spond economically to their problems. In the face of serious economic decline, the large firms opted to diversify and/or to increase their international operations rather than to call for protection.[270]

These differences within the industry were not reflected as much in its political organization. All the firms in the tire industry, except McCreary Tire, belonged to the RMA. Although dominated by the large multinational tire makers, the RMA's tire division also represented the small U.S. manufacturers. It lent support to their petitions for trade relief in the late 1970s and the early 1980s but did not participate in decision making on these cases for two reasons. First, not all the major firms liked the idea of pursuing the petitions, and the RMA refused to take action whenever unanimous consent was lacking.[271] Second, the RMA was legally forbidden by the Federal Trade Commission from collecting and circulating data on industry prices necessary for the filing of CVD and antidumping suits.[272] Apparently, fear of antitrust violations kept the RMA out of the petition process.

Because of these two factors, the RMA refused to handle the smaller firms' trade complaints. These firms then decided to form their own ad hoc committee, as already mentioned, to develop consensus within the industry on the trade complaints. Consensus building was very important in this industry, largely because the petitioners' problem was obtaining the support of the industry leader, Goodyear, who preferred freer trade. Without Goodyear's tacit support, any petition lacked credibility; hence, Goodyear had to be convinced, along with the other major firms, not to oppose the petitions. The industry's economic structure thus rendered political consensus building a necessity, while the major firms' well-developed links to the international economy made trade policy actions to hinder imports undesirable and difficult to undertake, even in the face of tremendous economic distress. Rather than seek protection, the major firms adjusted on their own, shedding unprofitable operations, diversifying, and/or developing new products.

270 *RPN*, January 18, 1982, p. 1; *RPN*, March 29, 1982, p. 1; *RPN*, April 26, 1982, pp. 1, 75; *RPN*, September 27, 1982, p. 59; RMA interviews.

271 RMA interviews.

272 Ibid. One interviewee claimed the RMA feared the antitrust implications of collecting the antidumping and countervailing-duty data; the other interviewee claimed this was not a concern, since they collected this data for the excise tax calculations.

CHAPTER 5

The French Case Studies, 1970s

WE NOW TURN to six French industries of the 1970s, and examine them in terms of our primary hypothesis: that industries with greater links to the international economy should be less protectionist than more domestically oriented industries, even when both face serious economic distress. As in chapters 3 and 4, each case is divided into two parts. First, the industry's economic distress and import problems, which indicate its a priori interest in protecting its domestic market, are discussed. The industry's ties to the international economy are also detailed, generating predictions about its preferences on trade policy issues. Other relevant features of the industry are then examined as well.

The second section of each case explores the preferences of the industry vis-à-vis trade policy. For French firms in the 1970s, four different arenas for communicating their trade policy views existed. The industry expressed its *national* trade policy interests, usually involving its complaints about foreign trade and its desire for import surveillance or limitation, to French government officials. Second, the industry made known its demands for *industrial* policy measures through pressure on the appropriate French officials for increased aid, subsidies, reduced tax burdens, and new norms and standards affecting foreign competition. Third, the industry's desire for trade policy actions at the *European Community* (EC) level may be seen in its preferences expressed regarding the tariff negotiations of GATT, its complaints about foreign dumping, subsidization, or injury by imports, and its demands for import surveillance or limitation by the EC. The fourth arena was internal, involving the industry's own discussions and determination of strategies to deal with its problems.

CASE 1: FOOTWEAR

Prior to the mid-1970s, the French footwear industry was a success. The industry was the second largest in Europe, just behind Italy, and the world's third largest footwear exporter. This success was reversed after 1975; from this point on, the industry declined steadily and experienced severe economic distress due to increasing imports, declining demand within France, and closure of the traditional export markets.[1] Decreasing numbers of firms, rising unemployment, falling investment, and low profitability marked the industry. Between 1971 and 1978, 20 percent of all French footwear firms disappeared.[2] French footwear production, after reaching its highest volume in 1971, declined some 15 percent between 1975 and 1981.[3] These firm closures and production declines led to rising unemployment in the industry.[4] By the late 1970s, investment levels and profit margins were very low.[5]

Its troubled domestic situation after 1974 was accompanied by a deteriorating international trade position, as manifested in rising import levels, mounting import penetration, and declining exports. The footwear industry in France initially benefited from the opening of the European Common Market. Between 1969 and 1974, its exports grew phenomenally, around 25 percent per year, while its imports remained moderate.[6] After 1974, however, footwear imports surged, doubling in value almost every two years between 1974 and 1980.[7] As a percentage of the domestic market, imports also rose: in 1970, import penetration was around 12 percent; by 1977 it was over 25 percent and by 1981 it accounted for almost 50 percent of the French market.[8] The worst periods for the industry were the years from 1975 to 1977 and from 1979 to 1983. The first period was marked by a sudden surge in Italian imports, as well as by a sharp decline in ex-

[1] *Les Echos*, March 17, 1972; *Le Point*, September 8, 1975; Fédération Nationale de l'Industrie Chaussure Française (hereafter FNICF), *Chaussures de France* (Paris: FNICF, September 1984), pp. 12-17; DAFSA, *L'Industrie de la Chaussure en Europe* (Paris: DAFSA, 1979), pp. 24-26; Christian Stoffaës, *La Grande Menace Industrielle* (Paris: Calmann-Lévy, 1978), p. 225.

[2] DAFSA, *L'Industrie de la Chaussure en Europe*, 1979, p. 51

[3] *Libre Service Actualité* (hereafter *LSA*), no. 864, November 5, 1982, p. 257; DAFSA, *L'Industrie de la Chaussure en Europe*, 1979, pp. 7-20

[4] *La Vie Française*, February 7-13, 1983, p. 35; *La Croix*, September 5, 1975; FNICF, *Chaussures de France*, September 1984, p. 11; European Confederation of Footwear Industries (hereafter ECFI), *Sectoral Study of the European Footwear Industry* (Brussels: ECFI, November 13, 1978), pp. 45-46; INSEE, *Les Comptes de l'Industrie, Situation en 1979* (Paris: Documentation Française, 1980), pp. 129-32.

[5] INSEE, *Annuaire Statistique de la France* (Paris: Documentation Française, 1983), p. 511; DAFSA, *L'Industrie de la Chaussure en Europe*, 1979, intro.

[6] *Le Point*, September 8, 1975; *Les Echos*, December 3, 1969; *Les Echos*, March 17, 1972; *Les Echos*, August 28, 1975.

[7] Figures from French Customs Service (Douanes fiche for NAP 600-4601).

[8] Unpublished INSEE data on import penetration; Bernard Bobe, "Les Importations des Biens de Consommation en Provenance de Tiers Monde," *Revue d'Economir Industrielle*, no. 14 (4th trim., 1980):52; FNICF, *Chaussures de France*, pp. 16-17; *Les Echos*, March 14, 1985.

ports due to the closure of traditional markets abroad.[9] In the second period, imports surged once again, but their primary source was now the countries of East Asia, mainly Taiwan, South Korea, Hong Kong, and China.[10] Between 1975 and 1981 French footwear imports rose by 67 percent, while its exports fell by 7 percent.[11] Overall, the industry's economic difficulties and rising foreign competition made it a likely candidate to seek protection.

The industry's links to the international economy in the 1970s were moderate but declining. In general, French footwear was a Type I industry, with limited trade ties and few multinational operations. The ties that did exist were concentrated in the hands of a few large firms. The industry's international trade position in the 1970s deteriorated. From an increasingly positive trade balance in the early part of the decade, the industry's position turned negative in 1975 for the first time.[12] Its trade deficit ballooned from 400 million francs in 1976 to 2.4 billion francs by 1982.[13] The industry's export dependence—that is, its export sales relative to its domestic production—was stagnant if not falling after 1975. In 1970, the industry exported about 21 percent of its production. This held constant through the 1970s, reflecting the fact that both exports and national production declined; but by the early 1980s, footwear's export dependence was beginning its decline, dropping to about 18 percent.[14] By the early 1980s its primary

[9] *Le Monde*, October 17-18, 1976; *Forum International*, June 11, 1979; FNICF, *Chaussures de France*, pp. 16-17; *Chaussure Industrie*, no. 105 (July 1981); *Le Figaro*, September 9, 1977; ECFI, *Sectoral Study*, pp. 20-26.

[10] Although Italy remained the largest importing country, these Asian imports were the most rapidly expanding, especially in terms of lower-priced footwear. See FNICF, *Chaussures de France*, pp. 14-17; Parlement Européen, *Rapport du Parlement Européen*, by E. Romagnoli (Strasbourg: Parlement Européen, November 1981), pp. 11-12 esp.; *Chaussure Industrie*, no. 105 (July 1981); *La Vie Française*, February 13, 1983, p. 35; ECFI, *Sectoral Study*, pp. 24-29. This new source of import competition was combined with (and in part a consequence of) the further closure of other footwear markets. American restraints on Asian footwear begun in 1978, in particular, caused problems for the Europeans, because their market then remained the last one open to footwear exports and thus served as the area to which the Asian exports were diverted. See *Chaussure Industrie*, no. 95 (February-March 1980):7-10; Parlement Européen, *Rapport du Parlement Européen*, pp. 11-12 esp.; DAFSA, *L'Industrie de la Chaussure en Europe*, 1979, p. 28.

[11] *LSA*, no. 864, November 5, 1982, p. 257.

[12] DAFSA, *L'Industrie de la Chaussure en Europe*, 1979, pp. 29-30; ECFI, *The Situation of the European Footwear Industry* (Brussels: ECFI, 1983).

[13] French Customs Service data (Douanes fiche).

[14] Bobe, "Les Importations des Biens de Consommation en Provenance de Tiers Monde," p. 52. French Customs Service data (Douanes fiche) for exports, INSEE, *Annuaire Statistique*, 1983, p. 514, *Chaussure Industrie*, no. 105 (July 1981).

trade ties to the international economy were through imports and not exports.

The significance of its export dependence was also reduced, since only the few, largest firms in the industry exported. Of a total of nearly five hundred firms, the sixty largest accounted for over 75 percent of all exports, and 90 percent of all exports were done by the ninety largest firms in the late 1970s.[15] French export dependence in footwear was declining in the 1970s, highly concentrated among a few large firms, and limited to high-priced leather footwear and to a few developed countries' markets.

The industry had few multinational ties. Its foreign production was limited, no more than 2 percent of total production.[16] Among the producers, however, different levels of multinationality were apparent. Foreign penetration of the industry was substantial; in fact, of the ten largest firms in France in 1978, three were completely foreign owned. These three—Adidas, Charles Jourdan, and Bata—were large multinationals and some of the most important exporters in France.[17] In addition, for the top three French-owned firms—André, Eram, and Myrys—the international market also played an important role.[18] These firms had foreign production, sizable export sales, and extensive import operations. After 1975, they adapted to rising foreign competition by shifting production abroad to lower-wage areas and by moving increasingly into footwear distribution (commercial operations), rather than production, in France.[19] These three large French

[15] FNICF, *Chaussures de France*, pp. 9-11; *Chaussure Industrie*, no. 87 (July 1978):37.

[16] Michel Delapierre and Charles-Albert Michalet, in Centre d'Etudes et de Recherches sur les Entreprise Multinationale (hereafter CEREM), *Crise, Concurrence Internationale, et Stratégies des Multinationales Françaises* (Paris: CEREM, 1981); Charles-Albert Michalet, ed., *L'Intégration de l'Economie Française dans l'Economie Mondiale* (Paris: Economica, 1984), pp. 77-102; Julien Savary, *Les Multinationales Françaises* (Paris: Presses Universitaires Françaises, 1981), p. 28.

[17] In 1976, direct foreign investment was estimated to equal 15 percent of total value-added for the industry. STISI, *Les Entreprises Moyennes dans l'Industrie* (Paris: Documentation Française, 1976), pp. 174-75. However, for these firms foreign operations were very significant. Adidas (West Germany) and Charles Jourdan (U.S.) exported over 50 percent of their total French sales, and Bata (Swiss) was regarded as the "IBM" of footwear with ninety factories worldwide. *La Vie Française*, February 7-13, 1983, pp. 32-36; DAFSA, *L'Industrie de la Chaussure en France* (Paris: DAFSA, 1976), pp. 16-17; *La Vie Française*, June 18, 1979.

[18] DAFSA, *L'Industrie de la Chaussure en Europe*, 1979, p. 53.

[19] *La Vie Française*, February 7-13, 1983; DAFSA, *L'Industrie de la Chaussure en Europe*, 1979. For example, André, France's largest footwear firm, exported about 20 percent of its production in the mid-1970s but had no foreign production before 1970; however, by the early 1980s, André had several factories in Germany and Spain and was importing

firms, who accounted for most of the multinationality in the footwear industry, were thus import centered and *not* export oriented.

In sum, the French footwear industry's international ties in the 1970s were limited and concentrated in the hands of the few largest firms. Its trade linkages grew on the side of imports, while exports stagnated. Foreign production operations were never significant for the industry, although they did increase in importance for the largest firms over the decade. Finally, the different levels of international linkages among the firms prompted divergences of interests on trade issues.

Three other features of the French footwear industry deserve comment, since they illuminate facets of its political organization, strength, and activity. First, the industry was composed of many small firms, and its largest lacked substantial control over the market.[20] The large number of firms and the limited importance of the largest firms meant that industry-wide organization was critical for political success. On the other hand, the differences between the largest firms and the mass of smaller ones were considerable. The problems and interests of the large firms were unlike those of the rest of the industry. In fact, a majority of the industry felt that their problems were caused by the large firms' activities in foreign production, distribution, and importing.[21] The industry was increasingly divided over this issue during the 1970s.

Second, the industry was regional. The masses of small footwear producers were concentrated in three rural areas—the Cholet in the Loire, Romans in the Rhone-Alps, and Alsace.[22] Though each of these centers had some export activity, the Alsatian region led in this respect, exporting 47 percent of its total regional footwear production.[23]

into France over two-thirds of the footwear it sold there. See *La Vie Française*, February 7-13, 1983, pp. 32-36; *Le Figaro*, February 9-10, 1985, p. 13; *Le Monde*, February 5, 1985, *Usine Nouvelle*, December 3, 1981, p. 75; 1985 André *Bulletin*. Similarly, Eram increasingly moved production abroad and established a larger presence in distribution in the late 1970s. By 1983, it produced in France only 40 percent of the footwear it sold there and imported much of the rest from its factories in Spain, Portugal, and Brazil. See *Le Matin*, June 6, 1977; *La Vie Française*, February 7-13, 1983, pp. 32-36; DAFSA, *L'Industrie de la Chaussure en France*, 1976, pp. 16-17.

[20] FNICF, *Chaussures de France*, pp. 9-11; ECFI, *Sectoral Study*, pp. 47-48; DAFSA, *L'Industrie de la Chaussure en Europe*, 1979, p. 49. For example, the largest firm, André, held only 9 percent of the total market in 1982. *Le Figaro*, February 9-10, 1985.

[21] *Le Monde*, April 2, 1977; interviews.

[22] FNICF, *Chaussures en France*, pp. 9-10; *La Vie Française*, February 7-13, 1983, p. 34; *Economie-Géographie*, no. 171 (January 1980):6-7.

[23] *La Vie Française*, February 7-13, 1983, p. 34, *Forum International*, March 25, 1980, *Le Figaro*, March 25, 1980; *Le Matin*, March 28, 1980

This difference in the regions' extent of international activity was reflected in their preferences on trade matters. In addition, the producers' concentration of activity in each region enhanced their influence with the regional government.

Third, the industry-wide association of footwear producers (FNICF) represented over 90 percent of all French footwear producers and was well organized and powerful. The association served not only as the industry's main conduit to the French government and the EC but also as an industry leader, organizing and conducting R&D, defining product standards, and aiding ailing firms. Although influential within all segments of the industry, the association encountered increasing problems reconciling the two main groups' interests in the late 1970s, which eventually prompted some of the larger firms to seek representation, especially on trade issues, elsewhere.

The Dependent Variable

Parts of the footwear industry in France showed a strong preference for protection of the domestic market after 1975. In the latter part of the decade, the industry's internal coherence decreased, as the large and small firms' adjustment strategies diverged. The development of international ties by the largest firms provoked increasing intra-industry divisions on trade issues. The lack of export or multinational ties to the international economy among most footwear firms meant that protection was a low-cost strategy with potentially high benefits for them, while it was more costly for the larger producers.

Throughout the 1970s, the industry's concern about trade issues rose and fell with the degree of economic distress it faced. As its difficulties grew, concern with trade mounted. Three periods of intense activity by footwear manufacturers at the national level on trade and industrial policy can be identified. In each, activity on trade issues was couched in the terms of an industry-wide industrial policy, or *plan*. The solutions promoted by the industry followed similar lines; they called for reduction of the "social costs" paid by firms, increased government aid to "restructure," and measures to deal with trade problems. Not surprisingly, in the latter two episodes, which coincided with periods of severe economic distress, the trade measures proposed were protectionist.

The first period of the footwear industry's attention to trade issues, between 1968 and 1970, was prompted by the opening of the Common Market in 1968. The French industry saw this as a great opportunity and wanted to capture more of the European market. In particular, the FNICF, led by an active president, José Bidegain, and the large

French footwear exporters realized the opportunities of the European market and designed a plan to enhance the French industry's position within it. The plan they developed called for substantial government aid (worth about 400 million francs, much through low-interest loans) to promote exports and to aid firms in restructuring.[24] This set of measures contained none that served to protect the domestic market, although the export aid measures did aim at strengthening France's trade abroad. In 1970, after a year of negotiations over the exact amount of aid to be given, the footwear industry's plan was accepted by the French government.[25]

The second period, which began in 1975, was shaped by the industry's growing economic difficulties. Parts of the footwear industry began complaining about imports, especially from Italy, which accounted for 60 percent of all French footwear imports.[26] In the face of workers' strikes, plant occupations, and plant closures, the industry association, still led by Bidegain, devised a new footwear plan. It was similar to the earlier one, except that it also contained measures intended to protect the French market.[27] This plan embodied a compromise between the two groups of firms with different preferences. Although all firms in the industry supported price liberalization and reductions in social costs and taxes, only the largest pressed for increased government aid, especially concerning exports.[28] As the principal exporters, the large firms gained the most from this kind of assistance.

On the other hand, the small firms concentrated in the regions near Fougères and Cholet, who faced the brunt of the import invasion, wanted protection. Supported by unions and the regional government, they demanded that something be done to halt the precipitous decline of the region's footwear industry; they viewed protection as a means to fight the problem.[29] The large firms opposed protection,

[24] *Le Figaro*, October 25, 1968; *Les Echos*, August 28, 1975; interviews; *L'Humanité*, February 26, 1976.

[25] Ibid.

[26] DAFSA, *L'Industrie de la Chaussure en Europe*, 1979, pp. 29-30.

[27] The 1975-76 plan called for price-control liberalization, a new injection of export and restructuring aid from the government, reductions in social costs and taxes paid by firms, and the imposition of border controls on imports. *Rapport de la Commission Industrie*, 7th Plan (Paris: Documentation Française, 1976), pp. 187-88; *Les Echos*, February 26, 1976; *Le Figaro*, September 9, 1977; *L'Aurore*, September 10, 1975; interview.

[28] *Libération*, March 10, 1978; *Le Nouvel Economiste*, no. 71, March 7, 1977, pp. 38-39; interviews.

[29] *Le Monde*, February 19, 1976; *Le Monde*, March 9, 1976, p. 46; *Les Echos*, April 1, 1976.

however, for two reasons. They feared its effects on their exports and, most important, being large importers themselves, they realized import limits might upset their intrafirm trade.[30]

These divisions within the industry did not prevent the association led by Bidegain from pushing its new plan containing protectionist measures. Bidegain and the regional authorities from Fougères and Cholet lobbied the French government, especially the Ministry of Industry, during 1975 and 1976. Finally, the government adopted a plan in 1976 to force Italian footwear importers to use "technical visas," a procedure designed to slow imports and raise their costs.[31] Bidegain also negotiated an agreement on footwear imports with the Italian industry. But this arrangement, under pressure from French footwear distributors and the EC, collapsed quickly.[32] In this case, intra-industry divisions prevented the implementation of a protectionist scheme.

The association launched a new plan to protect the industry in 1976. Demands for the industrial policies involved in the 1975 plan were combined with a new demand for "safeguarding" the industry from injury caused by imports.[33] After much industry lobbying, the French government initiated a new series of measures, similar to the industry's plan, including a system of import surveillance and quotas to keep the market "orderly."[34]

When these policy measures were instituted in 1977, they provoked a breakdown of consensus within the industry. The large firms, mainly André, Eram, and Labelle, objected to any new protection; in fact, they used the distributors' association to lobby the government against these measures.[35] When the government initiated them over these protests, the large firms provoked a crisis within the footwear industry association and succeeded in ousting Bidegain. These firms claimed that he was trying to ruin the industry and that the protection he advocated only hurt French producers.[36] The large firms seized control

[30] *Le Nouvel Economiste*, no. 71, March 7, 1977, pp. 38-39; interviews.

[31] *Les Echos*, February 26, 1976; *Le Monde*, October 17-18, 1976; *Le Nouvel Economiste*, no. 71, March 7, 1977, pp. 38-39; interviews; *Les Echos*, June 6, 1977.

[32] *Le Monde*, October 17-18, 1976.

[33] *Le Nouvel Economiste*, no. 71, March 7, 1977, pp. 38-39; *Le Monde*, February 27, 1976; *Rapport de la Commission Industrie*, pp. 187-88.

[34] *L'Unité*, March 19, 1976; *Le Figaro*, March 10, 1976; *Le Monde*, March 10, 1976; *L'Humanité*, March 10, 1976; *Les Echos*, September 13, 1977, p. 16; interview; Ministère de l'Industrie, *Note d'Information*, no. 66 (Paris: Ministère de l'Industrie, September 13, 1977), pp. 2-3.

[35] *Le Monde*, April 2, 1977; interviews.

[36] Ibid.

of the FNICF and pressed their interest in having the protectionist system dismantled. Once again, divisions of interests within the industry limited the protectionist policies adopted. In the end the government maintained surveillance (a posteriori) on imports but never instituted the quota system.[37]

The third episode of industry activity occurred between 1979 and 1982. Coinciding with the worsening of economic problems, this period was marked by increasing concern over imports from East Asian and other less developed countries. Before 1979, however, the industry association, now controlled in large part by the big, international firms, had steered clear of any protectionist activity. The association waged an increasingly public war between 1977 and 1980 against the import limits of other countries and attempted to increase its exports.[38]

When these measures had done little to help the industry by 1979, complaints against East Asian imports were renewed. In response, the footwear association proposed a new set of measures in 1981. The industry once again demanded increased government aid to restructure the industry, reduced taxes and social costs for footwear producers, formalization of the quality certificate system, a "buy French" campaign waged against footwear distributors, and the negotiation of import "autolimitation" agreements with South Korea and Taiwan.[39] Coinciding with the Socialists' entry into government and their campaign to "reconquer the domestic market," these ideas were favorably received. In 1981, the new footwear plan was announced, and later that year the industry negotiated its own import limits with the South Korean and Taiwanese industries.[40]

This time, the large French firms did not appear to object. These firms seemed to feel that this might calm the rest of the industry's growing demands for strict, global quotas. Moreover, these import limitation agreements were "loose."[41] Most important, they did not interfere with the large firms' import trade, because these firms neither

[37] Interview.

[38] ECFI, *Sectoral Study*, pp. 16-20, 63-65. With French government help, it created an industry export center and obtained a collective export insurance guarantee from the government (from COFACE). *Forum International*, June 26, 1979.

[39] *Le Monde*, September 5, 1980; *Les Echos*, September 4, 1980; *La Vie Française*, February 7-13, 1983, p. 35; *Le Monde*, December 7-8, 1982; *Le Figaro*, June 5, 1981.

[40] *La Vie Française*, February 7-13, 1983, p. 35; *Le Figaro*, June 5, 1981; *Le Monde*, December 7-8, 1982; *Les Echos*, March 22, 1983; *Le Monde*, April 23, 1981; interviews.

[41] They were administered by the industry association itself, and they placed such large ceilings on imports that they were not very restrictive. Interviews.

imported from Asia nor imported the types of shoes the Asians did.[42] For these reasons, the large, more international firms accepted the protectionist measures, though they never liked them.

In the mid-1970s and again in the early 1980s, the industry attempted to obtain increased protection at the European level. Here again, the industry's internal differences limited its protectionist demands. During the Tokyo Round negotiations of the GATT, the French footwear industry, claiming that further opening of its market would mean its demise, sought to have its tariffs exempted from all proposed reductions.[43] Later, it pressed to be included in some global import limitation program, like the textile sector's Multifiber Agreement (MFA).[44] In 1978, before GATT negotiations were concluded, it proposed that its tariffs be increased.[45]

Although footwear tariffs were reduced by less than the average cut agreed to on other products, the French firms' demands were not met for two reasons. First, the large French producer-distributors did not support these proposals and probably did their best to see them defeated.[46] Second, the Italian footwear manufacturers, being the number one exporters in the world, opposed any such protectionist measures. Because the EC operated on a unanimity system, the opposition of the Italians meant that these measures could not be instituted or even proposed in the GATT negotiations.[47] Thus once more, intra-industry divisions, based on differences in firms' international ties at both the national and European levels, mitigated pressures for protection.

The second period of European pressure by the French industry occurred at the end of the decade. In 1978, mounting concern over East Asian imports and over growing trade barriers in all other countries prompted many European producers, led by the French, to agree on the need for a more "organized" trading system. Pressure from the European industry confederation prompted the EC to initiate a statistical import surveillance system on Asian footwear.[48] The closure of the U.S. footwear market in 1978 to Asian imports created fears that the Asians would then make a massive attack on the European market. This united the European producers. In the early 1980s when the

[42] Interviews.
[43] *Les Echos*, October 23, 1975; *Le Monde des Affaires* (July-August 1977):59-60.
[44] *Les Echos*, September 28, 1978; interview.
[45] *Les Echos*, January 24, 1978.
[46] Interviews.
[47] Ibid
[48] *Le Nouvel Economiste*, no. 129, April 24, 1978; *Les Echos*, April 20, 1978; interviews.

Asian import "invasion" reached new heights, the European industry demanded that the EC develop a permanent system of import surveillance.[49] By the early 1980s, the rise of the Asian footwear importers, which constituted a threat to all the European firms, had led to a coordinated, mildly protectionist action against them. As on the national level, the European footwear industries grew increasingly protectionist over the 1970s, as imports surged and their international ties weakened.

In the 1970s the French footwear industry's internal divisions also deepened. The main cleavage existed between the large firms, who imported and exported significantly, and the small firms, whose orientation was domestic. Over the 1970s this division grew, as the large firms increased their size and foreign operations in response to rising import competition. They moved production abroad and imported more into France, and this activity brought their interests into conflict with those of the smaller firms. Policy outcomes were affected by these disputes, as protectionist pressures before 1979 were reduced by the opposition of the large firms.

After 1979, when the problem became Asian imports, the resistance of the large firms nationally and at the European level to protectionist forces declined. The large firms had few trade relations and no production activity in the Asian countries; their ties to this part of the international economy were weak. Imports from this area could be selectively limited without infringing upon the intrafirm trade of the large firms. The leaders of the French industry were thus less active in their opposition to protection, although the organization of distributors (SNCICF), which they had used earlier to lobby against protection, did attempt to dissuade the French government from adopting any protectionist measures.[50]

Overall, the French footwear industry in the 1970s had limited ties through exports or multinational production to the international economy. As expected, the lack of these ties meant that when problems arose, the industry was likely to demand protection. However, the international economic ties that did exist within the industry were concentrated among the largest firms, and they turned out to be antiprotectionist in the 1970s. Their efforts centered on promoting exports and reducing trade barriers elsewhere. Their opposition to the smaller firms' preferences for market closure seemed, in the end, to have diluted the protectionist measures adopted.

[49] Parlement Européen, *Rapport du Parlement Européen*, pp. 5-7; interviews.
[50] Interviews

Case 2: Watches and Clocks

The French watch and clock industry underwent dramatic changes in the 1970s. The industry shifted first toward the production of watches in response to declining consumer interest in clocks and second, in a more significant change, toward the development of electronic watches. This technological revolution caught French producers unaware. The industry was both unwilling and unable to make the change to electronic watches and clocks. By 1981, a decade into the technological shift, France had only two producers of electronic watches, accounting for a mere 15 percent of total consumption.[51] Not surprisingly, this cost the industry dearly. Within France, the firms suffered a great deal; their market was invaded by imports and many of them disappeared. From an industry with hundreds of firms in the early 1970s, it was grouped entirely around one firm by the early 1980s.[52] Internationally, the French also declined. In 1977, they were the fifth largest producers in the world; in four years they had fallen to seventh.[53]

Falling demand and shifting consumer preferences in view of the electronics revolution forced rapid adjustment on an already weak industry. Problems began in the early 1970s with mounting firm losses and closures, rising unemployment, falling profitability, and declining investment.[54] These problems continued throughout the 1970s and returned with renewed impact in the early 1980s.[55] In 1982-83, the industry's two largest firms were forced to lay off large numbers of workers and close various operations.[56] The industry thus faced serious, mounting economic distress between 1970 and 1983.

The technological change also brought new foreign competition, as imports from East Asia surged. Before 1968, the watch and clock producers faced little import pressure. In the late 1960s, imports accounted for no more than 10 percent of French production.[57] Foreign competition greatly increased after this due to important reductions in trade barriers in the late 1960s.[58] The industry's tardiness in developing electronic watches also induced a spate of imports. This import invasion began in the mid-1970s and entailed a shift in suppliers from Swiss, German, and American producers to those from Hong Kong, South Korea, Taiwan, and Japan.[59] This change in suppliers had an important effect. The French industry had few ties to these new importers and viewed this competition ominously.

[51] *La Vie Française*, November 9, 1981.

[52] Centre pour le Développement Horloger (hereafter CPDH), *Rapport sur l'Horlogerie Française* (Paris: CPDH, 1986), p. 2; *Economie-Géographie*, no. 202 (February 1983):2; *Les Echos*, June 22, 1979.

[53] *Economie-Géographie*, no. 202 (February 1983):1.

[54] CPDH, *Rapport*, pp. 8-9; *LSA*, no. 860, October 8, 1982, pp. 66-70; *Usine Nouvelle*, no. 9, March 1, 1984, p. 44; *Economie-Géographie*, no. 202 (February 1983):10-11, CPDH, *Bilan des Activités du CPDH depuis 1982 et Propositions pour un Nouveau Programme à Moyen Terme* (Paris: CPDH, 1985), annex, pp. 4-5; DAFSA, *L'Industrie Horlogère* (Paris: DAFSA, 1978), pp. 47-50, 59-60.

[55] CPDH, *Bilan des Activités*, p. 4; *Economie-Géographie*, no. 202 (February 1983):6; *Usine Nouvelle*, no. 9, March 1, 1984, pp. 41-42; *Les Echos*, April 26, 1979; *La Vie Française*, December 6-12, 1982, p. 94; *Economie et Statistique*, no. 144 (May 1982):22.

[56] CPDH, *Bilan des Activités*, p. 4; *Le Nouvel Economiste*, May 3, 1985, pp. 64-65, *La Vie Française*, December 6-12, 1982, p. 94; interview.

Imports increased about five fold in the 1970s as a consequence of the surge in electronic watches from East Asia.[60] Imports as a share of the domestic market also rose dramatically from 31 percent in 1970 to close to 60 percent in 1979.[61] Import penetration nearly doubled in the decade, eventually claiming more than half of all sales. The need to adjust to the new technology, combined with the intensified foreign competition, produced serious challenges for the French producers, and made them likely candidates to want protection.

In the 1970s the watch- and clockmakers had strong trade dependence and low multinationality, although the industry was penetrated by foreign investment. The industry's international ties were mixed and changing over the decade. As the industry failed to meet the technological challenge, its trade ties, especially its export capacity, weakened. By the mid-1980s the industry was moving from being a Type II to becoming more like a Type I, especially in the electronic watch sector.

In the 1970s the industry's trade dependence was extensive, although beginning to weaken. It had a small positive net trade position until 1979, when it turned negative.[62] Exports by the industry increased over the decade, although they too slowed by the early 1980s.[63] Exports as a percentage of national production rose from 44

[57] Banque de France, *L'Industrie de l'Horlogerie* (Paris: Banque de France, 1974), pp. 23-25.

[58] The opening of the Common Market, the GATT Kennedy Round tariff reductions, the removal of quotas on Japanese products, and a new Swiss-French trade treaty augmented the openness of the French market. Banque de France, *Horlogerie*, pp. 23-25. *Economie et Politique* (March 1976):45-46; DAFSA, *Horlogère*, p. 15.

[59] DAFSA, *Horlogère*, pp. 12-14; *LSA*, no. 860, October 8, 1981, p. 70; *Economie-Géographie*, no. 202 (February 1983):14.

[60] French Customs Service data.

[61] Unpublished INSEE data

[62] French Customs Service data.

[63] Ibid.

percent in 1971 to 68 percent in 1977, falling back, however, to 63 percent in 1982.[64] The French export trade in watches and clocks was distinct, as it involved mainly (90 percent) *parts* of watches and clocks. The French firms did not export the parts directly but rather sold them to a large retailer/distributor who did the exporting.[65] This weakened the firms' connection to the international market and reduced their interests in exports. Exports of watch and clock parts were not concentrated within the industry. Many small, specialized firms exported the parts they fabricated, usually through a large distributor, while the largest French producers were important exporters as well.[66] As in the industry overall, the exports of all large French firms, except one, declined after 1978. They could not compete with the new electronic watches made in Asia.[67]

The French watch and clock producers' multinationality was limited in the 1970s. The producers were small and specialized and thus less likely to develop foreign operations. Instead of multinational production, they employed a web of trade flows and international licensing agreements to obtain access to foreign markets. Foreign production relative to total production for them equaled 1.7 percent in 1974, the lowest percentage for any industrial sector in France.[68]

Foreign investment in the industry was more significant than French operations abroad. Of the largest French producers, excluding the foreign controlled firms, only one appeared to have any production operations outside France.[69] The other large producers before 1979 were either controlled by foreign firms or were subsidiaries of large foreign producers.[70] In fact, over half of the top seventeen firms

[64] DAFSA, *Horlogère*, p. 6; *Usine Nouvelle*, no. 9, March 1, 1984, p. 44.

[65] DAFSA, *Horlogère*, intro and pp. 6, 8, 11; *Economie et Statistique*, no. 144 (May 1982):13-15; CPDH, *Bilan des Activités*, p. 18.

[66] *Quotidien de Paris*, April 30, 1985; *Forum International*, November 29, 1980; *Les Echos*, April 16, 1971; *Le Figaro*, March 8, 1978; *Le Figaro*, May 2, 1979.

[67] *La Vie Française*, November 9, 1981; *Les Echos*, February 15, 1975; *Le Figaro*, May 2, 1979.

[68] This is for the larger sector containing watches and clocks ("construction mécanique" or "mécanique de précision"); Savary, *Multinationales Françaises*, p. 28. The sector also had one of the lowest percentages of subsidiaries abroad among all French industries in 1978. Michel Delapierre, in *L'Intégration de l'Economie Française*, ed. Michalet, pp. 88-89, 99.

[69] In the mid-1970s, Jaz had about five plants operating outside France and had financial ties to the large Franco-Belgian group Empain-Schneider. *Usine Nouvelle*, no. 39, September 28, 1978, pp. 36-38; DAFSA, *Horlogère*, pp. 27-31; *L'Expansion* (March 1978):96-99.

[70] *Usine Nouvelle*, no. 39, September 28, 1978, pp. 36-38; *Economie et Politique*, no. 260 (March 1976):44.

were foreign controlled in 1976.[71] The largest firm, the American Timex, held some 25 percent of the total French market.[72] Indeed, U.S., German, and Swiss control over the French industry through foreign investment rivaled the penetration that imports claimed on the market.

Unlike trade dependence, which declined after 1979, the industry's multinational ties increased. After 1979 the industry was restructured around one large firm, Matra, which was an electronics and military equipment producer and exporter. Matra, although not highly multinational, sought to build a series of international alliances to strengthen its watch division.[73] Principally, it allied with the Japanese firm Seiko to obtain new technology and export bases. By 1983, this left two groups, Matra allied with the Japanese, on the one hand, and about 150 small French producers allied in the industry association, on the other.

Although constituting a small industrial sector, the French watch and clock producers commanded much national political attention for three reasons. First, the producers were concentrated geographically. Ninety percent of the firms were located in the Haut Doubs Department, near the city of Besançon.[74] The industry had a tremendous regional impact and commanded the interest of its local political leaders.[75] Second, the industry became infamous for its labor unrest. The "Lip Affair" in the early 1970s symbolized a new wave of labor problems, involving plant takeovers, and focused national attention on the industry.[76] Third, the industry was extremely well organized. Despite the large number of firms, it had a strong, centralized industry association with a number of different organizations devoted to helping the firms financially and technologically. The producers were able to speak publicly with a single voice, and their association had good ac-

[71] DAFSA, *Horlogère*, pp. 27-31, 33.

[72] Ibid.

[73] Groupe ESCP, "Le Développement International des Groupes Français," *Cahier d'Etudes et de Recherche*, no. 82-30 (October 1982):12, shows Matra's multinationality to be very low: 5 percent. Evidence of its strategy is in *La Vie Française*, November 24, 1980, p. 32; *Les Echos*, December 23, 1983; *Les Echos*, November 26, 1982; *La Vie Française*, December 6-12, 1982; p. 95; *Le Monde*, October 23, 1980; *Le Nouveau Journal*, July 10, 1979; *La Vie Française*, November 9, 1981; interviews.

[74] *Economie-Géographie*, no. 202 (February 1983):4.

[75] Two of whom—Edgar Faure and Jean-Pierre Chevènement—were national political figures. Interview.

[76] *Le Monde*, April 19, 1973; *L'Express*, August 13, 1973; *Le Figaro*, February 19, 1976, *Le Figaro*, January 31, 1976; *Les Echos*, April 6, 1976. *Le Monde*, August 17, 1977; *Le Nouvel Observateur*, August 15, 1977; *Les Echos*, June 22, 1984.

cess to the French government.[77] In the late 1970s this unity was, however, disrupted by Matra's move into the industry. Matra had different interests than the small watchmakers and its own connections to the government; both of these factors brought it into conflict with the industry association.[78] From a highly unified industry, it had evolved by the early 1980s into a more bifurcated one.

The Dependent Variable

The French firms' strong trade dependence, weak multinationality, strong organization, and high foreign penetration shaped their responses to their economic problems. These responses changed significantly over the period from 1970 to 1983 as their international ties weakened and foreign competition grew. In the late 1960s and early 1970s, the industry was increasingly integrated into a web of international trade flows and was interested in promoting this trade by reducing the barriers hindering it. In the mid-1970s, as its problems and especially foreign competition grew, the industry backed off from its interest in greater market openness. It made few trade policy demands and concentrated instead on conversion to the new electronics technology. In this period, industrial policy demands were central. After 1980, as the French industry weakened and its exports fell, the producers took new interest in trade issues, but this time in protectionist policies. Unable to adjust, the French producers demanded that foreign competition be reduced.

The French watch and clock industry's national trade policy preferences revealed the industry's shifting interests during the 1970s. Before 1973, the producers were oriented toward free trade. The French producers willingly accepted the end of French quotas on Japanese watch and clock imports in the late 1960s. They agreed to the full level of tariff reductions on their products in the Kennedy Round of the GATT negotiations. They also helped negotiate a trade treaty with the Swiss, in which they accepted the progressive elimination of all tariffs on their trade in return for greater access to the Swiss market.[79]

In the mid-1970s, as trade grew and as the French failed to shift to the new electronic products, their interest in open markets declined. No attempts to close their market were made, however. Given the

[77] CPDH, *Rapport*, pp. 2-5, 10-12; *Economie et Statistique*, no. 144 (May 1982):17; *Economie-Géographie*, no. 202 (February 1983):2-3; *La Croix*, April 15, 1976.

[78] Interviews.

[79] Banque de France, *Horlogerie*, pp. 23-25; *Economie et Politique* (March 1976):45-46, DAFSA, *Horlogère*, p. 15; interview.

rapid rise in foreign competition, this was surprising. At this time the industry was still a major exporter with substantial trade flows. Despite rising bankruptcies, labor unrest, and mounting import penetration, the producers resisted any temptation to demand protection.

By 1980 the situation had changed. Export growth was falling and the trade balance had turned negative. The French producers had been unable to adjust to the new technology, and electronic watch imports surged. The industry made its first demand for protection when its association called for a quota on electronic watch imports. In 1981 the industry was granted this quota; however, it was restricted to imports from Hong Kong.[80] Apparently Matra, the largest French producer, with substantial trade ties to Japan, did not want quotas on all Asian countries. Unlike much of the rest of the industry, Matra was unexcited about quotas in general and opposed to quotas on countries with which it had sizable trade ties.[81] Matra's resistance thus helped reduce the scope of the French quotas imposed.

This trade action was taken nationally and outside of both GATT and EC rules, and it prompted swift retaliation. The government of Hong Kong imposed a boycott on one of France's largest export items, cognac.[82] In addition, a French firm partially controlled by the largest Hong Kong watch producer, Remex, lodged a complaint with the GATT over the quota. The French firm was a major exporter and importer of watches and their parts, and the quota restricted this intrafirm trade.[83] These two actions shifted further demands for protection to more approved channels—i.e., the EC.

The other national arena in which the French watch and clock producers voiced their preferences concerning foreign competition involved industrial policy debates. In the 1970s, the watch and clock producers began making industrial policy demands through their strong industry organization. As the producers' problems mounted after 1973, the association designed restructuring plans and negotiated with the government for aid. Four different plans were demanded and implemented by the industry between 1970 and 1983. The plans reveal the industry's gradual turn to protection and increasing internal disarray.

The first plan was developed around 1971, when trade was growing

[80] *La Vie Française*, December 6-12, 1982, pp. 94-95; *Journal Officiel de la Communauté Européen* (hereafter *JOCE*), no. L. 106/34, April 19, 1984; *LSA*, no. 860, October 8, 1982, pp. 66-70; interview; *Les Echos*, July 15, 1980.

[81] Interviews.

[82] *La Vie Française*, no. 1956, December 6-12, 1982, pp. 94-95.

[83] Ibid.

and the electronics revolution just beginning. The industry association sought to promote adjustment within the industry. It wanted aid to help firms develop the new technology and to foster concentration in order to increase firms' competitiveness.[84] This resulted in a government plan to give aid to the largest and most innovative firm, Lip.[85] It also prompted the creation of a new firm, Montrelec, allied with Thomson-Brandt and Lip and geared to the development of electronic watches.[86]

With the failure of these measures, the industry was even in deeper trouble by 1976, when it began designing a new plan. This plan focused on the same two elements as the earlier one had—financial aid and restructuring. This time the industry sought to have the government give aid not to any single firm but rather to the association, for distribution to deserving projects. In addition, the industry was to restructure around one large firm, Jaz.[87] In the end this second plan increased concentration in the industry a bit and gave the firms new financial aid. Like the first plan, it had little protectionist intent or effect and instead focused on improving competitiveness.

With the limited success of this plan, the industry was again reeling from the effects of foreign competition by 1979. It was hardly producing any electronic watches, and imports were now exceeding exports. A new strategy was devised. The industry felt that it must have a leader, that is, a large firm with the electronics technology and foreign markets to produce and sell the new products.[88] The government also wanted such an industry "federator," and it finally forced Matra to take on this role. In 1979 Matra unhappily bought controlling in-

[84] *La Croix*, March 8, 1970; *Le Figaro*, February 9, 1971; *La Croix*, April 15, 1976, *Financial Times*, February 4, 1970; *Les Echos*, May 24, 1971.

[85] *Les Echos*, May 24, 1971; *Le Figaro*, February 17, 1972; *Le Monde*, March 12, 1974; *Les Echos*, February 1, 1974; *L'Express*, February 4, 1974; *Le Monde*, June 17, 1976; *L'Express*, April 12, 1976, pp. 58-59; *Le Figaro*, February 9, 1976.

[86] *La Croix*, April 15, 1976.

[87] Later on, this restructuring plan was altered as another large firm, Jaeger, refused alliance with Jaz and sought to create its own "pole" of alliances. *Le Figaro*, October 7-8, 1978; *Les Echos*, September 6, 1978; *L'Expansion*, no. 89 (October 1975):141-43; *Le Nouvel Economiste*, no. 28, April 26, 1976, pp. 32-35; DAFSA, *Horlogère*, p. 30; *Usine Nouvelle*, no. 9, March 1, 1984, pp. 41-42; *Le Monde*, December 8, 1977; *Le Monde*, December 10, 1977; *L'Expansion* (March 1978):97-99; *La Vie Française*, August 20, 1979, p. 17; *La Vie Française*, February 12, 1979, p. 30; *Economie-Géographie*, no. 202 (February 1983):3-4; *Le Nouvel Economiste*, no. 149, September 18, 1978; *Le Monde*, September 10-11, 1978; *Le Monde*, January 19, 1979; *Les Echos*, January 18, 1979; interview.

[88] *Le Matin*, June 29, 1979; *Forum International*, July 2, 1979; *La Vie Française*, August 20, 1979, p. 17; interview.

terests in the largest firms, Jaz and Jaeger, thereby becoming a major force in the industry.[89] Protection was still not demanded.

The fourth plan for the industry was announced in 1982. This plan was more ad hoc and protectionist. Designed in part by the industry association and in part by the local prefect of Franche-Comté, a region where the industry produced, the plan called for increased aid, to expand R&D and save employment, and for the imposition of quotas on electronic watches from Asia.[90] As part of the Socialist government's attempt to help industry "reconquer the domestic market," the plan sought to halt decline rather than promote adjustment. The industrial policy preferences of the industry thus evolved in an increasingly defensive, protectionist direction, as its trade ties weakened and imports took over the domestic market.

A similar evolution in preferences was apparent at the EC level. The French producers began the 1970s with an interest in freer trade. Their agreement to end traditional French quotas on Japan, to reduce by the full amount their tariffs in the Kennedy Round of GATT, and to negotiate a trade liberalization treaty with Switzerland all testify to this preference for greater market openness before the mid-1970s. By the Tokyo Round GATT negotiations, however, the industry's preferences were beginning to shift. The French were not interested in seeing European watch and clock tariffs reduced by the full amount; indeed, they hoped that certain products would be exempted from any tariff cuts.[91] Though not explicitly protectionist, the industry's preferences were no longer as oriented toward free trade as previously.

By 1979, the industry's demands had become more protectionist. In the late 1970s a large number of dumping complaints were lodged by the industry. These complaints involved many different products from mechanical alarm clocks to quartz crystal pieces—and were directed against a wide spectrum of countries—from Japan and the United States to China and the Soviet Union.[92] In 1983, the French

[89] *Les Echos*, June 27, 1979, *Les Echos*, June 29, 1979; *Les Echos*, August 27, 1979; *La Vie Française*, August 20, 1979, p. 17; interview.

[90] CPDH, *Rapport*, pp. 3, 12, 20-26; *La Vie Française*, December 6-12, 1982, p. 95; *La Vie Française*, February 7-13, 1983, p. 66, *Les Echos*, July 15, 1980; *Economie-Géographie*, no. 202 (February 1983):4; interview.

[91] In the end, EC tariffs on watch and clock products were substantially reduced in exchange for similar reductions by other developed countries, but some products were completely exempt from any further liberalization. EC, *Rapport de la Commission de la CE sur les Négociations Multilatérales, Bilan par Secteur* (Brussels: EC, 1979), p. 23; *Economie et Politique* (March 1976):45-46; interview.

[92] EC, "Official List of Anti-Dumping and Anti-Subsidy Complaints" (Brussels: EC, 1981), pp. 6, 30, 32

industry, supported by its government, lodged an escape clause petition, seeking to organize all trade in this sector.[93] The EC watch and clock industry had been reduced over the 1970s to the French producers alone.[94] Opposition to the French firms' demands for protection was thus limited, unlike in the footwear case. In the end, the French industry's requests were granted; quotas were imposed in 1985 on electronic watch imports from China, Taiwan, Hong Kong, Japan, India, Pakistan, the Philippines, and Singapore.[95] The beginning of an "organized trading system" for French watches and clocks was thus created, as much of the industry desired.

Matra's role in the erection of these trade barriers was unclear. Although it opposed the French quotas in 1982, its preferences in the 1983-84 escape clause action appeared mixed. Matra had fared poorly in the watch business since its start in 1979. By 1982 it was losing huge sums and had forged alliances with the Japanese in order to remain in the business. On the one hand, the threat of protection allowed Matra to negotiate these accords; without it, the Japanese would have kept importing.[96] On the other hand, the quotas imposed affected Matra's trade with Seiko adversely and fortified the firm's desire to sell its watch operations.[97] However, because Matra was not a substantial extra-European exporter of watches and clocks and because it wanted the alliance with Seiko, the largest Japanese producer, Matra's position toward the escape clause action tended to be favorable. Its opposition in any case seemed weak, while the protectionist demands of the other producers and the industry association were loud, united, and insistent.[98] By the mid-1980s, the industry was more protectionist than before, even if somewhat divided as a result of Matra's mixed interests.

The French watch and clock industry thus responded to its economic difficulties as predicted for a Type II industry moving toward being a Type I. Throughout the early 1970s, when its exports and trade dependence were expanding, the industry pushed for freer trade at both the national and EC level. By the mid-1970s, as economic pressures and imports mounted, the industry sought to foster adjust-

[93] *JOCE*, no. L, 106/34, April 19, 1984; *Financial Times*, April 19, 1984; interview.

[94] By the 1980s, the French industry produced 70 percent of all EC watches; only one or two British and German firms remained. *JOCE*, no. L, 106/34, April 19, 1984.

[95] Chambre Française de l'Horlogerie (CFH), circular no. 1099, Paris, June 7, 1985, p. 4.

[96] *Les Echos*, December 23, 1983, p. 7; interview.

[97] Ibid.

[98] *Les Echos*, December 23, 1983, p. 7; *La Vie Française*, December 6-12, 1982, p. 95; interview.

ment through a national industrial policy, though it never demanded protection. This resistance to protection before 1980 was surprising, given the industry's serious difficulties. By 1982, the French producers had seen their trade dependence and export growth reduced as they failed to move into the new electronic products. They began demanding protection with increasing insistence. First at the national level and then at the EC level, they pressed for import quotas. Their pursuit of protection on both fronts was successful. Unified in a strong industry association and lacking EC industry opposition, the mass of small French watch and clock producers were able to impress their trade preferences upon the entire European industry in the 1980s.

Case 3: Flat Glass

The French flat glass industry was one of the world's largest and most powerful; in the early 1970s, it was the sixth largest producer in the world.[99] In addition, the industry was dominated by two of the world's largest producers, St. Gobain and BSN, who controlled well over 70 percent of the French market and maintained a virtual duopoly on glass manufacturing within continental Europe during the 1970s.[100] In the course of this decade, however, the industry underwent a technological revolution, which created problems for it and in time altered its structure by breaking this duopoly and inducing the entry of new foreign competitors.[101]

[99] It comprised the largest component of the glass manufacturing sector, with over 35 percent of the sector's total sales. Patrick Sergent, "L'Industrie Verrière Française de 1962 à 1971" (Thesis, Paris, Fondation Nationale des Sciences Politiques, 1973), p. 7. Data on international position from *Economie-Géographie* (November 1977):8-10.

[100] Institut de Recherche et d'Information Socio-économique (hereafter IRIS), *Restructuration de l'Appareil Productif Français* (Paris: Documentation Française, 1976), pp. 110-11; *Economie-Géographie* (November 1977):2-10, Sergent, "L'Industrie Verrière," pp. 22-24; Christian Mille, "Evolution de la Branche Verre Plat en France et en Europe" (Ph.D. dissertation, Paris, Université de Paris I, 1981), pp. 365-67

[101] In the mid-1960s a new glass-making technique, called "float" glass processing, was introduced. Though the flat glass industry had long been characterized by very large-scale economies of production, necessitating extremely large plants, huge capital investments, and sizable labor forces, this new technique created even larger-scale economies and made obsolete the old plants. The building of these huge new plants created significant overcapacity problems and initially reinforced concentration within the European industry in the mid-1970s. See Mille, "Evolution de Verre Plat," pp. 307-308; Sergent, "L'Industrie Verrière," p. 3; DAFSA, *L'Industrie du Verre dans le Monde* (Paris: DAFSA, 1976), intro. The fact that this change occurred at the same time that the industry's main consumers, the automobile and construction industries, were falling into a deep recession only aggravated their problems. See DAFSA, *L'Industrie du Verre*, 1976, intro. and p. 41; FCSIV, *Rapport d'Activité pour 1983* (Paris: FCSIV, 1983), p. 8; *J'Informe*, December 12, 1977.

Between 1970 and 1982, the French flat glass industry experienced several periods of severe economic difficulty. In the years between 1974 and 1977 and after 1979, the glass manufacturers faced serious recessions. The technological shift to "float" glass beginning in the late 1960s, the oil shock of 1973-74, and the consequent decline in the glass industry's main consumers—the automobile and construction industries—sent the French industry into a tailspin between 1974 and 1977.[102] The number of glass plants in France fell, and given the large size of these plants, this entailed a substantial decline in employment.[103] This declining demand, coupled with the erection of new float plants, led to sizable overcapacity and falling prices.[104]

Problems at the firm level, especially for the two industry giants—St. Gobain and BSN—were also manifest. In particular, St. Gobain experienced tremendous difficulties in France between 1974 and 1977 because it had built ten huge new float glass plants between 1968 and 1975. When demand fell in 1974, the firm was left with substantial unused and unprofitable capacity.[105] In fact, without its profitable foreign operations, St. Gobain would have gone out of business in France in the late 1970s, according to its president.[106] Like St. Gobain, BSN experienced great problems with its flat glass operations in the 1970s. In 1972, BSN was the largest producer in Europe; by 1980, it had sold all of its flat glass plants. Unlike St. Gobain, BSN failed to modernize early and developed only one "float" plant before 1973. Thus, it was forced to build these new plants in the mid-1970s, amid industry-wide overcapacity and falling prices.[107] This late modernization made BSN's flat glass operations even less profitable than St. Gobain's.[108]

The glass industry recovered for several years after 1977, but the same problems hit it again after the second oil shock. Once more, construction activity and auto manufacturing declined, which reduced de-

[102] *La Vie Française*, February 27, 1975.

[103] DAFSA, *L'Industrie du Verre dans le Monde* (Paris: DAFSA, 1981), p. 68.

[104] IRIS, *Restructuration*, pp. 112-13; *J'Informe*, December 12, 1977; DAFSA, *L'Industrie du Verre*, 1981, intro., p. 28; *La Vie Française*, February 27, 1975; FCSIV, *Rapport*, p. 5; INSEE, *Annuaire Statistique*, 1983, p. 99.

[105] *La Vie Française*, December 8, 1975. This left its glass divisions with negative net after-tax balances between 1975 and 1979, and it reduced the whole company's profit margins to about 1 to 2 percent of its revenues, a very low figure. DAFSA, *L'Industrie du Verre*, 1981, pp. 154-56; *L'Expansion*, December 21, 1979–January 10, 1980, p. 96.

[106] *La Vie Française*, February 20, 1978.

[107] Mille, "Evolution de Verre Plat," pp. 334-37; *La Vie Française*, December 8, 1975; *La Vie Française*, March 10, 1980.

[108] In fact, between 1973 and 1979, these operations lost a total of 620 million francs. Mille, "Evolution de Verre Plat," p. 337, note 1.

mand for flat glass. The result, as before, was overcapacity, price-cutting wars, declining production, and falling profit margins for several years after 1980.[109] Moreover, a new form of foreign competition entered the French and European markets: direct foreign investment in the flat glass sector. After 1980, four new foreign firms bought or built plants in Europe. These four, from the United States, Japan, and Britain, represented another powerful foreign threat to the industry in Europe.[110] They were disliked by the existing firms, especially St. Gobain, because they broke its virtual monopoly.

These intermittent economic crises were compounded by the steady growth of imports in the French (and European) market over the decade. Imports rose every year, quadrupling between 1973 and 1982.[111] Their share of the total French market doubled between 1970 and 1980. Rising from a relatively low level of 18 percent in 1970, imports captured approximately 35 percent by 1980 and close to 40 percent by 1982.[112] In addition, this import threat came from new sources, such as Italy, Eastern Europe, and East Asia, which had recently developed new capacity and were shifting from importing to exporting. Their appearance on the world glass market was doubly disturbing for the French industry: it signaled the decline of French glass exports to them and meant increased competition at home and in Europe.[113] Overall, the French flat glass industry faced constantly mounting foreign competition at home (and abroad) in the decade, which should have induced serious concerns about imports and perhaps demands for protection.

The manufacture of French flat glass was a Type III industry, with substantial export dependence and sizable, integrated multinational production capacity in the 1970s.[114] During the 1970s, the flat glass industry in France had extensive international trade relations. Although the industry's trade balance was negative every year except

[109] FCSIV, *Rapport*, p. 5; *JOCE*, "Communications," no. C232, September 3, 1984, p. 19; *Financial Times*, July 24, 1985; Mille, "Evolution de Verre Plat," pp. 365-67.

[110] *La Vie Française*, March 10, 1980; *Financial Times*, July 24, 1985; Mille, "Evolution de Verre Plat," pp. 364-67.

[111] French Customs Service data.

[112] Unpublished INSEE figures (for 1970); *Les Echos*, January 7, 1983 (for 1980 and 1982). These figures understate the actual penetration of flat glass imports by a substantial amount, since they do *not* account for any of the glass brought into France on imported motor vehicles, whose penetration of the French market was itself rising over the decade.

[113] IRIS, *Restructuration*, pp. 112-13; *J'Informe*, December 12, 1977; interviews: Mille, "Evolution de Verre Plat," p. 267.

[114] Sergent, "L'Industrie Verrière," pp. 22-24; see note 100 above.

1979, 1981, and 1982, it was a substantial exporter.[115] The value of its exports grew fivefold between 1973 and 1982, climbing slightly faster than its imports. Its percentage of exports to domestic production also rose over the decade, from about 25 to 30 percent in 1970 to nearly 42 percent in 1979.[116] At the firm level, exports also played a crucial role. Exports of glass from France for St. Gobain and BSN grew over the 1970s and were their most important exports globally.[117] The French glass industry and its two leading producers were thus large and growing exporters, dependent on these sales for a substantial part of their revenues.

In addition to being export dependent, the French flat glass industry was very multinational. The internationalization of this industry began early and was well advanced by the 1970s. This international activity also involved a great deal of intrafirm trade; its foreign and domestic production were well integrated due to the large-scale economies of production that induced the building of specialized plants used to service a number of markets.[118] Its percentage of foreign production relative to total production was 28.3 percent, the highest for all French industrial sectors in the 1970s.[119]

The firms St. Gobain and BSN also had extensive and rising multinationality over the decade. By the end of the 1960s, St. Gobain dominated production throughout continental Europe and also had plants in the United States, Brazil, and Lebanon.[120] In 1971, the firm realized only 57 percent of its revenues from glass in France, and this multi-

[115] French Customs Service data.

[116] INSEE, *Les Comptes de l'Industrie, 1979*; Bobe, "Les Importations des Biens de Consommation en Provenance de Tiers Monde," p. 52.

[117] For St. Gobain, approximately 13 percent of its total global sales in 1979 and over 15 percent in 1984 were accounted for by its French exports. See DAFSA, *L'Industrie du Verre*, 1981, p. 98; St. Gobain, *Annual Report, 1984* (Paris: St. Gobain, 1984), p. 4. Moreover, of its total export sales, 70 percent were those from France. See St. Gobain, *Annual Report, 1984*, pp. 3-4. St. Gobain was also the thirteenth largest exporter among French firms in 1981. See *Economie-Géographie*, no. 207 (September 1983):10. For BSN, the figures were lower but still very significant. Around 10 percent of its total global sales involved its French exports during the 1970s. (This figure is estimated from data in Sergent, "L'Industrie Verrière," pp. 27-31; DAFSA, *L'Industrie du Verre*, 1981, p. 98; interviews.) Other data reveal that exports for both firms grew at a rate of 10 percent over the period from 1974 to 1979. Groupe ESCP, "Le Développement International," pp. 11-12.

[118] Mille, "Evolution de Verre Plat," pp. 261-63; INSEE, *Annuaire Statistique*, 1983, p. 417.

[119] Savary, *Multinationales Françaises*, table 6, p. 28. This figure is for the larger glass and minerals manufacturing sector.

[120] Mille, "Evolution de Verre Plat," pp. 304-305, 337-41; DAFSA, *L'Industrie du Verre*, 1976, p. 86.

nationality grew more throughout the 1970s, as the firm began new production operations in Latin America, Egypt, Nigeria, and Portugal.[121] By 1979, the company was generating 53 percent of its sales through its foreign operations[122] and was among the one hundred largest multinationals in the world.[123]

St. Gobain's operations were integrated worldwide. Its intrafirm trade, especially within Europe, was important in the 1970s. Most of the flat glass exported from West Germany and Belgium to France was part of the firm's internal trade.[124] Moreover, after 1974, the only profit-making glass operations of St. Gobain were those outside France.[125] St. Gobain's multinational production operations were large and growing, highly integrated, and profitable in this decade.

Like St. Gobain, BSN was an early international producer. Although less multinational than St. Gobain, BSN had 47 percent of its total employees outside France and earned 42 percent of its revenues abroad by 1979.[126] It was also ranked the tenth largest multinational in France in the 1970s.[127] Like St. Gobain, it had significant intrafirm trade in Europe and was responsible as well for much of France's flat glass imports from West Germany and Belgium.[128] Thus BSN too was a large multinational, rivaling its domestic competitor, St. Gobain. Overall, the French flat glass industry was highly export dependent and multinational in this period.

While the industry was concentrated in France, it was also concentrated regionally and globally. In Europe, three producers—St. Go-

[121] Sergent, "L'Industrie Verrière," p. 1; interview.

[122] DAFSA, *L'Industrie du Verre*, 1981, p. 98; *Economie et Politique*, no. 82/355 (February 1984), p. 69; St. Gobain, *Annual Report, 1984*, pp. 3-4.

[123] St. Gobain, *Annual Report, 1984*, pp. 3-4. Furthermore, St. Gobain was the second largest multinational in France among industrial companies in terms of both its amount of foreign production and its number of employees abroad relative to the firm's total (50 percent and 58 percent, respectively, in 1979). Groupe ESCP, "Le Développement International," p. 13; Julien Savary, "Les Multinationales Françaises," *Economie et Humanisme*, no. 257 (January-February 1981):76.

[124] No figures on this intrafirm trade are available. Information from interviews; INSEE, *Annuaire Statistique*, 1983, p. 417. Since these two countries were France's largest sources of flat glass imports (with 28 percent and 22 percent, respectively, of all these imports), St. Gobain's intrafirm trade among these two countries was very significant. FSCIV, *Rapport*, pp. 11-12.

[125] *La Vie Française*, February 20, 1978; DAFSA, *L'Industrie du Verre*, 1981, pp. 154-56; interviews.

[126] DAFSA, *L'Industrie du Verre*, 1981, p. 98; Groupe ESCP, "Le Développement International," p. 12.

[127] Savary, "Multinationales Françaises," p. 76.

[128] INSEE, *Annuaire Statistique*, 1983, p. 417; interviews.

bain, BSN, and Pilkington in the United Kingdom—controlled the entire market. In North America, Pittsburgh Plate Glass (PPG) played the dominant role, while in East Asia the Japanese firm, Asahi, a subsidiary of Mitsubishi, controlled much of the flat glass market.[129] These top five producers controlled about 80 percent of the world market in 1976.[130]

This concentration was significant for two reasons. First, it meant that the large French firms were primarily European in their operations and not French. St. Gobain and BSN may be termed "European" firms in the 1970s.[131] This European identity and the market domination of these two French firms led to collusion between them. Infrequently clashing, the two often ran an effective and "cozy" cartel, dividing the European market and controlling prices within it, until their lucrative practice attracted foreign attention.[132]

A second point about this European organization of flat glass production in the 1970s was that it broke down after 1979. BSN's sale of its glass operations between 1979 and 1982 ended the European duopoly. Since St. Gobain was not interested in these operations, they were acquired by foreign firms. The entry of these new firms destabilized the old cartel and brought new foreign competition.[133] More worrisome, the construction of new glass operations in Luxembourg by the U.S. firm, Guardian, provoked further deterioration in the cartel and generated rising concern about overcapacity.[134] The entry of

[129] Interviews; IRIS, *Restructuration*, pp. 110-11.

[130] *Bulletin du Crédit National* (1er trim., 1983):13-16; IRIS, *Restructuration*, pp. 110-11.

[131] For example, not only did St. Gobain do its accounting in ECU rather than in francs, but it also organized its decision making for the sector at the European, and not the French, level. See *Le Monde*, July 28-29, 1985, p. 14; interview; Mille, "Evolution de Verre Plat," pp. 345-46; St. Gobain, *Annual Report, 1984*, pp. 4-7. This European identity was highly ironic given St. Gobain's history; it was created in 1665 by Colbert to be the national monopolist in glass and to halt the glass import invasion from Italy. Mille, "Evolution de Verre Plat," pp. 283-84.

[132] *Financial Times*, July 24, 1985; Mille, "Evolution de Verre Plat," pp. 369-85; DAFSA, *L'Industrie du Verre*, 1976, p. 89; Sergent, "L'Industrie Verrière," pp. 22-24, 33-34.

[133] Pilkington, the British giant, bought the German operations; Asahi, the Japanese firm, moved into Belgium; and PPG, the United States's and world's largest firm, acquired its French operations. See *Financial Times*, July 24, 1985; Mille, "Evolution de Verre Plat," pp. 323-26, 359-67; *La Vie Française*, March 10, 1980; interviews. Direct foreign investment in the French industry prior to 1976 accounted for at most 10 percent of total investment in the industry; however, by 1983, this figure had risen to 50 percent IRIS, *Restructuration*, pp. 109-110; *Economie et Politique*, no. 82-355 (February 1984):69

[134] Mille, "Evolution de Verre Plat," pp. 354-58, 365-67; *La Vie Française*, March 10, 1980; *Financial Times*, July 24, 1985; interviews; *JOCE*, "Communications," C232, September 3, 1984.

these new firms and particularly the competitive pressures it unleashed were likely to have inspired attempts by the French firms to close the French or European markets to foreign investment as well as to imports.

The Dependent Variable

Understanding the French flat glass industry's reaction to the foreign competition it faced in the 1970s requires asking whether the French (or European) flat glass industry wanted to protect its market from either foreign imports or direct foreign investment; that is, was the industry protectionist toward any aspect of foreign competition? In general, the industry's lack of protectionist demands and activity at both the national and the European level and the importance attributed to its own internal adjustment strategies are evident.

In the 1970s, the French flat glass industry was minimally involved with the national government on issues of trade or industrial policy. The industry showed little interest in trade issues and made no demands for surveillance or limitation of imports.[135] In fact, during the industry's worst crises, the presidents of St. Gobain expressed their preferences for free trade and the maintenance of an open European market.[136] This preference was linked to the firm's international character—that is, its need to ensure continuous flows of exports and imports of glass among its far-flung plants.

This disinterest in trade restrictions in the face of severe economic difficulties was combined with a similar disinterest in controlling foreign investment. During the decade, the two leading firms made no efforts to limit foreign investment in French glass production. In 1979 when BSN announced its intention to sell its glass plants, neither BSN nor St. Gobain tried to block their purchase by the giant American firm, PPG.[137] The flat glass industry's preferences for foreign trade and investment policies at the national level thus tended toward market openness, despite the rising pressures from foreign competition.

In the industrial policy arena, the makers of flat glass again showed little interest in governmental aid. Apparently, the manufacturers wanted little to do with the government. Relations between the industry and government in the 1970s were described as "not very smooth"

[135] Interviews; no other sources reveal any interest by the industry in such measures.

[136] *Le Nouvel Economiste*, no. 151, February 10, 1978, pp. 52-53; Stoffaes, *Grande Menace Industrielle*, p. 486; *La Vie Française*, February 20, 1978; *Bulletin du Crédit National* (1er trim., 1983):5-7

[137] Interviews; no other sources make any mention of attempts to forestall such direct foreign investment in France.

and rather "strained."[138] The industry dealt mainly with three ministries, two of which it tended to fight with constantly. Battles over price controls with the Ministry of the Economy and Finance and over environmental rules with the Ministry of Health and the Environment were a continuous focus of attention. In addition to these contacts, there were good relations with the Ministry of Industry.[139] But throughout the 1970s no "plan" ever existed for the glass industry, and it received little government aid.[140] Moreover, the lack of a plan or aid did not concern the industry.[141] Both BSN and St. Gobain prided themselves on their independence from the government, and both remained largely self-financed through their crises.[142] The French glass industry was slightly more active at the European level. This greater interest reflected the European scale of its operations. For BSN and St. Gobain, the European market, rather than the French, was more important, due to their concentration of trade and production operations throughout Europe. Preferences for closure of the European market were never voiced by the industry; indeed, in traditional trade policy areas, it sought greater openness of markets worldwide.

The trade policy demands of the industry concerning European issues were evident in its activities during the GATT Tokyo Round negotiations in the mid-1970s. By and large, the French producers of flat glass preferred the application of the full tariff reduction to their products. Even when the United States refused to reduce its glass rates, the Europeans went ahead with a 23 percent reduction in their schedule.[143] The industry's interest was in having other countries open their markets further, but even when this was not possible it did not oppose greater opening of its market. The European industry also worked to harmonize glass tariff classifications among different countries, another effort intended to facilitate trade.[144]

On other European trade issues, the glassmakers also showed no interest in protection. In the 1970s the industry never lodged a formal

[138] Interviews.

[139] Ibid.

[140] Ibid. Unpublished data from INSEE on aid show very minimal amounts to the glass sector; St. Gobain did get some aid for its electronics operations in the late 1970s.

[141] Interviews; *Le Figaro*, February 21, 1978; *Bulletin du Crédit National* (1er trim., 1983):5-7; *Les Echos*, January 7, 1983.

[142] Interviews; Mille, "Evolution de Verre Plat," pp. 292-94, 344; St. Gobain, *Annual Report, 1984*, pp. 7-14; *Les Echos*, January 7, 1983.

[143] EC, *Rapport de la Commission de la CE sur les Négociations Multilatèrales*, p. 27; interviews.

[144] Interview, FSCIV, *Rapport*.

trade complaint against any of its foreign competitors. No evidence of antidumping, antisubsidy, or escape clause petitions by the industry before 1982 exists.[145] Given that East European imports surged, that the United States was protecting its market against the European glassmakers while beginning to export to Europe, and that East Asian imports were growing during this decade, the lack of any such complaints by the Europeans was remarkable.[146]

Concerning the problem of foreign investment within Europe, the flat glass manufacturers also showed little interest during the decade. The industry's constant fears of overcapacity should have produced concerns about potential new foreign entry, but little attention was directed toward this problem. The French industry did nothing to block the sale of BSN's operations in Europe to foreign producers. The entry of Pilkington (U.K.), PPG (U.S.), and Asahi (Japan) into the European market did not elicit any attempt by St. Gobain to preserve its monopolistic status.[147]

Only in the early 1980s, when the U.S. firm, Guardian, attempted to build new glass plants in Luxembourg did the existing producers complain. St. Gobain, along with the rest of the industry—i.e., the other foreign firms, lodged a complaint against the Luxembourg government for encouraging this new capacity by giving Guardian huge subsidies to build in the country. Concerned about both overcapacity problems and the price effects of these subsidies, the existing glass manufacturers hoped the new float plants would never be built. After negotiations, the subsidies were reduced and a first plant built.[148] In this case, the industry used the EC to help negotiate reductions in the subsidies with the Luxembourg government. The issue, then, was one of concern over the deleterious effects of national subsidies to industry. In general, the French glass producers in the 1970s and early 1980s were as disinterested in EC intervention to help them as they were in French government aid. One EC official maintained that the sector had adopted a position aimed at persuading the EC to allow the

[145] Interviews; EC Commission, *1st Annual Report of the Commission of the EC on the EC's Anti-Dumping and Anti-Subsidy Activities* (Brussels: EC, 1983) and *2nd Annual Report of the Commission of the EC on the EC's Anti-Dumping and Anti-Subsidy Activities* (Brussels: EC, 1984).

[146] Mille, "Evolution de Verre Plat," pp. 264-67; interviews. In interviews, the rising concern over East Asian production and exports was voiced. Since 1982 this concern has increased, but as of 1986 no complaints had been filed or other actions taken.

[147] Interviews.

[148] Interviews; Mille, "Evolution de Verre Plat," pp. 354-58; *JOCE*, "Communications," C232, September 3, 1984, esp. p. 19; *Financial Times*, July 24, 1985.

evolution of the industry to proceed with as little public intervention as possible.[149]

Disinterest in French or EC intervention did not mean that the flat glass industry was inactive in trying to deal with its economic problems in the 1970s and early 1980s. The industry did not choose to seek public resolution of its foreign competition problems through protectionism, but it did pursue solutions on its own. Three basic strands of its strategy can be discerned.

The first part of this strategy involved efforts by the French firms to increase their international operations in the 1970s. Further multinationalization was viewed as a means to enhance competitiveness by augmenting the firm's size and its presence in many markets.[150] Both BSN and St. Gobain expanded their operations globally in the 1970s. Moreover, after BSN's exit and the entry of new giant competitors like PPG and Asahi, St. Gobain felt more compelled to move abroad in order to remain competitive with its new global rivals.[151]

The second element in the industry's adjustment strategy involved diversification. Though St. Gobain and BSN both had sizable operations outside of flat glass production before the 1970s, the two opted to diversify more extensively after 1968. Hence, in 1971 BSN had 43 percent of its sales in flat glass; in 1981, it had no flat glass operations left. The success of its diversified activities led to BSN's sale of its money-losing flat glass operations in 1980.[152] For BSN, the rising competitive pressures in flat glass initially induced diversification and then exit from the industry; it never tried to protect its market to stave off these pressures. St. Gobain also chose to accelerate its diversification. It initially integrated downstream, acquiring a large consumer for its glass products, and later moved further afield into the high technology area.[153] Through this diversification, St. Gobain sought to reduce its dependence on the difficult glass industry. Like BSN, it worked to resolve its problems in glass by means of its corporate strategy, not protection.

[149] *JOCE*, "Communications," C232, September 3, 1984, p. 19.

[150] Mille, "Evolution de Verre Plat," pp. 295-97, 302-305, 337-43; DAFSA, *L'Industrie du Verre*, 1976, p. 86; interviews.

[151] *Les Echos*, January 7, 1983; interview.

[152] Sergent, "L'Industrie Verrière," pp. 27-31; *Financial Times*, July 24, 1985; Mille, "Evolution de Verre Plat," pp. 346-49.

[153] Sergent, "L'Industrie Verrière," pp. 33-34. In 1979, it began a joint venture with National Semiconductor to produce semiconductors in Europe. Additionally, St. Gobain sought to position itself for the future by moving into the computer field. In 1980, it acquired a 20 percent interest in Machines Bull, the French computer maker. *Journal des Finances*, December 7, 1978; *L'Expansion*, December 21, 1979–January 10, 1980, pp. 94-96; *Les Echos*, November 8, 1979.

The final element in the industry's strategy involved collusion and cartelization of the European market. BSN's and St. Gobain's control of most of the flat glass industry in Europe allowed the two to exercise a duopoly.[154] Ultimately, however, this did less to protect the European market than to encourage further attempts at entry. While precluding much market share movement by producers within Europe and holding back new investment, this collusion created stable, high prices for glass that made foreign producers eager to enter the market. This collusion attracted both imports and attempts to invest in the market. Indeed, when BSN was selling its operations, the major foreign producers fought to buy them. As one manager in the French glass industry said, the foreign firms saw BSN's sale as a "big opportunity" to finally get into the European market.[155] In the end, this element of the industry's strategy induced foreign competition instead of forestalling it.

Overall, the French flat glass industry's response to its economic problems in the 1970s principally involved its own internal economic strategies, especially internationalization, diversification, and collusion. The glassmakers rarely used more public, political strategies. In large part, this preference stemmed from the industry's international character. Having a global web of trade and production activities, the industry did not see protectionism or other forms of public intervention as desirable, because they would have upset the firms' trade and production flows. This is the view expected of a highly export-dependent, multinational industry.[156]

Case 4: Pharmaceuticals

The specialties sector of the pharmaceutical industry in France was divided into two distinct groups.[157] A large number of its firms were

[154] Sergent, "L'Industrie Verrière," pp. 22-24; Mille, "Evolution de Verre Plat," pp. 369-85; DAFSA, *L'Industrie du Verre*, 1976, p. 89; *Financial Times*, July 24, 1985. The French government apparently even encouraged it, believing that it would lead to more rational investment decisions and calmer market conditions. See Mille, "Evolution de Verre Plat," pp. 376-379. On the other hand, the EC investigated and condemned these two firms' collusive activities numerous times. DAFSA, *L'Industrie du Verre*, 1976, p. 89; Mille, "Evolution de Verre Plat," pp. 379-84.

[155] Mille, "Evolution de Verre Plat," pp. 354-58; *Financial Times*, July 24, 1985; interviews.

[156] This point was made repeatedly in interviews; see also *Financial Times*, July 24, 1985; *Les Echos*, January 7, 1983.

[157] The pharmaceutical sector had two main sectors: basic pharmaceuticals (NAP 1901) and specialty ones (NAP 1902). Although somewhat arbitrary, because the producers of each were essentially the same firms, this division was important because the two areas

small, independent laboratories producing a limited selection of pharmaceutical products. The second group, which dominated the industry, consisted of a few large, diversified firms, often with only a minority interest in pharmaceuticals. Though the industry was not very concentrated, the large firms controlled it by virtue of their overwhelming size.[158] Over the 1970s the gap between these two groups widened, and the balance of power shifted increasingly in favor of the large firms.[159]

During the 1970s the pharmaceutical industry in France experienced severe economic difficulties coupled with mounting foreign competition. A serious downturn between 1974 and 1978 resulted in declining firm numbers, stagnant employment, and falling rates of profit, investment, and production. The effects of the first oil shock in 1973, which raised production costs and reduced demand, hurt the pharmaceutical industry. Between 1970 and 1984, its number of firms decreased by 25 percent.[160] This consolidation and closure of firms also reduced employment.[161] The severity of the industry's problems was revealed further by its declining profitability and investment. The industry was caught in a profit squeeze. This in turn reduced investment in it after 1975 and, given the importance of R&D investment, hurt its competitiveness.[162] These problems affected all parts of the pharmaceutical sector; in 1975 and 1976, 50 percent of its firms reported financial losses.[163] The biggest firms also suffered. Rhône-Poulenc Santé, Sanofi, and Roussel-Uclaf, the three largest, experienced declines in profits, employment, and exports in the late 1970s.[164]

The effects of this recession were aggravated by growing import competition. After the late 1960s, pharmaceutical trade globally and

---

had different international trade positions. Due to its trade problems, the specialties sector is the one focused on here. The specialty pharmaceutical industry consists of firms manufacturing active substances, the basic input for pharmaceutical products, and specialty medicines for human use.

[158] Jacqueline Sigvard, *L'Industrie du Médicament* (Paris: Calmann-Lévy, 1975), pp. 36-42.

[159] Sigvard, *Médicament*, pp. 36-51; *Economie et Politique* (September 1980):62; *Le Matin*, April 23, 1977; *Entreprise*, no. 1008, January 3, 1975, pp. 46-50.

[160] Sigvard, *Médicament*, p. 25; Syndicat National de l'Industrie Pharmaceutique (hereafter SNIP), *Dossier Economique* (Paris: SNIP, 1985); *Le Nouvel Economiste*, no. 496, June 28, 1985.

[161] INSEE, *Les Comptes de l'Industrie, 1979*, pp. 120-22.

[162] Sigvard, *Médicament*, pp. 59, 61, 96-97; SNIP, *L'Industrie Pharmaceutique et Ses Realités* (Paris: SNIP, 1982), p. 17; *Economie-Géographie*, no. 151 (February 1978):10; *Le Nouvel Economiste*, no. 496, June 28, 1985.

[163] *La Vie Française*, November 3, 1975; *Le Monde*, July 16, 1976.

[164] *La Vie Française*, April 4, 1977, p. 19; *Le Nouvel Economiste*, no. 489, May 10, 1985, p. 78; *Le Nouvel Economiste*, no. 502, August 9, 1985, p. 27.

in Europe particularly exploded due to the creation of the Common Market and the reduction of numerous trade barriers.[165] The growing threat posed by imports of specialty pharmaceuticals was apparent in France during the 1970s. Between 1973 and 1981, imports multiplied over ten times in value.[166] The share of imports in total domestic consumption rose between 1970 and 1977 from 16.5 percent to over 25 percent.[167] Moreover, this increase was doubly significant because foreign penetration in the 1960s was virtually unknown.[168] Among all French industries, the pharmaceuticals sector experienced the fourth largest rate of increase in import penetration between 1974 and 1980.[169] Combined with its economic difficulties, this import invasion should have prompted concern among the firms over trade issues, and perhaps even demands for protection.

Pharmaceuticals was a Type III industry. Trade and multinational ties were significant for the industry and rising over the 1970s, although multinationality remained its primary form of international activity. But exports and foreign production operations were concentrated in the hands of the largest firms; the majority of small labs focused only on the domestic market.[170]

The trade relations of the French pharmaceutical manufacturers grew over the 1970s. The liberalization of markets in the period between 1965 and 1972 prompted an expansion of imports and exports. France increased the value of its pharmaceutical exports by more than five times between 1973 and 1980.[171] Exports as a percentage of national production rose impressively from 13.4 percent in 1970 to 20 percent in 1980.[172]

Three features of this export trade should be noted. First, the industry derived a great deal of foreign income from licenses and patents with foreign firms, although it ran an increasingly negative balance in this area.[173] This sizable trade in licenses and patents

[165] Sigvard, *Médicament*, pp. 147-51.

[166] French Customs Service data (Douanes fiche for NAP 1902).

[167] Unpublished INSEE data (NAP 1092).

[168] Sigvard, *Médicament*, pp. 147-51; *Economie-Géographie*, no. 151 (February 1978):10.

[169] Ministère de l'Industrie, *Les Chiffres Clés de l'Industrie, 1984* (Paris: Documentation Française, 1985), p. 48, for sector including "parachimie et pharmacie."

[170] *Les Echos*, October 30, 1975.

[171] SNIP, *Dossier Economique*, p. 41; Sigvard, *Médicament*, pp. 147-51. Although this increase was from a low initial level, it was not as rapid as that experienced by imports, and in consequence, imports overtook exports in 1976, which produced an increasingly large trade deficit. See French Customs Service data.

[172] Bobe, "Les Importations des Biens de Consommation en Provenance de Tiers Monde," p. 52; *Info Chimie*, no. 238 (June 1983):102.

[173] Taking into account the net trade through licensing agreements, which were almost

constituted an essential part of the industry's linkage to the international economy. Second, it imported mostly lower value-added active substances, which were then used in the production of higher value-added medicines, which in turn formed the core of the industry's exports.[174] The manufacturers were thus dependent on imports for their production and exports. Third, export dependence was not equally shared by all firms. Of a total of over 300 firms, only 180 exported at all, and the largest ten exporters sold over 40 percent of the industry's exports.[175] This concentration of export activity meant that the largest firms were more dependent on exports than the industry as a whole.[176]

The pharmaceutical producers in France were extensively involved in foreign production operations. Many of these were begun early in the postwar period as a means to obtain access to foreign markets, which were then largely closed to imports.[177] Multinationality thus had come first and was more significant for the pharmaceutical industry than were its exports. Although its production abroad relative to its total production was about 8 percent in the early 1970s, its percentage of the total number of French foreign operations was the highest for all French industry. It possessed 25 percent of all French production facilities abroad in 1978.[178]

This multinationality grew over the 1970s. The French producers felt they had to expand abroad or lose competitiveness.[179] Movement

five times the size of direct exports, the trade balance becomes more negative. French pharmaceutical producers were involved in many such agreements, but on balance they earned less from their patents than they paid for the use of foreign companies' licenses. *Economie-Géographie* no. 151 (February 1978):10; *Les Echos*, October 30, 1975; DAFSA, *L'Industrie Mondiale de la Pharmacie: Structure et Stratégies* (Paris: DAFSA, 1981), pp. 70-71.

[174] Sigvard, *Médicament*, pp. 147-51; DAFSA, *L'Industrie Mondiale*, pp. 55, 65; SNIP, *L'Industrie Pharmaceutique*, 1982, pp. 25-29.

[175] *Les Echos*, October 30, 1975.

[176] Rhône-Poulenc, the largest firm in the industry, was the eighth largest exporter in France in 1981. For the firm's pharmaceutical division, exports accounted for 30 percent of all sales. The figure for Sanofi, the fourth largest French producer, was 20 percent for 1980. Pharmuka, the seventh largest firm, also had an above-average export dependence; the figure for its parent corporation, Pechiney-Ugine-Kuhlmann, was 25 percent in 1976. *Economie-Géographie*, no. 207 (September 1983):10; *Info Chimie*, no. 238 (June 1983):111; "Les Multinationales," *Cahiers Français*, no. 190 (Paris: Documentation Française, March-April 1979), p. 23.

[177] *Les Echos*, August 21, 1980; INSEE, *Annuaire Statistique*, 1983, p. 418; EC, *The Community's Pharmaceutical Industry* (Brussels: EC, 1985), pp. 19-22. This figure is for pharmaceuticals as a whole and other chemicals.

[178] Savary, *Multinationales Françaises*, p. 28; Michel Delapierre in *L'Integration de l'Economie Française*, ed. Michalet, p. 99.

[179] DAFSA, *L'Industrie Mondiale*, pp. 1, 70-79; *Le Figaro*, January 28, 1980; *Info Chimie*, no. 238 (June 1983):127.

abroad enabled firms to spread their high production (especially R&D) costs over larger markets, which increased profits.[180] These operations were woven together through webs of intrafirm trade. Producers manufactured active substances in certain markets and then shipped these to other areas where they were used in the production of medicines, many of which were then exported. This intrafirm trade was increasingly significant for the French industry during the decade.[181] These foreign operations were more profitable for the firms than were their domestic ones. In some cases, without their foreign profits, the pharmaceutical firms would have generated such losses in France their survival would have been questionable.[182] Multinationality was clearly important for the industry.

This multinationality was concentrated in the hands of the largest firms. Rhône-Poulenc Santé, the leader of the French industry, had subsidiaries worldwide in the 1970s, with an especially strong presence in Europe, Africa, and the Middle East. Its multinational operations accounted for 30 percent of its sales in the late 1970s. Moreover, this percentage grew rapidly over the 1970s and early 1980s.[183] The second largest firm in France, Roussel-Uclaf, which in 1974 was bought by the German firm, Hoechst, also increased its foreign operations over the 1970s. Its foreign operations accounted for 40 percent of its total sales in 1975.[184] Sanofi, another large French producer, made some 40 percent of its sales outside of France and was actively expanding into Japan, the United States, and West Germany in the 1970s and early 1980s.[185] All of France's large pharmaceutical producers were thus heavily multinational.[186]

[180] *Info Chimie*, no. 238 (June 1983):111.

[181] DAFSA, *L'Industrie Mondiale*, pp. 53, 78; *Le Nouveau Journal*, March 29, 1980.

[182] *Info Chimie*, no. 238 (June 1983):107-110, 118-19; *Le Figaro*, September 22, 1978; *Les Echos*, May 20, 1980; *La Vie Française*, April 4, 1977, p. 19; *La Vie Française*, September 25, 1978, p. 25; *La Vie Française*, April 14, 1980; *Le Monde*, April 11, 1980.

[183] *Info Chimie*, no. 238 (June 1983):107-12; *Le Nouvel Economiste*, no. 489, May 10, 1985; EC, *The Community's Pharmaceutical Industry*, p. 20; Groupe ESCP, "Le Développement International," p. 12.

[184] Groupe ESCP, "Le Développement International," p. 12; *La Vie Française*, February 16, 1981, p. 50; *Les Echos*, December 22, 1976; *La Vie Française*, April 4, 1977, p. 19; *Le Monde*, December 7, 1977; DAFSA, *L'Industrie Mondiale*, pp. 69-70; EC, *The Community's Pharmaceutical Industry*, p. 20.

[185] DAFSA, *L'Industrie Pharmaceutique*, pp. 69-70; *Info Chimie*, no. 238 (June 1983):118-19, 124; *Les Echos*, March 24, 1981; EC, *The Community's Pharmaceutical Industry*, p. 20; *Le Figaro*, June 19-20, 1980.

[186] The French firms were not as multinational as the large U.S., Swiss, and German firms that dominated the industry globally. See DAFSA, *L'Industrie Mondiale*, intro. and p. 1; *Le Nouvel Economiste*, no. 496, June 28, 1985. Rhône-Poulenc and Sanofi were twentieth and thirty-first, respectively, in size among the world's largest pharmaceutical pro

The firms in the business were highly trade dependent and multinational. In fact, these two forms of international activity accounted for the majority of the industry's sales. The revenues generated by exports, technical licenses, and foreign operations accounted for 61 percent of domestic revenues in 1968, 75 percent by 1973, and 90 percent in 1980.[187] These high levels and growth rates of international operations for the industry attest to its strong ties to the world economy.

In addition to its international ties, the movement of foreign firms into the French industry increased its international character and competitive pressures. Not only did import competition rise, but foreign competition through direct investment accelerated. In the 1960s, only some 20 percent of capital in French pharmaceuticals was controlled by foreigners; by the end of the 1970s the figure had risen to 50 percent.[188] The early penetration by Swiss firms was followed later by the Germans and Americans. As already mentioned, the second-largest French firm, Roussel-Uclaf, was acquired by the giant German corporation, Hoechst, in 1974.[189] Indeed, of the top five firms in France, two were foreign owned.[190] Direct foreign investment, therefore, constituted another crucial aspect of foreign competition for the industry.

Dependent Variable

Did the French pharmaceutical industry respond to its economic difficulties by seeking to close its market to foreign competition, either imports or investment? The role played by the industry's growing international ties in the formulation of its demands was critical. In general, these links fostered its attempts to open its market further.

At the national level, the French pharmaceutical manufacturers pursued no efforts whatsoever in the 1970s to protect their domestic market from rising foreign competition. Prior to 1972, neither imports nor direct foreign investment was appreciable. The French market in pharmaceuticals was virtually closed to all foreign pressures due to the very strict system of industry price controls and national drug regulations. Between 1968 and 1972, however, a number of initiatives were taken that reduced the constraining effects of this system.[191] Imports increased greatly as a result. Despite this import surge, the producers never sought to have the French government protect the industry, even when they ran into economic difficulties after 1975.[192] Furthermore, the pharmaceutical manufacturers never pressed for restrictions on the entry of foreign producers.[193] Overall, the industry had little interest in trying to restore restrictions on access to its home market.

In the postwar period, the French pharmaceutical industry was involved in the government's health policy; it was seen as an integral element in the social security system. As such, it was subjected to a great deal of government regulation, ranging from price controls to new product rules. Although related to national health policy, these regulations had strong effects on trade. Their severity made importing practically impossible before the late 1960s. In the late 1960s and early 1970s efforts were made to reduce the protectionist effects of these measures, often at the behest of the industry itself. Moreover, during the period after 1972, the industry and its association, SNIP, became involved in attempts to open the French market and to create a European market in pharmaceuticals.

The industry's activities to alter its industrial policies focused on three key goals. First, the pharmaceutical producers wanted an end to the strict price control scheme regulating their products. The French government used this to set prices for pharmaceuticals purchased as part of its health insurance and social security policies. These prices were kept at low levels to control the social security system's chronic deficit,[194] but they pervaded the whole French market. They basically determined the range of all drug prices in France and the price of

ducers. See EC, *The Community's Pharmaceutical Industry*, table on p. 20. Moreover, the large French producers had small market shares in the biggest world markets—that is, in the United States, West Germany, and Japan. By the early 1980s, the French had improved their international standing somewhat. Their consolidations at home and expansion abroad increased both their size and presence, bringing them into closer competition with the world leaders. Sigvard, *Médicament*, pp. 43-47; *Le Monde*, January 22, 1980, p. 43; *Le Monde*, April 11, 1980; *Les Echos*, supplement, February 28, 1979, pp. 13-20.

[187] SNIP, *L'Industrie Pharmaceutique*, 1982, p. 28; Sigvard, *Médicament*, pp. 141-47; *Les Echos*, October 30, 1975.

[188] *Le Matin*, April 23, 1977; DAFSA, *L'Industrie Mondiale*, pp. 74, 206; Stoffaës, *Grande Menace Industrielle*, pp. 267-68; Sigvard, *Médicament*, pp. 47-51.

[189] *Les Echos*, February 13, 1974; *La Vie Française*, January 2, 1974; *Le Nouvel Economiste*, no. 489, May 10, 1985.

[190] Sigvard, *Médicament*, pp. 74-75.

[191] DAFSA, *L'Industrie Mondiale*, pp. 31-33, 53, 75-79; Sigvard, *Médicament*, pp. 79-83, 136-39; Chambre de Commerce, *La Concurrence Etrangère et les Importations Sauvages* (Paris: Chambre de Commerce, 1977), p. 33; INSEE, *Annuaire Statistique*, 1983, p. 418

[192] Interviews.

[193] Ibid.; EC, *The Community's Pharmaceutical Industry*, pp. 36-45; *Economie et Politique* (September 1980):62; *Les Echos*, January 27, 1981.

[194] Sigvard, *Médicament*, pp. 79-83, 18; EC, *The Community's Pharmaceutical Industry*, pp. 36-45; *Les Echos*, supplement, February 28, 1979, pp. 46-58, 67, *Les Echos*, July 15, 1976.

exports, since foreign purchasers negotiated on the basis of the publicly known domestic prices.[195] Price controls were a major source of concern for the industry, because they reduced its profitability, thus limiting R&D and hurting its competitiveness.

The pharmaceutical producers fought for greater pricing flexibility throughout the 1970s. They launched three major efforts to force the government to alter its policy and were successful in two of them. The battle over pharmaceutical prices was waged between the industry and the Ministry of Industry, on the one hand, and the ministries of Health and of Finance, on the other. The first group desired to end, or at least reduce, price controls in order to restore the industry's profitability and competitiveness; the second group advocated retention of controls in order to keep the social security deficit from increasing and to retain influence over the industry.[196] In 1972 the industry launched its first campaign for price liberalization and relaxation of various regulations. Some of the industry's demands were realized, mostly in regard to the latter issue. The net effect was to encourage importing by making it easier and by making pharmaceuticals more profitable.[197]

The decade's major effort to reduce price controls occurred in 1975-76. The French producers were experiencing severe economic difficulties, which prompted them to seek changes in the policies affecting them. Taking the initiative, the industry designed a long-term industrial policy for itself, a central element of which was price liberalization. In alliance with the Ministry of Industry, the pharmaceutical producers presented their plan to the President of the Republic.[198] The industry received no satisfaction of its demands at this point, but it continued and intensified its campaign.[199]

The final episode in the battle over price controls took place in the late 1970s. The industry, as its problems worsened, found a new ally in the Ministry of Health. By the late 1970s, the producers, with the

[195] Sigvard, *Médicament*, pp. 136-39; DAFSA, *L'Industrie Mondiale*, p. 15; *Les Echos*, April 14, 1976; interview.

[196] Sigvard, *Médicament*, pp. 97-103; *La Vie Française*, November 3, 1975; *La Vie Française*, March 26, 1979, p. 26, *Le Monde*, July 16, 1976; *Info Chimie*, no. 238 (June 1983):115; *Le Figaro*, November 14, 1979; interview.

[197] *Les Echos*, supplement, February 28, 1979, p. 67, interview. DAFSA, *L'Industrie Mondiale*, pp. 31-32, 53.

[198] *Le Point*, no. 179, February 23, 1976, pp. 85-86; *Le Point*, no. 209, September 20, 1976, p. 112; *Le Monde*, July 16, 1976; *Les Echos*, January 10, 1977; *Le Matin*, June 22, 1978; interview.

[199] *Le Figaro*, February 13, 1976; *Le Nouvel Observateur*, June 28, 1976, p. 43; *Le Point*, no. 179, February 23, 1976, pp. 85-86; *Economie-Géographie*, no. 151 (February 1978):2-3.

backing of the ministries of Industry and Health, impressed their concerns on the government and were allowed some price liberalization, which encouraged imports.[200] The industry's demand for reductions in price controls was directed at its own domestic situation, but the industry understood and approved of the trade effects—i.e., both higher-priced exports and more imports—attached to such liberalization.

The industry's second goal was to restore its competitiveness by reorganizing. In 1975, as part of its price liberalization scheme, the industry proposed to regroup itself around several of the largest firms, but only in exchange for greater pricing flexibility. When the Ministry of Finance and the President rejected the changes in the pricing scheme, the pharmaceutical producers refused to regroup, something that the government strongly desired.[201] When the government agreed to price liberalization in 1979-80, the industry then reorganized itself around the four largest firms.[202] What is interesting about the industry's demands for new industrial policies is that they did not involve protectionism. Despite the industry's mounting problems and import penetration, it never sought to close its market. Indeed, it actively sought to reduce trade barriers and promote foreign investment.

The industry's demands also were not focused on receiving more government aid. Although considered a sector of the future, the pharmaceutical industry was not a major requester or recipient of state aid. Largely self-financed, it did not depend on the government.[203] The aid it did receive went mainly toward its R&D efforts: it was a way of making up for profits lost due to the price controls.[204]

The third goal sought by the pharmaceutical producers was the relaxation of rules governing the introduction of new drugs. In the early 1970s, the industry sought to loosen testing requirements and to re-

[200] *La Vie Française*, March 30, 1981, p. 38; *Les Echos*, January 27, 1981; *Le Matin*, January 7, 1980; *Le Figaro*, March 7, 1980; *Le Point*, no. 390, March 10, 1980, p. 100; *Les Echos*, March 7, 1980.

[201] *Le Point*, no. 209, September 20, 1976, p. 112; *Le Monde*, August 6, 1976; *Le Monde*, August 9, 1976; *France Nouvelle*, May 23, 1977; *La Vie Française*, January 17, 1977; *Le Matin*, June 22, 1978; *Les Echos*, July 15, 1976.

[202] *Le Monde*, March 7, 1980; *Le Point*, no. 390, March 10, 1980, p. 100; *Journal des Finances*, March 13, 1980; *Journal des Finances*, February 12, 1981.

[203] *Les Echos*, supplement, February 28, 1979, p. 27; Sigvard, *Médicament*, pp. 59, 61, 64; *La Vie Française*, November 26, 1979; *Le Nouveau Journal*, September 13, 1979; *Les Echos*, June 13, 1978.

[204] *Les Echos*, supplement, February 28, 1978, pp. 71-78, *Les Echos*, June 13, 1978; *Le Nouveau Journal*, September 13, 1977.

duce waiting periods for new products. In 1972 measures were adopted by the French government to ease such restrictions, which thereby further opened the market to imports.[205] After this, however, the industry's efforts concerning drug regulations shifted to the European level.

There, pharmaceutical industry's efforts were more focused on reducing trade barriers than its efforts in France had been. In terms of traditional trade policy instruments like tariffs and quotas, the industry was already unencumbered by them in the 1970s. In the GATT negotiations of the Tokyo Round, the European industry did not resist further cuts in its tariffs, but these were not a central concern.[206] The industry also favored increased international harmonization of product classifications to facilitate trade.[207] In addition, the industry's involvement in the negotiations with the United States to end its policy of "American Selling Price" (ASP) on chemical imports was part of its preferences for trade liberalization globally.[208] The pharmaceutical manufacturers' central concern with trade involved the European Common Market. As the firms increased their operations throughout Europe, their interest turned more toward the creation of a single European market.[209] Toward this goal, a major attempt to harmonize pharmaceutical regulations in Europe was made in the early 1970s. Beginning in 1972, the EC initiated negotiations to eliminate various national regulations and to establish European-wide standards, rules, and testing procedures. This process was backed by the European pharmaceutical producers, who saw the myriad of diverse national policies as an impediment to their European trade and production flows. In 1975, the negotiations produced a set of European codes for the pharmaceutical industry, which aided trade within the Community.[210]

The French industry's disinterest in protection was further dis-

205 *Economie-Géographie*, no. 151 (February 1978):2-3; Sigvard, *Médicament*, pp. 79-83, 136-39; *Les Echos*, supplement, February 28, 1979; EC, *The Community's Pharmaceutical Industry*, pp. 36-45; interview.

206 DAFSA, *L'Industrie Pharmaceutique*, pp. 75-76; interview. Duties on pharmaceutical specialties in France were reduced in the Tokyo Round from 5.5 percent in 1974 to 2.5 percent in 1981, according to figures from the French Customs Service.

207 Interview.

208 *Les Echos*, February 21, 1979, p. 7.

209 *Le Matin*, June 22, 1978; *Les Echos*, October 31, 1974; Sigvard, *Médicament*, pp. 19, 278-81; interview.

210 Sigvard, *Médicament*, pp. 19, 79-83, 278-81; EC, *The Community's Pharmaceutical Industry*, pp. 36-45; *Economie et Politique* (September 1980):62; *Les Echos*, supplement, pp. 58-61, 67; interview.

played by its lack of complaints to the EC over foreign dumping, subsidization, or other unfair trade practices. The chemical sector as a whole was one of the most frequent complainers, but the pharmaceutical producers were not involved in this activity.[211] Despite growing foreign competition from both within and outside of the EC, the industry showed little desire to have this limited. Not even the relatively restrained step of complaining to the EC was taken. The industry at home and in Europe appeared far more interested in meeting foreign competition than in halting it.

The industry's own, internal efforts to adjust were most important. Its strategy to restore its competitiveness had two central elements, neither of which entailed efforts to reduce imports or foreign investment. The first element in the French producers' strategy was to increase their multinationality. The large producers realized that to remain competitive they had to have large markets over which to spread their costs. Only by exporting and operating in large, profitable markets could they make the revenues necessary to finance the R&D efforts crucial to their future. This realization prompted the largest firms to extend their foreign operations and to seek ways to reduce barriers impeding their sizable intrafirm trade flows.[212] As part of this, the French producers also increased their technical agreements with foreign producers in an effort to acquire new technology and/or foreign outlets.[213] The success of this internationalization increased the industry's insertion into the global economy and provided a key means for dealing with its economic problems.

The second element in the pharmaceutical industry's strategy was to increase firm size by consolidating the industry. The large firms believed that only further growth would enable them to be competitive with the giant Swiss, German, and U.S. firms that dominated the industry globally. This view led to acquisitions of smaller labs by the big producers as well as acquisitions by large firms outside the industry.[214] These efforts were initially not favored by the French government, but by the late 1970s the government had become a full partner in

211 EC, *First* and *Second Annual Report on Anti-Dumping and Anti-Subsidy Activities*; interviews.

212 *Info Chimie*, no. 238 (June 1983):127; DAFSA, *L'Industrie Mondiale*, intro. and pp. 1, 53, 68; Sigvard, *Médicament*, pp. 282-83; *Les Echos*, May 2, 1983, p. 7; *Le Matin*, June 22, 1978; *Le Figaro*, October 21, 1977; *Economie-Géographie*, no. 151 (February 1978):3-4.

213 DAFSA, *L'Industrie Mondiale*, pp. 70-74; *Economie-Géographie*, no. 151 (February 1978):10.

214 Sigvard, *Médicament*, pp. 43-47; *Le Monde*, May 24, 1973; *Le Monde*, January 22, 1980, p. 43; *Le Monde*, April 11, 1980; *Les Echos*, supplement, February 28, 1979; *Les Echos*, May 20, 1980.

these efforts. In the plan agreed to in 1980, the industry reorganized itself around the largest four firms and increased its concentration and competitiveness.[215] The French pharmaceutical industry's response to its economic difficulties in the 1970s did not involve protectionism. Its efforts were focused on lowering the barriers to trade both in France and within the EC. Its attempts to reduce price controls, relax national regulations and standards, and harmonize procedures in Europe contributed to freer trade, and its own strategies of internationalization and consolidation aimed at restoring its competitiveness. The industry's growing interests in trade liberalization were related directly to its growing international operations. The fact that close to 70 percent of its revenues came from foreign sales made foreign markets crucially important to the industry.

Case 5: Tires

The French have one of the largest, most powerful tire industries in the world. In 1974 they were the world's third largest tire producer, after the United States and Japan.[216] France's strong position was due to one firm, Michelin. It controlled the French market and accounted for about 50 percent of all sales in 1974. It also dominated the European market, where it held 31 percent of the market there in 1973.[217] Moreover, Michelin rose from being the third largest world producer in 1973 with 14 percent of the global market to being a close runner-up to the number one firm, Goodyear, in 1982 with 18 percent of the market.[218] The story of the French tire industry, and indeed the European one as well, in the 1970s, was largely the story of Michelin, since the only other French producer, Kléber-Colombes, was partially controlled by Michelin.

Michelin played a central role in the industry globally. Worldwide, the industry was concentrated; the five largest producers held over 65 percent of the global market by the late 1970s, and this concentration was increasing.[219] Until the mid-1970s, world competition involved

[215] *Les Echos*, supplement, February 28, 1979, pp. 71-78; *Journal des Finances*, February 12, 1981. Concentration within the industry rose over the decade; in 1970, the biggest firms held about 35 percent of the market; by the end they accounted for 75 percent. *La Vie Française*, June 16, 1980.

[216] EC, *Etude sur l'Evolution de la Concentration dans l'Industrie des Pneus en France* (Brussels: EC, August 1977), p. 11.

[217] EC, *Etude sur l'Industrie des Pneus*, pp. 17, 22; *La Vie Française*, February 8, 1973.

[218] *La Vie Française*, February 8, 1973; *L'Expansion*, June 22-July 5, 1984, pp. 76-77.

[219] DAFSA, *L'Industrie Mondiale des Pneumatiques* (Paris: DAFSA, 1980), intro. and p. 1.

two American firms, Goodyear and Firestone, and Michelin.[220] After this, the market underwent a dramatic restructuring, mainly because of Michelin's aggressive strategy.

In the early 1970s, Michelin began fiercely marketing the new radial tires and internationalizing in an attempt to gain market share. This strategy was successful, but it upset the industry's structure. Michelin moved into new markets, acquired larger market shares, and became the world's largest radial producer.[221] It also helped bring about the radial revolution, which caught other firms unprepared. The rapid consumer shift to radials, combined with the recessions caused in part by the oil shocks, led to the demise of numerous large and small tire makers. By the early 1980s, all of the American firms, except Goodyear, and all of the European firms, except Michelin, were in retreat. The market now centered around the intense, global competition of Goodyear, Michelin, and the Japanese firm, Bridgestone.[222] The tire industry in France and elsewhere was thus restructured during the 1970s, becoming increasingly international and concentrated.

The French tire industry experienced severe economic distress in the 1970s as well as rising foreign competition due to the oil crises and the change to radials. Radial production required huge capital investments in new facilities, and the oil shortage flattened consumer demand for autos and thus for tires. These problems squeezed industry profits and induced overcapacity, plant closures, and falling employment. The difficulties were particularly evident between 1974 and 1977 and between 1980 and 1985.[223] Tire production grew until 1975, then leveled off, and began falling by the decade's end.[224] Employment in the industry fell in the last half of the 1970s, although for Kléber it dropped severely between 1970 and 1975.[225]

Problems were even worse after 1979. Michelin, though hurt in France during the first recession, was spared worse damage because of its lead in radial technology and its strong sales abroad. After 1979, this changed, and Michelin, like Kléber, closed plants, laid off increasing numbers of workers, and encountered mounting financial losses,

[220] *Economie-Géographie*, no. 125 (June 1975):4.

[221] *L'Expansion*, June 22-July 5, 1984, pp. 75-76; *Les Echos*, December 28, 1977; DAFSA, *L'Industrie des Pneus*, pp. 80-84, 93

[222] *L'Expansion*, June 22-July 5, 1984, pp. 75-77; *La Vie Française*, May 4, 1981.

[223] DAFSA, *L'Industrie des Pneus*, intro., pp. 3-4, 20, 28; EC, *Etude sur l'Industrie des Pneus*, pp. 11-18; *Les Echos*, December 28, 1977, *Le Figaro*, August 1, 1985, p. 11

[224] INSEE, *Annuaire Statistique*, 1983, p. 536; EC, *Etude sur l'Industrie des Pneus*, pp. 11-18; *La Vie Française*, May 8, 1978, p. 23; *Economie-Géographie*, no. 125 (June 1975):9.

[225] INSEE, *Annuaire Statistique*, 1983, p. 533; EC, *Etude sur l'Industrie des Pneus*, pp. 30-34.

especially after 1981.[226] Indeed, every tire producer suffered: sales in France fell 18 percent, exports dropped 13 percent, and 10,000 jobs were lost in the industry between 1980 and 1983.[227] Excess capacity and losses also forced several firms out of business in France—e.g., Dunlop and Uniroyal.[228]

Foreign competition also intensified over this period. Tire imports into France increased fourfold in value between 1973 and 1981.[229] Imports claimed a growing share of the domestic market. In 1970, they held 10 percent of domestic consumption; by 1979 they claimed 21 percent.[230] In addition, the nature of this competition changed, becoming more threatening. Early in the decade, imports had come almost entirely from other European countries; these imports were usually high quality, specialized tires. By the late 1970s, the competition involved large volumes of low-priced tires imported from East Asia or Eastern Europe.[231] Foreign tire competition in France thus accelerated and shifted ominously over the decade, which created serious problems for the French producers and made them likely to seek protection.

Tire manufacturing was a Type III industry. Both its trade dependence and multinationality were substantial and growing over the decade. Moreover, the French producers took part in its rising internationalization.

Export trade in the French tire industry was extensive, and increasingly so, over the 1970s. France exported more tires as a percentage of its total tire production than any other country.[232] Not surprisingly, the industry's trade balance was positive in the decade. While imports experienced significant growth, exports began at a substantial level and rose rapidly until the early 1980s.[233] As a proportion of domestic production, exports of tires climbed from 40 percent in the early 1970s to nearly 50 percent by 1979, revealing the industry's sizable

[226] *Le Figaro*, August 1, 1985, p. 11; *Le Monde*, April 21, 1984; *Le Matin*, July 6, 1984; *L'Expansion*, June 22-July 5, 1985, pp. 75, 77-78; *Les Echos*, May 5, 1980; *La Vie Française*, July 21, 1980; *La Vie Française*, February 4-10, 1985, p. 41; *Wall Street Journal*, December 12, 1984, p. 34.

[227] *Le Monde*, April 11, 1984; *Le Monde*, April 19, 1984; *La Vie Française*, March 14-20, 1983, p. 34; *Quotidien de Paris*, February 16, 1985.

[228] *L'Expansion*, June 22-July 5, 1984, pp. 75-76; *Les Echos*, August 23, 1979.

[229] French Customs Service data.

[230] Unpublished INSEE data.

[231] French Customs Service data, EC, *Etude sur l'Industrie des Pneus*, p. 18; DAFSA, *L'Industrie des Pneus*, p. 52; *Le Nouvel Economiste*, no. 503, August 23, 1985, p. 40.

[232] DAFSA, *L'Industrie des Pneus*, pp. 49-51.

[233] French Customs Service data.

overall dependence on exports.[234] For Michelin, over 36 percent of its total sales in 1970 were due to its exports,[235] and this percentage increased as the firm internationalized. Indeed, Michelin probably accounted for a large part of both French imports and French exports of tires. Through its integrated global production strategy, the firm shipped tires to and from about ninety countries.[236]

In terms of multinationality, the tire makers also revealed their integration into the world market. Foreign production by the French firms was large, accounting for almost 15 percent of total production in 1974,[237] a proportion that was the second largest among all sectors of the nation's industry.[238] This foreign production was highly integrated and profitable,[239] and production abroad rose during the 1970s. For Michelin, multinational operations were crucial. Michelin began its internationalization early; by 1970 it had seventeen plants outside of France.[240] Between 1970 and 1974, this number rose to twenty-two, as the firm advanced into Canada and the United States.[241] By 1974, Michelin was the third largest multinational in France. It had close to 60 percent of its total employees located outside France and realized about 50 percent of its total sales abroad.[242] During the decade this multinationality increased further, so that by 1980, the firm had thirty-five plants worldwide and almost 70 percent of its revenues from operations outside France.[243]

[234] DAFSA, *L'Industrie des Pneus*, pp. 49-51, 94; *Economie-Géographie*, no. 125 (June 1975):7; EC, *Etude sur l'Industrie des Pneus*, p. 18. These figures understate the actual importance of exports since they do not include indirect tire exports—i.e., those already on French cars or trucks sold outside of the country. *Economie-Géographie*, no. 125 (June 1975).

[235] *La Vie Française*, October 8, 1971.

[236] *Entreprise*, no. 941, September 21, 1973, p. 81; *L'Humanité*, December 1, 1981; Michelin, unpublished corporate documents, 1985; interviews. The other firms in the French market also moved different types of tires around Europe to balance production and demand. Kléber and the other producers—most of whom were foreign multinationals—thus contributed to the sizable trade flows of tires in and out of France. Interviews; DAFSA, *L'Industrie des Pneus*.

[237] Savary, *Multinationales Françaises*, p. 28.

[238] Ibid.

[239] See note 236; see also Savary, *Multinationales Françaises*, pp. 90-91, 171.

[240] *Entreprise*, no. 941, September 21, 1973, pp. 71, 73; *La Vie Française*, September 18, 1970.

[241] *Le Monde Diplomatique*, June 1974.

[242] Savary, "Multinationales Françaises," p. 76; "Les Multinationales," p. 23; *Le Monde Diplomatique*, June 1974; Alain Jemain, *Michelin: Un Siècle des Sécrets* (Paris: Calmann-Lévy, 1982), pp. 210-23.

[243] *L'Humanité*, June 10, 1980; Jemain, *Michelin*, pp. 230-36. Michelin's movement abroad in the 1970s was partly offensive and partly defensive. The firm's technological

Michelin also had very integrated production operations. It operated a complex web of international facilities that greatly depended on intrafirm trade flows.[244] This web was especially important in Europe. Michelin was largely responsible for the tire trade among France, Spain, Italy, and West Germany. Indeed, its plants in these countries exported close to 50 percent of their production, most going to Europe or the United States.[245] Michelin was thus a central force in tire trade and production globally.

Because they were its main source of profits in the 1970s, these foreign operations were of crucial importance for the firm. François Michelin, the firm's largest owner and its director, stated that without its foreign plants and sales, the company would have gone bankrupt in France.[246] The greater profitability of these foreign operations not only made them essential to the firm but also encouraged their growth at the expense of French operations. By the end of the decade, Michelin was the largest multinational in tire production.[247]

The other French tire maker, Kléber-Colombes, was also a multinational, although smaller than Michelin. In 1975, Kléber earned 37 percent of its revenues outside France.[248] This percentage rose as the

advantages prompted it to adopt an aggressive marketing strategy, which targeted the North American market since this was the least "radialized." Michelin built plants in Canada to service the entire continent in the early 1970s, but the firm eventually moved into the United States as part of a more defensive strategy. Michelin's Canadian exports to the United States exploded, and several American tire producers launched a trade complaint. When in 1973 duties on its imports to the United States were raised as a result of this complaint, Michelin began U.S. production. By 1977, it held 8 percent of the American tire market, which made it the third or fourth largest producer there. *L'Express*, July 27, 1970; *Entreprise*, no. 941, September 21, 1973, pp. 73, 75; *L'Expansion*, September 7-20, 1979, p. 108; *Financial Times*, July 14, 1971; *NYT*, October 8, 1972; *Le Monde*, October 6, 1972; *London Times*, May 6, 1973; Jemain, *Michelin*, pp. 210-23; *L'Expansion*, June 22-July 5, 1984, pp. 76-77.

[244] *La Vie Française*, July 21, 1980; EC, *Etude sur l'Industrie des Pneus*, pp. 30-33; *Le Nouveau Journal*, September 16, 1970.

[245] DAFSA, *L'Industrie des Pneus*, pp. 53-55; EC, *Etude sur l'Industrie des Pneus*, pp. 11-18.

[246] *La Vie Française*, May 8, 1978, p. 23.

[247] Even in comparison to the large American firms, it was unique, having over 50 percent of production abroad compared to Goodyear's 44 percent and Goodrich's 22 percent, which indicated the full range of the American firms' multinationality. DAFSA, *L'Industrie des Pneus*, pp. 53-56, 33; *Economie et Politique*, no. 240 (July 1974):32-45.

[248] EC, *Etude sur l'Industrie des Pneus*, p. 34. In essence, Kléber operated as an independent firm, but throughout the 1970s Michelin had a growing interest in it. Only in the early 1980s, when Kléber ran into severe economic difficulties, did Michelin assume management control over it. Prior to this, however, Kléber acted in fact as an autonomous French tire manufacturer. *Entreprise*, no. 941, September 21, 1973, p. 71. *International Herald Tribune*, September 17, 1980; Jemain, *Michelin*, pp. 137-55.

firm branched out in Europe, and by 1980, the proportion had reached 54 percent.[249] Kléber limited its operations to Europe and had substantial trade flows as well among its subsidiaries.[250]

The French industry, in addition to being multinational, was penetrated by foreign capital. This foreign presence accounted for about 48 percent of the industry's total investment in 1974.[251] Before 1979, of the top seven French producers, five were foreign and were subsidiaries of some of the world's largest tire firms—e.g., Goodyear, Firestone, Dunlop, and Uniroyal.[252] The industry's poor economic fortunes during the decade altered the character, but not the extent, of this foreign presence, leaving only three foreign producers in France: Goodyear, Continental, and Sumitomo.[253] It also left the industry in France and Europe more concentrated, with four firms controlling the market and with Michelin the clear leader in Europe.[254]

The Dependent Variable

What was most striking about the French tire industry's response to its economic difficulties between 1974 and 1982 was that despite the severity of its economic situation, it resorted little to demanding public help from either the French government or the EC. The industry chose to adjust through its own mechanisms.

The tire industry's economic crisis did not lead to greater "concertation" between the manufacturers and the French government. The relationship between these two groups has never been extensive or amicable in the postwar period, largely as a consequence of the problems between Michelin and the government.[255] Unlike most large French firms, Michelin has not had a special relationship with the government; indeed, Michelin has avoided having anything to do with it. This attitude comes from the company's family owners and directors. The long line of Michelins who control the firm has always distrusted the government—whether on the right or left—and preferred to op-

[249] *Les Echos*, May 5, 1980.

[250] *Entreprise*, no. 941, September 21, 1973, p. 82.

[251] Savary, "Multinationales Françaises," p. 258.

[252] DAFSA, *L'Industrie des Pneus*, pp. 96-100, 103, 109, 112-13.

[253] After 1979, Uniroyal and Firestone pulled out of Europe altogether, the first selling its operations to a German firm, Continental, and the second simply ending production. Later, Dunlop ended its operations in France, selling them to the Japanese firm, Sumitomo. *L'Expansion*, June 22-July 5, 1984, pp. 75-76; *Financial Times*, June 4, 1985; *Les Echos*, August 23, 1979; *L'Usine Nouvelle*, no. 21, May 24, 1979; *Le Monde*, April 11, 1984; *La Vie Française*, May 4, 1981.

[254] DAFSA, *L'Industrie des Pneus*, pp. 109-13.

[255] Jemain, *Michelin*, chs. 10, 11.

erate independently of any political organization. Largely self-financed and privately owned, Michelin has long operated in a cloud of secrecy.[256] In part, this independent posture has allowed the firm to continue its conservative style of management without interference from unions or the state.

Michelin's attitude toward the government was backed by its actions. Despite mounting imports and rising difficulties in the 1970s, the firm did not go to the government and demand any aid. It did not ask for protection against either imports or new foreign investments; Michelin did not desire any type of protectionism. In fact, Michelin officials maintained protection was "not the right way to go" because it would lead to more government interference and because it would upset the firm's international operations and reduce its competitiveness.[257] Michelin's concern with the international market and its desire to remain independent led it to resist any urge to protect its home market.

In terms of industrial policy measures, the firm also avoided contact with the French government. Michelin's development of the radial tire and its large investment program abroad were financed independently of the French Treasury. The firm used its own cash flows and organized a large international loan to finance these massive investments.[258] In addition, Michelin never demanded any form of subsidy or aid from the government in the 1970s. No "plan" for the industry existed, and none was desired.[259]

The other firms in the industry also had little to do with the French government. All the others, save Kléber, were foreign owned and tended to have less contact with the government. The French government did give aid to Dunlop-France in 1982. It is unclear, however, whether Dunlop requested this. The firm desired to sell its operations,

[256] *L'Expansion*, September 7-20, 1979, pp. 101-108; *L'Expansion*, June 22-July 5, 1984, p. 82; *L'Express*, July 27, 1970, pp. 51-52; *Le Monde Diplomatique*, June 1974; Jemain, *Michelin*, pp. 154-59, 161-67, 170-73. The firm even refused to allow President de Gaulle to visit its factories, and it pulled out of the main industry organization, the CNPF, in 1968 after condemning it for accepting the union demands involved in the Grenelle Accords. Moreover, many have speculated that Michelin internationalized with such a vengeance to escape the confines of the French government and was keen to operate in the United States where its philosophy was better accepted. Jemain, *Michelin*, pp. 154-59, 161, 216-23; interviews; *Entreprise*, no. 941, September 21, 1973, p. 84; *Le Monde Diplomatique*, June 1974, *L'Expansion*, September 7-20, 1979, pp. 101-108.

[257] Interview.

[258] *L'Express*, July 27, 1970, pp. 51-52; *Le Monde Diplomatique*, June 1974; *L'Expansion*, June 22-July 5, 1984, p. 82.

[259] Jemain, *Michelin*, pp. 154-59, 161-67; *Les Echos*, August 23, 1979; *L'Expansion*, September 7-20, 1979, pp. 101-108; interviews.

but the only interested buyers were foreign. The French government did not want a foreign purchaser but wanted to preserve employment in the area. After Michelin refused to purchase Dunlop's operation, the government found another answer. The compromise was to give Dunlop money to enable it to continue. This proved an ephemeral solution: Dunlop sold out to Sumitomo, the Japanese firm, in 1984.[260]

The other area of government intervention involved Kléber, which fell into deep trouble in the late 1970s and recorded growing losses each year. As rumors of bankruptcy spread, Kléber began seeking a buyer. Once again, the French government desired a "French solution"; it did not want a foreign buyer. When the German firm, Continental, agreed to buy a controlling interest in 1979, the government nevertheless acceded, accepting a "European solution." This deal fell through in 1980, however, as Continental grew fearful of Kléber's huge and mounting losses. Michelin at this point decided to try to sell its large interest in Kléber to a Japanese firm. The French government rejected this sale and instead forced Michelin to increase its holding in Kléber. In the battle, the government proposed to inject new funds into Kléber if Michelin would take it over. Though unhappy about them, Michelin finally accepted these terms.[261]

Except for the interventions in Dunlop and Kléber, which were not the firms' first preferences, the tire industry received and demanded little government aid. Despite growing import penetration, the firms never sought protection, which they viewed as more of a problem than a solution. In terms of industrial policy, the government appeared more eager to offer help than the firms were to receive it. No industrial plan was ever sought or designed; all the interventions were ad hoc and frequently government-initiated. Moreover, the interventions

[260] *Le Monde*, April 11, 1984; *Le Matin*, October 11, 1983.

[261] Jemain, *Michelin*, pp. 243-55; *International Herald Tribune*, September 17, 1980; *Les Echos*, November 14, 1980; *L'Humanité*, December 1, 1981; *Le Monde*, April 19, 1984; *Le Figaro*, March 7, 1985. In 1984, Michelin's forced marriage to Kléber and its own difficulties prompted it to seek government help. When Michelin announced 5,000 layoffs that year, all located in the region around Clermont-Ferrand, the regional government offered to help Michelin and encouraged it to contact the national government to get further aid. Some months later, Michelin entered into negotiations with the national government for the first time ever; it attempted to secure loans at preferential rates. Thus Michelin succumbed finally to seeking aid from the French government, but only after being forced to take over the unprofitable Kléber by the government. See *Le Point*, no. 530, November 15, 1982, pp. 125-26; *Wall Street Journal*, December 12, 1984, p. 34; *L'Expansion*, June 22-July 5, 1984, pp. 77-78; *Le Monde*, April 21, 1984; *Le Matin*, July 6, 1984; *Le Monde*, August 19-20, 1984; *L'Express*, April 26, 1985, p. 34.

were not in the least intended to restrict foreign trade; they aimed most at preserving employment in France.

At the European level, the industry's dearth of activity was also evident. In spite of mounting import penetration by East European and East Asian products, the industry made little attempt to halt this trade. Some of its activities were even aimed at further opening the market. During the GATT Tokyo Round negotiations, the European tire manufacturers offered to cut their tariffs by more than the accepted percentage if other countries would likewise reduce their barriers to trade. The industry also sought greater harmonization of industrial classifications with other countries in order to facilitate trade. And it did not seek to have the GSP status of products from its leading importers ended; this special status, allowing East European and East Asian tires to enter with almost no duty at all, was a major factor contributing to these imports' growth.[262] All of this suggests the industry's resistance to protectionism and its interest in open markets. As EC officials stated, if Michelin did not like the policies adopted, it would only have to make that known for them to be changed.[263] Apparently, Michelin had no such objections to these trade-liberalizing measures.

In terms of unfair trade complaints, the tire manufacturers also were inactive at the European level. Before 1979, no complaints of any sort were ever lodged by the industry.[264] In general, the tire industry was little involved with the EC. Michelin maintained its policy of avoiding public attention and governmental, whether French or EC, involvement, and tended to solve problems on its own. Being oligopolistic and well organized, the producers had little need for EC help. Indeed, as one EC official stated, the EC needed the manufacturers more than they needed it, since all reliable data on the industry available to the EC came from the producers themselves.[265] The EC's major contacts with the industry were adversarial and involved investigations of its anticompetitive behavior.[266]

[262] *Le Monde*, April 19, 1984; DAFSA, *L'Industrie des Pneus*, p. 52; interviews.

[263] Interviews.

[264] Ibid. In 1979, however, a dumping complaint against four East European countries was lodged. The source of this complaint was apparently the British Rubber Manufacturers Association (BRMA), which was run primarily by Pirelli-UK, Goodyear-UK, Dunlop, and Avon Tires. The EC pursued this complaint, eventually finding for it. Duties were never raised since the countries agreed to raise their prices to some acceptable level. This complaint was not of major importance and did little to reduce imports from these countries. Imports have continued to flood the Community, yet no new complaints have been made to date. EC, *First Annual Report on Anti-Dumping and Anti-Subsidy Procedures*; EC, *JOCE*, no. 113, May 1, 1980, pp. 70-73; interviews; DAFSA, *L'Industrie des Pneus*, p. 52; *Le Monde*, April 19, 1984; *Le Nouvel Economiste*, no. 503, August 23, 1985, p. 40.

[265] Interviews.

The most important means by which the French tire manufacturers responded to their economic distress in the 1970s were internal. Both Kléber and Michelin sought to deal with the new conditions in the industry on their own, and their strategies emphasized renewed competitiveness and not protection against competition. For Kléber, the strategy was initially to internationalize further; in the early 1970s, hoping to expand its scale economies and capture new sales, it moved into new foreign markets.[267] The failure of this strategy led in the late 1970s to attempts to find a suitable buyer, a large firm to take over its operations. Kléber, despite its near bankruptcy, never sought protection against foreign competition, and chose instead to exit the industry.[268]

Michelin's strategy in the 1970s had two main elements. First, like Kléber, it sought to increase its presence abroad in order to become one of the world's leading producers. Michelin aggressively promoted its radial tires throughout the world. Exports and foreign production were used to capture market share worldwide. The firm's movement into the United States was viewed as absolutely necessary if Michelin was to remain a world-class competitor. Michelin's strategy was to compete as hard as it could wherever it could, moving abroad to meet the challenge.[269]

The second element in Michelin's strategy involved the acquisition and maintenance of a monopolistic position within the European market. By the early 1970s, the firm already controlled 60 percent of the sales in France and over 30 percent in Europe, and also held a dominant market position in nearly every European country.[270] Michelin maintained this dominance through a variety of means, none of which included protectionism.

A central method involved the creation of strong ties with tire dealers. The firm even bought an interest in these dealer networks, so that

[266] Ibid.

[267] *Les Echos*, May 5, 1980; Jemain, *Michelin*, pp. 246-52.

[268] *International Herald Tribune*, September 17, 1980; Jemain, *Michelin*, pp. 251-55.

[269] Jemain, *Michelin*, pp. 177-85, 212-27; interviews. This strategy was successful until 1982. Michelin moved heavily abroad in the 1970s and increased its global market share significantly. The problems it began facing after 1982, moreover, seemed to have led *not* to the abandonment of this strategy but to a temporary hiatus in order to regroup. Jemain, *Michelin*, pp. 225-36, 258-61; interviews.

[270] *La Vie Française*, June 19, 1970, and February 8, 1973.

by 1973 it controlled directly some 30 percent of all European sales.[271] A second way of holding market share involved the industry's primary customer, the automobile industry. Being the largest tire buyers, auto manufacturers were a primary target for Michelin's attentions and held the dominant position in this relationship. Michelin did, however, own a large portion of Citroën, the number three French car maker, during the 1970s. Not surprisingly, it sold Citroën 100 percent of the tires it needed.[272] But this was unusual for the industry. In both France and the United States, the relationship between tire and auto manufacturers tended to be distant and adversarial, because the auto firms liked to get the best price possible by playing suppliers off against one another. Hence, even Michelin's relationship with the main French car producer, Renault, was not marked by any cooperation. In this case, a possible means of protection through government procurement policies—i.e., to require Renault to buy only Michelin tires—was not employed.[273]

In conclusion, the French tire industry, with its extensive foreign trade and production activities, chose to adjust to foreign competition and not to protect itself in the 1970s. The industry's strong international ties prevented it from seeking protection either in France or in Europe. Led by Michelin, the industry avoided public intervention as much as possible and managed its problems through its own internal strategies.

Case 6: Radios and Televisions

In the early 1970s the production of radios and televisions in France was controlled by three firms, only one of which, Thomson-Brandt, was French.[274] The other two were Radiotechnique, owned by Philips,

[271] This arrangement and other exclusive sales deals were disliked by the EC, which received numerous complaints about Michelin's behavior. The firm evidently promised to sell its high quality tires to dealers only if they refused to sell certain other tires. Michelin saw this as a way to retain its high quality image, but this policy had a way of limiting other firms' sales. Indeed, one East European tire maker went bankrupt because its European dealer went out of business when Michelin refused to sell to it. Interviews; *Entreprise*, no. 941, September 21, 1973, p. 81.

[272] *Entreprise*, no. 941, September 21, 1973, p. 73; *L'Expansion*, September 7-20, 1979, p. 104; Jemain, *Michelin*, pp. 187-203; DAFSA, *L'Industrie des Pneus*, pp. 46-47.

[273] DAFSA, *L'Industrie des Pneus*, pp. 46-47; *Entreprise*, no. 941, September 21, 1973, p. 82; Jemain, *Michelin*, pp. 190-207, 213-27, 234-36; interviews.

[274] DAFSA, *L'Industrie des Téléviseurs en Europe* (Paris: DAFSA, 1975), p. 64; *Stratégies*, no 227, May 26-June 1, 1980, p. 61; EC, *Etude sur L'Industrie de l'Electronique Grand Public en Europe* (Brussels: EC, 1978), pp. 146-51.

and Oceanic, controlled by ITT. Thomson-Brandt held about 40 percent of the French market in 1973, but this share dropped in the late 1970s, as Radiotechnique and imports grabbed increasing market share.[275] The French radio and television manufacturers had developed late and, despite being protected, they had never become strong international competitors.

Throughout the late 1960s and into the early 1970s, producers of radios and televisions in France operated profitably as a result of strong import barriers. When these barriers were reduced and new products, such as color televisions, were introduced that were not controlled by these barriers, the situation began to deteriorate for the French producers. The industry suffered simultaneously from reduced demand, sharp technological changes, and vigorous foreign competition. These difficulties, manifested in declining firm numbers, falling employment, and low profitability,[276] were apparent even among its largest producers. Radiotechnique was forced to restructure its operations, close several plants, and lay off large numbers of workers twice in the 1970s.[277] Thomson-Brandt fared poorly after 1976 as its profits fell.[278]

Foreign competition also plagued the industry. Over the 1970s the French radio and television producers lost control of their market to imports. The value of imports quadrupled between 1973 and 1980, and imports' share of the domestic market rose from 17 percent in 1970 to 39 percent in 1979 and to 50 percent by 1983.[279] These figures suggest the magnitude of the import invasion that the industry faced in the decade and the likelihood of its seeking protection.

[275] EC, *Etude sur L'Electronique Grand Public*, pp. 272-73; Arthur D. Little (ADL), *Analyse des Marchés et des Grandes Tendances Technologiques dans le Domaine de l'Electronique Grand Public* (Paris: Ministère de l'Industrie, 1979), p. 84, table 19.

[276] EC, *Etude sur L'Electronique Grand Public*, pp. 70-72, 83, 86, 91-92, 97-100, 271-73; SIMAVELEC, *L'Electronique Grand Public Français en 1983-84* (Paris: SIMAVELEC, 1985), p. 6; DAFSA, *Electronique Grand Public* (Paris: DAFSA, 1983), p. 145, 161; DAFSA, *L'Industrie Mondiale des Appareil de Radio, Télévision, et Electroacoustique* (Paris: DAFSA, 1978), pp. 63, 66.

[277] *Les Echos*, March 27, 1973; *Le Figaro*, November 26, 1974; *Les Echos*, January 14, 1981; *Les Echos*, January 21, 1981.

[278] *Le Figaro*, November 26, 1974; *Les Echos*, March 11, 1977; *Le Monde*, September 24, 1977; *L'Expansion*, January 25-February 7, 1980, p. 70.

[279] French Customs Service data; unpublished INSEE data (1970, 1979); *Libération*, March 11, 1982. For radios, imports grew from 39 percent of the market in 1970 to close to 90 percent in 1977. Imports of black and white televisions surged from 9 percent of the French market in 1970 to 34 percent in 1979. Color television imports augmented their share of the market from 6 percent in 1970 to 18 percent in 1979. DAFSA, *L'Industrie Mondiale des Appareil*, pp. 24-25; *Politique Hebdo*, October 17, 1977; DAFSA, *L'Industrie des Téléviseurs*, pp. 16-20, *Stratégies*, no. 227, May 26-June 1, 1980, p. 60.

The industry's links to the international economy were weak, especially before the late 1970s. French radio and television manufacture was a Type I industry before the mid-1970s but a Type IV after that. The French industry had been sheltered from foreign competition from its inception. These protectionist policies, in particular the adoption of a different standard for television reception and broadcasting (the SECAM system), limited French exports since French televisions were unusable elsewhere. The policies also limited French foreign operations: the French could not produce under other systems in foreign countries because they did not possess the know-how or the licenses to these technologies.[280] The industry was thus created behind artificial barriers, which in turn restricted its international development.

French radio and television manufacturers did not have strong trade ties to the international economy. The industry's trade balance grew increasingly negative over the decade. Even though exports grew, increases in imports overwhelmed this growth.[281] Exports did not amount to a significant part of total industry production; in 1972, their share of the French market was a mere 3.7 percent.[282] Moreover, the French share of the European and global market in radios and televisions was low and falling in the 1970s.[283]

At the firm level, exports were also unimportant. The consumer products section of Thomson-Brandt exported at most 17 percent of its production in 1976, and much of this was television parts and other nonrelated goods.[284] In addition, Thomson's exports were directed to-

[280] Rhonda Crane, *The Politics of International Standards* (Norwood, N.J.: ABLEX, 1979), chs. 3-6; *Usine Nouvelle*, no. 26, June 30, 1977, pp. 30-31.

[281] French Customs Service data; DAFSA, *L'Industrie Mondiale des Appareils*, pp. 33-35; *Les Echos*, June 5, 1979; Stoffaës, *Grande Menace Industrielle*, p. 226. From a low level, exports tripled between 1973 and 1980.

[282] DAFSA, *L'Industrie des Téléviseurs*, pp. 37, 48. The French exported very few radios, and between 4 and 5 percent of their consumption of televisions in the 1970s. *Stratégies*, no. 227, May 26-June 1, 1980, p. 60; EC, *Etude sur l'Electronique Grand Public*, pp. 122, 123, 125.

[283] DAFSA, *L'Industrie des Téléviseurs*, p. 37, 48. In 1978, French products accounted for a mere 4 percent of all European television and radio exports; by 1983, for 2 percent. DAFSA, *L'Industrie Mondiale des Appareils*, p. 5; DAFSA, *Electronique Grand Public*, p. 61.

[284] Figures for the firms are problematic. For Thomson-Brandt as a whole (that is, for CSF and Brandt) exports accounted for about 30 percent of production in the 1970s. But this figure overstates greatly the amounts involved in the radio and television sector, since it includes the data for CSF which was a strong, high technology, export-oriented division of Thomson. Brandt produced more mundane consumer goods; it had nowhere near the exports that CSF did. Jean-Marie Fourier, "Développement d'une Entreprise à

ward small countries that were former French colonies; it was not a player in large, competitive foreign markets.[285] Radiotechnique, controlled by the large Dutch multinational Philips, exported nearly 40 percent of its total sales in the early 1970s. Much of this trade, however, was with its parent firm.[286] Radiotechnique was thus a more important exporter; but, like the French firm, many of its exports were not destined for sale in competitive world markets.

The French industry's multinationality was restricted. The French producers had neither the technological edge nor the presence in foreign markets that might have induced foreign production. The industry's overall direct foreign investment position was limited. The percentage of foreign production to total production for the sector in 1974 was 4.1, one of the lowest for all French industrial sectors.[287] Indeed, before 1974 Thomson-Brandt's radio and television division had no production capacity outside of France.[288]

In the early 1970s, Thomson-Brandt changed its strategy, deciding that the only way to remain in business was to increase its size and produce abroad. In particular, the firm saw the European market as its target and set out in the mid-1970s to "Europeanize" its operations.[289] The firm accelerated its expansion abroad toward the end of the decade, so that by 1983 it controlled over 20 percent of the European television market.[290] This expansion made Thomson the second largest radio and television producer in Europe, behind Philips, and among the top ten producers globally.[291]

Vocation Internationale," *Humanité et Entreprise*, no. 106 (December 1977): 41-43, 48-49; Groupe ESCP, "Le Développement International," p. 13.

[285] Fourier, "Développement d'une Entreprise," pp. 48-49; *Stratégies*, no. 227, May 26-June 1, 1980, p. 62; EC, *Etude sur L'Electronique Grand Public*, p. 108.

[286] Over one-third of its French exports were sent to other subsidiaries of Philips in Europe. Furthermore, much of its exports were radios or parts for televisions to be processed outside of France. *Les Echos*, March 27, 1973.

[287] Savary, *Multinationales Françaises*, pp. 28-29. Other reports note the feebleness and tardiness of foreign investment by French firms in this sector. Michel Delapierre in *L'Intégration de l'Economie Française*, ed. Michalet, p. 92; interviews; Stoffaës, *Grande Menace Industrielle*, pp. 189-90.

[288] DAFSA, *L'Industrie Mondiale des Appareils*, pp. 49-52, 56; interviews.

[289] DAFSA, *Electronique Grand Public*, pp. 80-82; interview; *L'Expansion*, January 25-February 7, 1980, pp. 68-69; EC, *Etude sur L'Electronique Grand Public*, pp. 100-101; *L'Express*, June 2-8, 1979, pp. 94-95; *Usine Nouvelle*, no. 40, October 6, 1977, pp. 52-53.

[290] *Le Monde*, September 24, 1977; *La Vie Française*, March 14-20, 1983, p. 33; *Financial Times*, March 25, 1980; *Usine Nouvelle*, no. 40, October 6, 1977, pp. 52-53; *Libération*, March 11, 1983; *Usine Nouvelle*, no. 11, March 17, 1983, pp. 64-65.

[291] Christian Moretti, "Les Restructurations Industrielles en Europe: Le Cas de l' Elec-

Thomson-Brandt's acquisitions in the 1970s made it an important European producer. It had sizable production outside France and a substantial amount of intrafirm trade by 1983, as it exported throughout Europe from its plants in Spain and Germany.[292] But for many reasons Thomson remained a primarily French firm, never finding its foreign operations that important. First, the firm lost money on these foreign acquisitions, and so they were never viewed as integral.[293] Second, Thomson-Brandt never became a leading world producer because it did not innovate. Thomson's strategy was instead to buy the technology from other foreign producers or to import the products.[294] For these reasons, Thomson-Brandt, while possessing substantial European operations by the 1980s, still depended heavily on its home market. At most, Thomson-Brandt was an important European producer by the 1980s; however, its role outside of Europe was minimal. The French industry's multinational ties were therefore limited and less extensive than foreign operations in the French market.

A large number of foreign firms were producing radios and televisions in France. Of the three leading firms, two were foreign owned, and by the early 1970s over 50 percent of total investment in the industry was controlled by foreign firms.[295] The foreign firms involved were huge multinationals, such as Philips and ITT. Although controlling a large portion of the French market, they viewed their operations in France as only one small part of their global strategies. Philips, the second largest world producer, controlled 40 percent of the French television market through Radiotechnique, but its operations in France were tiny in comparison to its global capacity.[296] It was a global firm with integrated production operations and an international focus, unlike Thomson-Brandt.[297] This difference between

tronique Grand Public," *Cahiers d'Etudes et de Recherche*, no. 81-16 (1981):24-25; *Le Matin*, September 14, 1981; *Usine Nouvelle*, no. 11, March 17, 1983, pp. 64-65.

[292] EC, *Etude sur L'Electronique Grand Public*, pp. 78-79, 104-109, 113.

[293] *L'Expansion*, January 25-February 7, 1980, p. 69; *La Vie Française*, September 21, 1981, p. 31.

[294] It employed this strategy for color televisions, small televisions, television tubes, and video cassette recorders. *Le Nouvel Economiste*, no. 322, February 1, 1982, p. 52; *La Vie Française*, March 14-20, 1983, p. 33; *Le Figaro*, April 26, 1983; *Le Monde*, January 25-26, 1981; *Les Echos*, May 8, 1981; *L'Expansion*, January 25-February 7, 1980; *La Vie Française*, February 7, 1977, p. 13.

[295] DAFSA, *L'Industrie des Téléviseurs*, p. 68; EC, *Etude sur L'Electronique Grand Public*, pp. 109-112.

[296] EC, *Etude sur L'Electronique Grand Public*, p. 276; DAFSA, *L'Industrie des Téléviseurs*, p. 68.

[297] Moretti, "Les Restructurations Industrielles," pp. 24-25; DAFSA, *L'Industrie des Téléviseurs*, p. 68; *Le Figaro*, January 21, 1981; *La Vie Française*, March 31, 1980.

Thomson and Philips was central to the distinct approaches the two adopted to their similar economic problems.

The Dependent Variable

The industry's responses to the economic challenges of the 1970s were conditioned by its late, sheltered development and its lack of international ties. The industry basically chose to seek greater protection. It sought protection on the national level through trade and industrial policy measures. Gradually, as this national protection became less effective, the industry sought help at the European level. As it developed greater ties to the European economy, the French industry realized its need for protection on an EC-wide basis. Internally, the industry also made efforts to help itself by reorganizing, establishing operations in Europe, and attempting various anti-Japanese alliances.

At the national level, the French radio and television producers demanded and received protection against their main foreign competitors, the Japanese, before the 1970s. In the 1960s, the industry was protected in two ways. Weak and also afraid of Japanese competition, the producers lobbied in the mid-1960s to be included in the set of selective safeguards imposed on Japan as it became a regular GATT member.[298] The industry, and especially Thomson-Brandt, pushed for quotas on Japanese television imports on the grounds that they were necessary for the late-starting French industry to catch up.[299] The producers portrayed themselves as an essential element in the electronics industry and claimed that without profitable, large-scale consumer electronics operations they could not finance or support the substantial R&D costs necessary to a healthy, high technology electronics sector. This demand for protection fit in with the government's desire to create a strong, independent electronics industry.[300] In 1969 the French radio and television producers negotiated their first in a series of quotas with the Japanese. Although backed by the French government, the accords, limiting Japanese television exports to 4 percent of the French market, were negotiated by the industries themselves.[301]

In addition to these quotas, the French also protected the industry

[298] Robert Hine, *The Political Economy of European Trade* (Brighton: Wheatsheaf, 1985), pp. 239-41; *La Vie Française*, November 15-21, 1982, p. 28.

[299] Interviews; Fourier, "Développement d'une Entreprise," p. 52.

[300] *London Times*, November 6, 1982.

[301] European Research Associates (ERA), *EEC Protectionism* (Brussels: ERA, 1982), pp. 197-98, 211; *La Vie Française*, November 15-21, 1982, pp. 28, *La Vie Française*, December 15-21, 1982, pp. 28-30; *L'Expansion*, January 25-February 7, 1980, pp. 68-69.

by technical barriers. The 1960s saw the development of color televisions, and different systems for their operation proliferated. The United States early in the decade adopted one system (NTSC), which was soon taken up by other countries. The Europeans, however, later developed two different systems; the French invented the SECAM system and the Germans, the PAL system. These three were incompatible, and the Europeans fought a long battle over which one would be selected as the Community standard. In the end, no common choice was made; the French used SECAM and most of the rest of Europe adopted PAL.[302] This segmented the world market into three zones, the smallest of which was SECAM's. In this way the French protected their market, for any of the major importers would have to build special SECAM television production facilities in order to export televisions to France. But the French also limited their own capacity to export and reduced incentives to produce in non-SECAM countries, since they did not have licenses to build NTSC or PAL systems.[303]

The French industry's preferences concerning this technical barrier changed over time. It initially favored the decision because of its protective effects and the profits the SECAM licenses generated. But the industry, and Thomson in particular, feared that later when the industry had grown strong in France and needed larger, foreign markets, these would be denied because of the difficulties created by the different standards.[304] The industry's initial ambivalence later changed to outright opposition. In the 1970s, as Thomson grew dominant in France and sought to expand its operations, it pushed for the adoption of a bistandard system, one capable of using either PAL or SECAM.[305] The only way that Thomson could become a European player was through adoption of PAL standards. Apparently, Thomson's demands were heard; in the late 1970s the French government introduced a new television norm, allowing only bistandard televisions to be sold.[306]

Thus beginning in the late 1960s, the French radio and television market was doubly protected, once by quotas and once by the technical standard. This protection, which continued well into the 1970s, did not halt increases in imports. Despite the barriers, imports from Japan and East Asia surged after the mid-1970s.[307] The French firms, dependent on the domestic market, responded to this by demanding help from the French government. The industry sought a new quota with the Japanese in the early 1970s, as the initial one expired. They negotiated an agreement, only to have it challenged as unfair by the EC.[308] With this quota abrogated, the industry lodged safeguard complaints, and the French government used article 115 of the EC's Treaty of Rome to impose formal quotas on Japanese televisions and to begin surveillance of all television imports.[309]

Later, as the Japanese shifted production and export capacity to other East Asian countries, the French industry responded by demanding quotas on imports from South Korea, Taiwan, and Hong Kong. Under the provisions of article 115, new restraints were negotiated.[310] In terms of their preferences for trade policy nationally, the French television producers sought selective protection against East Asian producers, while simultaneously hoping to reduce technical trade barriers within Europe. Selective protection outside the EC and creation of a more unified European market were the goals Thomson pursued to accompany its strategy of "Europeanizing" its operations.

The producers were also involved in industrial policy deliberations. As part of the electronics sector, they took part in the government's attempts to promote it. Indeed, Thomson was selected as the "national champion" in French consumer and professional electronic goods, and Radiotechnique was also active in planning. With the government, these firms devised three plans for the industry in the period between 1970 and 1982. Each one had similar elements, usually entailing aid for R&D and exports and the use of government procurement policy, especially military contracts.[311] In general, the industry's preferences

[302] Crane, *Politics of International Standards*, esp. chs. 3-6.

[303] DAFSA, *L'Industrie des Téléviseurs*, p. 3; *Le Figaro*, January 16, 1974; Crane, *Politics of International Standards*, chs. 3-6; Moretti, "Les Restructurations Industrielles," p. 21; *Le Figaro*, June 19, 1975; *Les Echos*, February 12, 1975.

[304] Crane, *Politics of International Standards*, esp. p. 71, also chs. 3-6; *Stratégies*, no. 227, May 26-June 1, 1980, p. 62; *Les Echos*, February 12, 1975; interview.

[305] *Les Echos*, February 12, 1975; interview; Crane, *Politics of International Standards*, chs. 3-6; DAFSA, *Electronique Grand Public*, p. 11.

[306] *Les Echos*, September 20, 1976; *LSA*, March 19, 1982, pp. 88-90. DAFSA, *Electronique Grand Public*, p. 11.

[307] *Les Echos*, January 7, 1976; Moretti, "Restructurations Industrielles," pp. 14-16; *Libération*, March 11, 1982; DAFSA, *Electronique Grand Public*, p. 74.

[308] ERA, *EEC Protectionism*, pp. 197-98, 211; *La Vie Française*, December 15-21, 1982, pp. 28-30; *Usine Nouvelle*, no. 38, September 21, 1978, pp. 40-41; *L'Expansion*, January 25-February 7, 1980, pp. 68-69.

[309] *Les Echos*, September 20, 1976; Edgar Pisani, *Enjeux et Conditions des Equilibres Extérieurs de la France*, French Senate, Report 31, pt. 2, 1978, pp. 42, 184-85; *La Vie Française*, November 15-21, 1982, p. 28; interviews.

[310] DAFSA, *Electronique Grand Public*, p. 12; ERA, *EEC Protectionism*, p. 199.

[311] Yvonne Giordano, "Analyse de la Politique Française du Commerce Extérieur depuis le 6em Plan" (Ph.D. dissertation, University of Nice, 1982), p. 206; *Le Nouvel Economiste*, no. 322, February 1, 1982, p. 50; *Revue d'Economie Industrielle*, no. 23 (1st trim., 1983):298-99, 302.

were similar to its other demands: it sought to preserve its position in the French market.

The first plan for the industry was finalized in 1972, after much government-industry negotiation. In essence Thomson received government aid for R&D and exporting, and the government worked to persuade other countries to adopt the SECAM system and import French televisions.[312] In the early 1970s, the industry was provided with two thirds of its financing by the government.[313] The second plan was established in 1977-78. The first oil crisis and renewed Japanese competition had prompted the industry to seek help again. The government, concerned about the sector's deteriorating trade balance, unemployment problems, and loss of an independent high technology industry, was ready to lend assistance and ultimately gave some 600 million francs to the electronic components industry.[314] The third plan was initiated in 1982, after further economic difficulty beset the industry. Drawn up in negotiations between the industry and the government, this plan was written by the head of one of Thomson's subsidiaries and gave all aid in the consumer electronics area to Thomson.[315] Thomson took part in the negotiation of all three plans and was seemingly satisfied with their outcome, since it never complained.

While the French radio and television producers sought selective protection and subsidies nationally in the 1970s, they also were active at the European level, where they worked to protect the European market from Asian competition. In terms of traditional trade policy measures, the industry wanted to limit their reduction. During the Tokyo Round GATT negotiations, the industry was opposed to tariff reductions.[316] Initially, the EC planned to offer full reductions in this sector, but by the late 1970s it decided to reduce the amount of tariff

[312] Crane, *Politics of International Standards*, p. 42, chs. 3-6; *Les Echos*, September 15, 1972. As part of the "Plan Calcul," the industry was given about 70 million francs a year beginning in 1971, a part of which went to Thomson's radio and television production. OECD, *Selected Industrial Policy Instruments* (Paris: OECD, 1978), pp. 84-86.

[313] *London Times*, November 6, 1972.

[314] *Les Echos*, March 11, 1977; *La Vie Française*, April 10, 1978, p. 24; *Financial Times*, June 2, 1978; *Les Echos*, March 11, 1977; *Libération*, April 6, 1982. Radio and television operations were not directly subsidized, but as a later review of the plan noted, the firms used this money to help all their operations and thus "patch up" their overall balance sheets. *Libération*, April 6, 1982.

[315] *Les Echos*, May 13, 1982. Radiotechnique apparently received no aid. *Le Nouveau Journal*, July 30, 1982; *La Vie Française*, October 11-17, 1982, pp. 77-79; *Revue d'Economie Industrielle*, no. 24 (2nd trim., 1983):54-60.

[316] EC, *Rapport Sur Les Négociations Multilaterales*, p. 22; interviews.

cutting and applied only a 13 percent cut instead of the standard 25-30 percent.[317]

The European television makers also filed complaints with the EC concerning Asian imports. In 1973 the French industry tried to have its informal, national quotas instituted formally at the EC through a safeguard clause. This attempt failed because the German and British governments, as well as Philips, the Dutch multinational, opposed any such action.[318] This internal battle continued throughout the 1970s, with Thomson and the French government on the one hand, pushing for concerted European action against the Asian imports, and Philips and the British and German governments on the other, strongly resisting protectionist moves.[319]

Philips opposed protection because it was a large, integrated multinational producer with substantial operations in Asia.[320] The British opposed the French demands because they were home to numerous Japanese radio and television manufacturers[321] and were concerned about the repercussions that protection might have on the Japanese investments they subsidized. The Germans opposed the French out of a desire to see the German industry return to international competitiveness, which they felt protection would hinder.[322] Throughout the 1970s, these battles forestalled the erection of uniform barriers to Asian radio and television imports in the EC.

By the 1980s, much of this opposition to protection had dissolved. In 1981, a dumping case against Korean television imports was filed at the EC, a first step toward having the French demands met.[323] Although nothing came of this case, by 1982 negotiations were under way with the Japanese on a range of products, including stereos, televisions, television tubes, and VCRS.[324] Producers throughout the Com-

[317] EC, *Rapport sur les Négociations*, pp. 22, 56; *Le Figaro*, January 29-30, 1983.

[318] *Les Echos*, April 17, 1973; ADL, *Analyse des Marchés*, pp. 44-47; *La Vie Française*, March 31, 1980.

[319] ERA, *EEC Protectionism*, ch 6; EC, *The Consumer Electronics Industry* (Brussels: EC, 1985), pp. 87-96, 124-31; interviews; *Le Figaro*, April 26-27, 1980.

[320] EC, *Consumer Electronics Industry*, pp. 6, 87-96, 98-100; EC, *Etude sur L'Electronique Grand Public*, pp. 104-109; *La Vie Française*, January 17-23, 1983, p. 30; interview, *Le Figaro*, April 26-27, 1980.

[321] By the 1980s, the Japanese had almost 10 plants in the U.K. and covered some 10 percent of European production from this direct foreign investment. ADL, *Analyse des Marchés*, p. 71; ERA, *EEC Protectionism*, pp. 215-17; Moretti, "Restructurations Industrielles," pp. 29-31; *Usine Nouvelle*, no. 38, September 21, 1978.

[322] ADL, *Analyse des Marchés*, pp. 44-47.

[323] *JOCE*, "Communications," C25, February 5, 1981, p.3.

[324] Hine, *Political Economy of European Trade*, pp. 240-42; DAFSA, *Electronique Grand Public*, p. 12.

munity were now unified in their fears of a Japanese takeover of the electronics industry and were demanding that something be done.[325]

By 1982, Thomson was European in scale and thus was interested in European-wide protection, not in national barriers. It became active at the EC in seeking protection against Japanese imports. Resistance by Philips to Thomson's demands was weakened. It had ended some operations in Asia and was losing crucial markets in new product areas—VCRS and compact discs—to the Japanese.[326] The Germans no longer had much of a television industry left, since by 1983 Thomson and Philips controlled nearly all production in the country.[327] And British opposition had waned due to growing trade problems in other sectors, which were included in the agreement, and to a feeling that the Japanese were not playing the trade game fairly.[328] In 1983, an EC-Japanese agreement was concluded, providing for import surveillance of "voluntary" export limits on ten sensitive products, including radios and televisions. By the early 1980s, then, selective protection for Europe on audio equipment and televisions had been instituted.[329] These actions were in line with Thomson's growing interest in a European solution to its problems.

Selective protection at the national level and increasingly at the European level was the French radio and television producers' preference during the period from 1970 to 1985. The industry relied upon this protectionist strategy, combined with French industrial policy aid, to meet the economic challenges of the 1970s. While attempting to expand internationally, Thomson-Brandt's internationalization never became central to its survival or its prosperity. This was due in part to its late and sheltered development and its inability to become an innovative force in the industry. Thomson was dependent on the French market and government, and movement abroad was not a

[325] *Les Echos* January 5, 1983, p. 6; *Les Echos*, January 21, 1981; *Le Point*, no. 530, November 15, 1982.

[326] *Le Point*, no. 530, November 15, 1982; *Les Echos*, January 21, 1981; *LSA*, March 19, 1982, pp. 88-90; *La Vie Française*, March 31, 1980; EC, *Consumer Electronics Industry*, pp. 124-25, 185-86; ERA, *EEC Protectionism*, pp. 204-11.

[327] ERA, *EEC Protectionism*, pp. 215-17; *LSA*, March 19, 1982, pp. 88-90; *La Vie Française*, March 31, 1980. By 1982 only three major producers were left in Europe: Philips, Thomson, and the Japanese.

[328] Hine, *Political Economy of European Trade*, pp. 240-42.

[329] *Le Monde*, June 15, 1985, p. 20; *Le Monde*, July 27, 1985, p. 13; Hine, *Political Economy of European Trade*, pp. 240-42. Pressures for further action arose in 1984, as Thomson and Philips filed new complaints demanding tariff increases on VCRS. In 1985, tariffs on this good were elevated, and compensation was accorded through the lowering of duties on other electronic goods

strategy favored by French governments in the 1970s.[330] Thomson's operations in Singapore and Spain as well as its joint ventures and import agreements with various Japanese firms were disliked by the French government, which sought to bring Thomson's production back home.[331]

The government did not, however, discourage Thomson's European strategy. Thomson and the government agreed that increasing the firm's size and moving to a strong position within the European market were crucial. But Thomson "Europeanized" its operations only after 1977. This strategy of increasing its presence in the European market coincided with its desire for reduced intra-EC barriers and its demand for selective protection against Asian producers.

In this case, the industry's weak international ties in the early 1970s led to a response to foreign competition and other serious difficulties that centered on closing the home market. As Thomson-Brandt expanded into Europe, developing a European network of trade and production relations, its interests shifted from protection of the French market to a European solution which entailed reduced intra-EC trade barriers and heightened selective extra-EC protection. Global protection was not desired, because this would hurt the firm's operations in Europe. The industry's changing international ties over the decade thus helped alter its trade preferences. It increasingly behaved like a Type IV industry in its quest for selective protection.

[330] Giordano, "Analyse de la Politique Française," p. 214, shows Thomson as one of six largest aid receivers; *Les Echos*, March 11, 1977; *London Times*, November 6, 1972.

[331] *La Vie Française*, February 7, 1977, p. 13; *Usine Nouvelle*, no. 26, June 30, 1977, pp. 30-31; *Les Echos*, May 8, 1981; *Libération*, July 31, 1981; *Libération*, September 12-13, 1981; *Le Nouvel Economiste*, no. 322, February 1, 1982, p. 50; *Le Figaro*, April 26, 1983; interview.