A Legal Strategy for Controlling the Export of Hazardous Industries to Developing Countries: The Case of Asbestos

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As the United States and other industrialized countries have promulgated standards of safety and health for the workplace since the 1970s, employers have sought methods of minimizing or avoiding the cost of such controls. One method is simply to relocate hazardous production processes in developing nations that do not demand compliance with occupational health standards. This has resulted in the export of occupationally-related diseases to developing countries. The problem warrants the concern of human rights and public health advocates in the United States and other countries from which hazardous industries are exported.

This Article focuses on one well-documented occupational hazard, asbestos, and examines the role of United States companies in exporting hazardous asbestos operations. It then reviews several mechanisms that could be used to prevent the establishment of "dirty workplaces" abroad, including both international and national regulation as well as legal action. The Article concludes that neither international nor United States regulation offers effective and timely control of the problem. The Article proposes a third mechanism—one previously uninvestigated—whereby workers diseased through exposure to asbestos in operations owned or run by American companies abroad could bring suit, using tort litigation based on strict products liability, in United States courts.

The American common law basis for this tort litigation is well settled; thousands of suits have been filed since the initial products liability case, Borel v. Fibreboard Paper Products Corp. This litigation has resulted in tighter and more timely workplace controls than those stipulated by oc-

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occupational safety and health laws. The major unresolved question differentiating the type of remedy proposed in this Article, however, is that of foreign workers’ access to United States courts. The recent United States Supreme Court decision, *Piper Aircraft Co. v. Reyno*[^3], which sets forth criteria for foreign plaintiffs seeking access to United States courts, is examined. The Article then illustrates this approach by reference to two case studies of asbestos plants owned or operated by American companies abroad.[^4]

I. Export of Hazardous Industries

Occupational disease has been an unacknowledged epidemic in developed countries. Only during the past twenty years have there been effective demands for a clean-up of the workplace. The United States Congress passed the Occupational Safety and Health Act (the Act),[^5] which, among other things, sought to control occupational cancer by setting standards for carcinogens commonly found in the workplace.[^6] Opponents have contended that such controls impose undue expense,[^7] and they successfully have challenged certain standards in court.[^8] However, the efforts of labor unions and health activists have resulted in the promulgation of some fairly strict standards.[^9]

One industry response to such controls has been to move hazardous

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[^4]: The case studies offer varied examples of conditions in foreign workplaces, details of United States firms’ relationships to the local operations, and the host country’s labor, tort, and workers’ compensation laws. These examples will illustrate the Article’s analysis of how foreign plaintiffs who have been exposed to disease in the workplace might gain access to United States courts, although the Article does not mean to imply that the workers should bring suit.
[^7]: See, e.g., petitioner’s position in Society of Plastics Indus. v. OSHA, 509 F.2d 1301, 1308 (2d Cir. 1975) (vinyl chloride standard approved).
[^9]: See standards for various compounds discussed supra note 6.
industries overseas. Many Third World governments have less strict pollution and workplace environment controls\(^\text{10}\) and have long welcomed and encouraged industrialization by foreign capital.\(^\text{11}\) Moreover, the attenuated development of labor unions means that the demands of workers are articulated poorly in many developing countries.\(^\text{12}\)

Long before this "flight of dirty industries"\(^\text{13}\) phenomenon was uncovered, there were sporadic reports from developing countries of diseases caused by massive exposures to toxic substances in the workplace.\(^\text{14}\) In the past few years, several patterns have become clear. One is that the production of dangerous chemicals moves overseas once regulation oc-
curs in the United States, thus avoiding the capital expenditure for controls required in the United States. Another, perhaps more characteristic, pattern is the rather hasty shift to plants in Third World countries when the hazardous nature of a work process is demonstrated but before environmental controls are erected in the developed countries. A classic example of the latter pattern concerns benzidine dyes. The carcinogenicity of these dyes was established firmly in the late 1960s. The Occupational Safety and Health Administration (OSHA), which is charged with administering the Act, finally issued an emergency standard in 1973. In the interim, however, the major domestic manufacturers, GAF and Allied Chemical, had reduced drastically their production; by 1977 they had closed their United States plants. The result was that in 1980, "470,000 pounds of benzidine-based dyes were imported into the United States, a 20-fold increase since 1976."

The best example of the flight of dirty industries is the manufacture of asbestos products. The dangers associated with exposure to asbestos fibers have been recognized for over seventy-five years, and conclusive proof of the health hazards of asbestos was published in 1964. Controls on this carcinogen were tightened in almost every developed country in the mid-1970s.

Since the advent of controls in the developed countries, there have been various reports of asbestos manufacturing moving to Third World


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nations. American asbestos manufacturers have been especially quick to move the manufacturing process abroad, importing the finished products back into the United States. This is reflected by statistics detailing the huge increase in the import of asbestos textiles since 1970.

Because many developing countries set industrial development as a national priority, controlling the spread of occupational hazards cannot be achieved simply by relying on developing countries to police themselves and multinational corporations (MNCs). Moreover, many developing countries lack both resources and industrial infrastructure, making less advanced technologies more appropriate to their needs. Unfortunately, the less advanced technologies in a particular industry are often the most hazardous. The great appetite of many developing countries for economic growth ensures that hazardous industrial technologies will continue to spread to developing countries, even when—as in the case of asbestos—the health hazards are abundantly clear. In short, the incidence of occupational diseases around the world is likely to increase in the foreseeable future.

The debilitating effects of dirty industries do not fall on either corporate managers or officials of developing countries, but rather on the workers employed in the plants. Most of the workers are unaware of these health risks. Lack of ready employment alternatives may prevent

22. See, e.g., Myers, supra note 21, at 243 (details on the transfer of an entire asbestos textile plant from Hamburg, West Germany to Cape Town, South Africa).


24. Id. at 573-75. As Castleman reports, [p]rior to [1970] over 99 percent of U.S. [asbestos] textile imports came from Canada, Europe and Japan. Imports from these regulating countries stayed at around 3 million pounds per year in the years 1970-76, while total imports from Mexico, Taiwan and Brazil shot up to nearly 4.5 million pounds in 1976. Id. at 573-74. Imports supplied 35% of United States asbestos product demand in 1976. Id. at 572.

25. See, e.g., the case studies of Mexico and India discussed infra notes 151-219 and accompanying text, which indicate that despite the nominal concern for workers' health embodied in official statements and the existence of numerous controls over foreign investment, both countries have permitted American companies using hazardous production techniques to establish asbestos processing operations within their boundaries.

For example, Article 123 of the Mexican Constitution contains strong language about social welfare guarantees for all citizens. The reality of the situation is that less than 30% of the population is covered by any social security plan. See G. Cornejos, Law and Population in Mexico, LAW AND POPULATION SERIES No. 23, 39-49, 53. See also ORGANIZATION OF AMERICAN STATES, A STATEMENT OF THE LAWS OF MEXICO IN MATTERS AFFECTING BUSINESS 143 (4th ed. 1970) [hereinafter cited as O.A.S. DOCUMENT].


27. See infra notes 65-70 and accompanying text.

28. See infra notes 162-72 and accompanying text.
even those aware of the dangers from quitting their jobs or insisting on health precautions. In effect, workers in plants with known occupational hazards are being forced to risk their future health, without being informed of the hazards they are encountering or being equipped to take precautions.

Human rights organizations, as well as public health advocates, in both developed and developing countries, are among the many groups that should be concerned with this problem. The argument is often made that because of their less-developed economies and large needs for economic growth and development, developing countries should not be held to the standards of the developed countries in areas such as wages and working conditions. Where dirty industries in developing countries present gross workplace health hazards, however, standards of international human rights clearly indicate that every worker deserves some basic protection. If developing country governments are not adequately protecting their workers, the responsibility for educating and defending the workers falls to advocacy groups. As experiences in the United States and other developed countries have shown, controlling occupational hazards in developing countries may require concerted educational, political, and legal action by advocacy groups in developed countries.

There are three potential mechanisms of control—international regulation, United States regulation, and legal action—which advocacy groups in the United States may explore as means of controlling the ex-

29. A Presidential interagency committee addressing the question of controlling exported hazardous goods has observed:

Nations differ substantially in their economic and cultural conditions and in their use of, and need for, hazardous substances. It is difficult for one nation to make decisions on the acceptability of risks for another nation. Such assessments require extensive information regarding economic, political, and social conditions which U.S. regulatory agencies do not have and cannot readily obtain.

INTERAGENCY WORKING GROUP ON HAZARDOUS SUBSTANCES EXPORT POLICY, BACKGROUND REPORT ON THE EXECUTIVE ORDER ON FEDERAL POLICY REGARDING THE EXPORT OF BANNED OR SIGNIFICANTLY RESTRICTED SUBSTANCES 23 (1981) [hereinafter cited as INTERAGENCY WORKING GROUP].


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port of hazardous production processes to developing countries by American companies. This article focuses particularly on asbestos, but the argument may hold for a number of other occupational hazards.

II. International Regulation of Hazardous Industries

Because the problem of occupational hazards has become an international one, efforts to regulate or control the problem most logically should be directed, or at least coordinated, at the international level.

With the exception of the International Labour Organisation (ILO), international organizations have shown little awareness of occupational hazards. Such international fora as the General Agreement on Trade and Tariffs and the World Bank, which deal with matters of international trade and investment, have ignored completely the flight of dirty industries to developing countries.

A. The United Nations General Assembly and Specialized Agencies

To date, the UN General Assembly has not dealt specifically with the international spread of occupational diseases and hazards, nor has it attempted to promulgate standards on occupational safety and health. It has devoted some attention to international trade in, and use of, hazardous products, particularly pharmaceuticals; similar actions could be taken with regard to occupational safety and health.

The General Assembly first expressed concern about the harmful effects of toxic and hazardous products in 1979. Resolution 34/173 urged member states to exchange information on such substances and "to discourage . . . the exportation of such products to other countries." In the following year, the General Assembly established an information network through the United Nations Centre for Transnational Corporations (U.N.C.T.C.) to exchange information on banned hazardous chemicals and unsafe pharmaceutical products. While U.N.C.T.C. has begun to incorporate data on banned hazardous chemicals and unsafe pharmaceutical products within its information system, it does not address workplace hazards or the relocation of dirty industries.

Other international agencies, such as the World Health Organization,

35. Confidential interview with U.N.C.T.C. staff member (May, 1982).
the Organization for Economic Cooperation and Development, and the United Nations Environment Programme, have been concerned with the international spread of various consumer or environmental hazards. However, their efforts have been aimed primarily at information dissemination rather than standard setting or regulation, and they have not directed attention to specific occupational hazards.\textsuperscript{36}

B. The International Labour Organisation

The International Labour Organisation\textsuperscript{37} is virtually the only international body that has been concerned with industrial hazards such as asbestos. While the ILO has played a significant role in spreading awareness of occupational hazards and in developing international standards, it apparently lacks the capability to enforce the cleanup of dirty industries relocated in developing countries.

The ILO's principal purpose is to promulgate internationally accepted standards on labor issues, including compensation, rights of organization, and conditions of work. Official ILO standards, theoretically binding on the member states that endorse them, are embodied in ILO Conventions.\textsuperscript{38} The ILO also issues non-binding Recommendations and

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\item \textsuperscript{36} Among the relevant activities of other international organizations are the following:
  \begin{itemize}
  \item (a) The World Health Organization has established a "Certification Scheme on the Quality of Pharmaceutical Products Moving in International Commerce" to control trade in unsafe drugs. It also established the International Programme on Chemical Safety in conjunction with other U.N. bodies in 1980. See supra note 34, at 13.
  \item (b) The United Nations Environment Programme has established a register of some 330 hazardous chemicals, as well as a volume providing information on the acute toxicity of 200 chemicals, the regulations and recommendations of various countries and international bodies, and the trade and technical product names. \textit{Id.} at 14-15.
  \item (c) The Food and Agriculture Organisation has various programs to set standards and spread information on the use of pesticides and food additives, some jointly with WHO. \textit{Id.} at 17.
  \item (d) Informational exchange programs also exist for members of such non-U.N. bodies as the European Economic Community, the Organization for Economic Cooperation and Development, and the International Organization of Consumers Unions. None of these bodies, to the best of the authors' knowledge, has put into effect apparatus to control occupational hazards resulting from the international transfer of capital and technology. \textit{Id.} at 16.
  \end{itemize}
\item \textsuperscript{37} The ILO is an autonomous UN affiliate, of which some 146 countries are currently members. Its origins date from 1919, when it was established as a forum for business, labor, and government to discuss and formulate standards on labor issues.
\item \textsuperscript{38} ILO Conventions stipulate guidelines on specific labor issues; they must be ratified by a two-thirds majority of the International Labour Conference (the ILO's policy-setting body), and are binding on the member states ratifying them. Nations ratifying Conventions must submit them "to their competent national authorities (i.e., the legislature)" for action, and regularly report to the Secretariat on their progress in implementing Convention standards. Conventions cannot be ratified subject to reservation; however, some Conventions can be adopted in stages, and members may denounce past ratifications. See \textit{INTERNATIONAL LABOUR OFFICE, THE IMPACT OF INTERNATIONAL LABOUR CONVENTIONS AND RECOMMENDATIONS} 1-9 (1976).
\end{itemize}
other resolutions, which often have standard-setting importance in establishing references for national policies.\textsuperscript{39}

Though the ILO has been active in disseminating information about various occupational diseases and hazards since its inception,\textsuperscript{40} there currently is no official ILO standard regarding exposure to asbestos in the workplace. Despite the lack of official standards, the ILO has been concerned about the dangers posed by asbestos for several years, and it has taken steps leading toward the adoption of a convention specifying standards of treatment for occupational exposure to asbestos.\textsuperscript{41}

\textsuperscript{39} Recommendations issued by the ILO Secretariat are not subject to ratification by members and are not theoretically binding. Often Recommendations are issued simultaneously with Conventions, advising members on how to implement standards embodied in the Conventions or suggesting stricter guidelines. Member states are expected to bring Recommendations to the attention of the authorities "within whose competence the matter lies" . . . for the enactment of legislation or for other action," but do not have to report to the Secretariat on their later status. \textit{Id} at 1.

In addition, the ILO has devised numerous model codes, guides, and manuals to aid and advise members in setting national standards. ILO conferences, country studies, information exchanges, advisory team reports, and other information dissemination activities also convey evaluations and possible standards on a wide range of labor issues. \textbf{See} \textit{INTERNATIONAL LABOUR ORGANISATION, SERIES NO. 44, INTERNATIONAL STANDARDS AND GUIDING PRINCIPLES, 1944-1973} (1975).

\textsuperscript{40} The first Convention relating to occupational health and safety, addressing the hazards of white lead in painting, was passed at the ILO's Third Session, in 1921. Since then a number of Conventions and Recommendations have been adopted on such issues as safety in coalmines and in dockwork, compensation for occupational accidents and disease, and medical care. \textbf{See} \textit{INTERNATIONAL LABOUR ORGANISATION, CHART OF RATIFICATION OF INTERNATIONAL LABOUR CONVENTIONS} (1982). \textit{See also} the ILO's 1921 report on benzidine as a cause of occupational cancer, \textit{cited in} S. SAMUELS, \textit{NATIONAL STEWARDSHIP: UNILATERAL INTERNATIONAL REGULATION OF OCCUPATIONAL AND ENVIRONMENTAL HAZARDS} 5 (1980) [hereinafter cited as \textit{NATIONAL STEWARDSHIP}].

\textsuperscript{41} The ILO report of a Meeting of Experts on the Safe Use of Asbestos, released in 1974, recommends the adoption of "an international instrument or instruments on the safe use of asbestos" and that, in the meantime, the ILO should circulate the report to members and interested bodies and prepare a guide on the safe use of asbestos. The report reviewed a variety of methods of preventing risks due to exposure to asbestos, including dust suppression, enclosure and ventilation of working areas, personal protection (respiratory equipment and clothing), waste disposal, and storage of materials. The importance of measuring dust levels in the work environment, regular medical supervision, and education and training of employers and workers are also underlined. \textbf{INTERNATIONAL LABOUR ORGANISATION, ASBESTOS: HEALTH RISKS AND THEIR PREVENTION} 7-18, 72-93 (1973).

Despite the present lack of specific standards, certain other standards could apply to asbestos hazards in the workplace. ILO Convention 139 and Recommendation 147, both adopted in 1974, call for the control of occupational carcinogens by law or "by any other method consistent with national practice" and provide that member states ratifying the Convention shall "periodically determine the carcinogenic substances and agents to which occupational exposure shall be prohibited or made subject to authorization or control." ILO Convention 139, \textit{entered into force} June 10, 1974. ILO Convention 148 and Recommendation 156, dated 1977, concern the control of air pollution, noise and vibration in the workplace.

An ILO model code of practice on occupational exposure to harmful airborne substances has also been developed, and a report on occupational exposure limits for airborne toxic substances was published in 1977 to assist the exchange of information between governments on worker exposure levels for airborne substances. \textbf{See} \textit{INTERNATIONAL LABOUR OFFICE, OCCU-
C. Assessment and Some Proposals

The ILO has been effective in developing standards on many important issues relating to working conditions. Other international organizations have not taken a similar interest or demonstrated a comparable effectiveness. Several avenues are available to the ILO and other international organizations in addressing this problem.

The UN General Assembly could express its concern by passing resolutions condemning the internationalization of occupational hazards, similar to those on the export of dangerous products. Once this concern is registered, agencies such as the U.N.C.T.C. and the World Health Organization could begin incorporating data within their information networks on the movement of hazardous industries and its health effects. More importantly, the ILO could formulate international standards for asbestos and other occupational hazards as a basis for international controls on the flight of dirty industries from developed country regulation.

Even if these proposals were implemented, international regulation is not sufficiently comprehensive or reliable. First, differences of interest and opinion among member nations of international bodies, such as the ILO, have delayed and will continue to delay the development of strict standards for many occupational hazards. As long as a handful of producing nations resist adoption of comprehensive standards on exposure to occupational hazards, effective international regulation will not be promulgated or implemented.

Finally, the Occupational Safety and Health Information Center (C.I.S.) has been established within the ILO to maintain a computerized data base of published materials on all aspects of occupational safety and health. The ILO also has established the International Occupational Safety and Health Hazard Alert System to circulate rapidly information on severe or newly discovered occupational hazards among member nations.


See, e.g., the discussion on ILO Convention 139 (benzidine dyes) in S. SAMUELS, supra note 40, at 39-42.

Keynes's description of the League of Nations Assembly—as "an unwieldy polyglot debating society, in which the greatest resolution and the best management may fail altogether to bring issues to a head against an opposition in favour of the status quo"—is fitting here. J. M. KEYNES, PROPOSALS FOR THE RECONSTRUCTION OF EUROPE, in ESSAYS IN PERSUASION.
Second, the scope of international regulation is incomplete. For instance, not all countries producing or manufacturing hazardous substances are represented in the ILO, the most prominent example being South Africa. Moreover, countries which are members need not ratify the standards adopted by the ILO or other agencies.\footnote{For example, only 16 nations have ratified ILO Convention No. 139 on occupational cancer, even though it was adopted in 1974. Countries which have not ratified include such major industrial powers as the United States, the U.S.S.R., France, and Germany; among the many semi-industrialized countries failing to ratify are Mexico, India, the Philippines, and Malaysia. \textit{International Labour Office, Chart of Ratification of International Labour Conventions} (1982).}

Finally, national implementation of international standards generally has proven inadequate and unreliable. Even nations which ratify ILO Conventions may not succeed in putting those standards into effect if sufficient domestic opposition exists, and developing countries may lack the bureaucracy or infrastructure to monitor and enforce standards. International organizations simply lack the authority or capability to enforce compliance with adopted standards or resolutions on recalcitrant members.\footnote{Certainly, there are cases where nations not ratifying standards have nevertheless put them or comparable standards into effect—the ILO cites United States implementing, but not ratifying, Convention 32 on the prevention of accidents among dock workers. \textit{See} Jenks, \textit{ILO Standards: Are They Obsolete, Premature, Marginal or Important, in International Labour Office, Social Policy in Changing World: The ILO Response} (1976).}

III. National Stewardship

A second proposal for controlling the flight of dirty industries to developing countries is national stewardship.\footnote{For example, a leading scholar of the United Nations notes that a “major limiting factor of the organized \[peace\] settlement system \[of the UN\] is the essential principle of voluntarism . . . .” \textit{C. Inis, Swords Into Plowshares: The Problems and Progress of International Organization} 228 (4th ed. 1971). Although he argues that the system affords a number of important benefits such as third party mediation, the principle of voluntarism simply makes the enforcement of UN resolutions or actions against resisting states impossible. \textit{Id.} at 227-43.} This entails unilateral regulation by the home country of the MNCs seeking to export hazardous technologies. Coordinated national stewardship policies by the home countries effectively could eliminate the flight of industries in response to cleaner domestic workplace regulations in developed countries. The action of even one major home country, such as the United States, could be significant.

As in the case of international regulation, calls for national regulation of exported hazards in the past have been concerned primarily with dan-
gerous consumer goods and environmental hazards, rather than the export of hazardous production technologies. In early 1981, following intensive study by an Interagency Working Group, President Carter issued Executive Order No. 12264, which required extensive controls on the export of extremely hazardous products. Although the Order largely neglected the export of hazardous industries from the United States, one provision did require that foreign governments be notified annually of OSHA health standards for substances causing hazardous workplace conditions. However, the Order was quite short-lived. President Reagan assumed office a few days after the Order was issued, and quickly nullified it.

Despite its brief life, Executive Order No. 12264 illustrates the national stewardship approach in its use of existing legislation on consumer protection and occupational safety and health to impose strict controls on exports of hazardous products. These and other areas of law, such as United States antitrust and tax laws, might prove useful in controlling the export of hazardous industries. A brief review of each of these areas, however, indicates that none is sufficiently comprehensive to control adequately the foreign investment and transfer abroad of hazardous technology of United States corporations.

First, tax laws largely are neutral on the matter of overseas investment by United States corporations. It is doubtful whether they could be extended to halt the transfer of hazardous technologies abroad. Second, although antitrust laws give the United States government legislative authority to deal with the effect of outward foreign investment on the United States economy, they are unlikely to be effective in cases where individual companies relocate to avoid workplace controls, because of the slight effect of such relocations on the economy.

The Occupational Safety and Health Act and consumer product regul-

49. The Carter Administration expressed concern about the export of hazardous products which are banned in the United States, including chemically-treated infant wear and dangerous pharmaceuticals. INTERAGENCY WORKING GROUP, supra note 29.
51. Id.
52. The Carter order was issued on January 15, 1981, and was in effect only 32 days. On February 17, 1981, President Reagan issued Executive Order 12290, which cancelled the previous order. See 3 C.F.R. 127 (1982).
53. This is the conclusion reached by three prominent analysts of the relationships between United States policy and United States multinational corporations. See C.F. BERGSTEN, T. HORST & T. MORAN, AMERICAN MULTINATIONALS AND AMERICAN INTERESTS 451 (1978).
54. Id. at 255-57.
55. A three-pronged test was established in Timberlane Lumber Co. v. Bank of North
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lations are potentially more useful because they include provisions to control trade in hazardous products, but they do not cover foreign investment or the sale of technology abroad by United States firms. Their potential value as instruments in cleaning up hazardous workplaces in other countries is equivocal at best and probably easily circumvented by the companies.

Perhaps the most relevant existing statute is the Export Administration Act of 1979 (EAA), which authorizes the President to "prohibit or curtail the exportation of any goods, technology, or other information . . . to the extent necessary to further significantly the foreign policy of the United States or to fulfill its declared international obligations." Although the EAA would allow the President to control the export of hazardous substances, the legality of its application to exported hazardous technologies is doubtful.

In addition to the legal uncertainties, there are theoretical and political obstacles to using the Export Administration Act. First, use of the EAA would require an administration committed to developing such controls in the face of strong opposition from United States companies. Second, there is an inherent problem in controlling the diffusion of technology; because "technology" is in fact embodied in goods, manpower, methods of industrial organization, and management, as well as in machinery and direct foreign investment, it cannot easily be regulated or controlled by

America, N.T. & S.A., 549 F.2d 597 (9th Cir. 1976), to determine whether a United States court should exercise extraterritorial jurisdiction in antitrust cases. The three factors are:

(1) whether the alleged restraint of trade affected, or was intended to affect, the foreign commerce of the United States;
(2) whether the restraint was of a type that would be cognizable as a Sherman Act violation;
(3) and whether extraterritorial jurisdiction of the U.S. should be asserted, in light of considerations of international comity and fairness.

Id. at 615. Regarding the last factor, United States courts generally have been unwilling to establish extraterritorial jurisdiction where compulsion of foreign sovereigns is entailed. See 40 A.L.R. Fed. 343, 356-58 (1978). But see infra note 154.

56. If, for instance, a company is supplying hazardous asbestos products abroad or is importing such goods as intermediate inputs to further industrial production in the United States, these laws could be invoked to restrict the export or import of such goods.
58. Id. sec. 6(a)(1).
59. Interagency Working Group, supra note 29, at 32.
60. This is the conclusion reached by the Interagency Working Group, which stated that: [while] in the case of banned or severely restricted hazardous substances, there are ample precedents for export controls . . . . . . this is not true for export of production facilities . . . . Any system of controls for export of hazardous facilities would require a statutory basis . . . [which] is an issue that the Congress would want to examine.

Id. at 55-56.

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simply erecting trade or investment barriers. Developing effective controls over all these areas—particularly attempting to control the foreign direct investment by United States companies—would run counter to past United States policies and attitudes, and likely would be opposed within the government bureaucracy.

In sum, existing statutes probably are insufficient to control the export of hazardous asbestos technology by United States companies. Development of new effective statutes would require congressional action. However, congressional efforts to develop such statutes undoubtedly would arouse strong political opposition and would require a more hospitable political environment than currently exists. The constellation of political forces that would oppose such a measure are formidable—major corporations and their lobbyists, as well as free trade advocates in academia and the government—while the forces supporting the measure would, by and large, likely be limited to a few concerned advocacy and labor groups. Although the national stewardship option is desirable and should be pursued, it depends too heavily on political action to be a reliable method of control.

IV. Tort Litigation in the United States by Foreign Plaintiffs

Inadequate international regulation and national stewardship leads to the consideration of a third option, tort litigation brought in United States courts by workers exposed to asbestos hazards in foreign workplaces owned, run, or supplied by American corporations. Successful court action by foreign plaintiffs in American courts could provide an incentive for corporations attempting to evade United States workplace regulations to take more extensive health precautions in their asbestos


63. The AFL-CIO is the most prominent in this regard and has proposed legislative action to extend existing statutes to allow greater control over relocation of hazardous industries. See NATIONAL STEWARDSHIP, supra note 40, at 66-68.
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operations abroad. Even if this negative incentive to control the flight of dirty asbestos industries would not reduce significantly occupational hazards in MNC operations abroad, foreign asbestos workers contracting diseases as a result of negligent workplace practices by United States firms nevertheless may obtain some recompense for their illnesses through the courts.  

A. History of Asbestos Litigation in the United States Courts

Workers in developing countries who bring suit against asbestos corporations in the United States will benefit greatly from the extensive tort litigation that has been brought on behalf of American asbestos workers. Successful actions by American workers have included several key components: 1) establishing the ill-health effects of occupational exposure to asbestos; 2) bringing suit against suppliers of asbestos under products liability law; and 3) the use of the doctrine of collateral estoppel to prevent costly and time consuming delays in the conduct of the asbestos litigation.

1. Ill-Health Effects of Occupational Exposure to Asbestos: Discovery and Verification

The special properties of asbestos, including its great tensile strength and thermal insulative value, have resulted in widespread industrial and consumer use. As evidence of the dangers of asbestos began to accumulate early in this century, however, health workers began to realize that asbestos was not harmless. By 1918, a life insurance company refused to insure asbestos workers due to their increased rates of pulmo-

64. This Article's discussion is limited to the legal basis of such a suit. It does not attempt to resolve some of the practical obstacles that foreign workers or their advocates might face in the course of bringing suit. For example, in the face of likely opposition from foreign governments as well as the asbestos companies, human rights groups in the United States interested in pursuing this legal strategy probably would have to locate diseased workers in developing countries and gather evidence on such issues as plant conditions and how the plaintiff was exposed to asbestos. Similar obstacles have not stopped human rights groups in the past from locating and defending individuals in developing countries whose human rights have been violated by multinational firms or their own governments. One of the best known examples is Amnesty International. See AMNESTY INTERNATIONAL, AMNESTY INTERNATIONAL REPORT 1981 at 1-22.

65. For example, asbestos has been used in water pipes, wallboards, protective cloth, and brake and clutch linings. See Spell & Leineweber, Asbestos Minerals in Modern Technology, 2 ENVTL. RES. 166 (1969).

nary disease. In the next forty years, evidence linked exposure to asbestos with various cancers and lung disease, and conclusive documentation of the ill-health effects of asbestos was published in 1964. The asbestos industry was aware of these reports and actively tried to suppress them.


69. See Selikoff, Churg & Hammond, Asbestos Exposure and Neoplasia, supra note 20. Among the ill-health effects of asbestos is asbestosis, a chronic inflammation of the lung that eventually results in fibrosis of the lung, respiratory failure, and death. The severity of the disease is related to intensity and duration of exposure to asbestos fibers. Asbestos also can cause bronchogenic carcinoma, a lung cancer, and mesothelioma, a very rare malignant tumor on organ surfaces. Both types of malignancies can be caused by very short or insignificant exposures to asbestos, although there is usually a long interim or latency period of 20-30 years before a worker contracts a malignancy as a result of an asbestos exposure. See A. Hamilton & A. Hardy, Industrial Toxicology (4th ed. 1970); K. Isselbacher, Harrison's Principles of Internal Medicine (9th ed. 1980).

Controversy continues over the asbestosis "no effect" level. OSHA maintains a standard of $2 \times 10^{6}$ fibers/cubic meter, while NIOSH recommends $2 \times 10^{5}$ fibers/cubic meter. A no effect level is the exposure level below which there is no risk of disease. Carcinogen dose/cancer response curves are notoriously difficult to calculate. See S. Epstein, Politics of Cancer 83-89 (rev. ed. 1979). See also Harries, Experience with Asbestos Disease and its Control in Great Britain's Naval Stockyard, 11 ENVTL. RES. 261 (1976); Jellinek, On the Inevitability of Being Wrong, 363 ANNLAS N.Y. ACAD. SCI. 43 (1981); Mantel & Schneidermann, Estimating Safe Levels, A Hazardous Undertaking, 35 CANCER RESEARCH 1379 (1975); Schneiderman, Regulation of Carcinogens in an Imprecise World, 363 ANNLAS N.Y. ACAD. SCI. 217 (1981).

70. Epstein describes how industry communications were obtained through pre-trial discovery proceedings in a South Carolina products liability case. S. Epstein, supra note 69, at 89-96.

Epstein quotes Judge Price, who reviewed the correspondence, as stating that it "shows a pattern of denial and disease and attempts at suppression of information," and that it "furthers reflects a conscious effort by the industry in the 1930s to downplay, or arguably suppress, the dissemination of information to employees and the public for fear of promotion of lawsuits." Id. at 90.

In light of growing concern about the ill-health effects of asbestos, one of the first actions taken by the newly created OSHA was to promulgate an emergency standard. See id. at 83-89. Industry protested that the standard was too stringent and warned that it would cause further decline in an already depressed industry. See Export of Hazardous Factories, supra note 18, at 572.

Labor, on the other hand, complained that the emergency standard did not provide adequate protection. Both sides challenged the standard in court. The D.C. Court of Appeals upheld the standard, suggesting a new age of tough controls for workplace hazards. Industrial Union Dep't v. Hodgson, 499 F.2d 467 (D.C. Cir. 1974). The court also noted that when workers' health was endangered courts would uphold standards based upon information on the "frontiers of science." Id. at 474.

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2. Asbestos Litigation under Products Liability Law

In the United States, asbestos workers who were not warned by asbestos manufacturers about these dangers have sued asbestos suppliers for damages under products liability laws. The reason is simple. A recovery under workers’ compensation law precludes workers from suing their employers in tort. However, products liability law provides the workers with an alternative remedy by suing the asbestos suppliers for marketing a hazardous product without proper warnings.\(^7^1\)

The addition of Section 402A to the Restatement (Second) of Torts produced tremendous changes in products liability law.\(^7^2\) Under this section, a plaintiff need not prove the existence of a manufacturer’s warranty or negligence. As a result, the plaintiff’s burden of proof is relatively simple. Dean Prosser has noted that the plaintiff must establish three things: “The first is that he has been injured by the product . . . . The second is that the injury occurred because the product was defective, unreasonably unsafe . . . The third is that the defect existed when the product left the hands of the particular defendant.”\(^7^3\)

Thus it would seem that a plaintiff injured by asbestos must prove only that she was diseased, that her disease was caused by asbestos, and that secondary processing did not change the nature of the asbestos product.

Nevertheless, some problems remain. First, many difficulties arise in attempting to prove that a product is defective.\(^7^4\) Second, the plaintiff

\(^7^1\) See, e.g., Prosser, The Fall of the Citadel, 50 MINN. L. REV. 791, 814 (1966); RESTATEMENT (SECOND) OF TORTS § 402A (1965). The Restatement writers urged that underlying the availability of a direct remedy against a supplier-manufacturer is the policy that “demands that the burden of accidental injuries caused by products intended for consumption be placed upon those who market them, and be treated as a cost of production against which liability insurance can be obtained . . . .” Id. § 402A comment c.

Aside from these policy considerations, there are practical reasons for a worker to sue the supplier directly. Recoveries under workers’ compensation schemes often are inadequate. See M. FRANKLIN, TORT LAW AND ALTERNATIVES 776-83 (2d ed. 1979). Since employers usually are immune from tort actions under the provisions of the workers’ compensation statute, the worker will seek to buttress his recovery by suing a third party, in this case the supplier. Id. Moreover, even were this immunity to suit not available to employers, the worker would seek recovery from the supplier because in many instances the particular factory that employed the worker has gone out of business.

\(^7^2\) Cutting through the previous morass of contract and tort law, § 402A imposes strict liability on anyone who:

- sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property . . . The rule . . . applies although (a) the seller has exercised all possible care in the preparation and sale of his product, and (b) the user or consumer has not bought the product from or entered into any contractual relation with the seller.


\(^7^3\) W. PROSSER, HANDBOOK OF THE LAW OF TORTS 671-72 (4th ed. 1971). As Prosser points out, the plaintiff’s burden is decreased because she need prove neither the manufacturer’s negligence nor that the product carried a warranty. Id. at 672-73.

must show that the product caused her disease, and must exclude the possibility of intervening or multiple causes. Third, comment j of Section 402A implies that the defect must have been foreseeable before the manufacturer can be held liable. These points have been and continue to be litigated intensely in products liability suits. While Section 402A has eased somewhat the burden of proof for products liability plaintiffs, many issues remain upon which evidence must be submitted.

In 1972, in *Borel v. Fibreboard Paper Products Corp.*, the first reported case allowing recovery for an asbestos-related disease under a products liability rubric, Chief Judge Fischer of the Eastern District of Texas entered judgment following a jury verdict that asbestos manufacturers had breached their duty to the plaintiff Borel by failing to warn him about the dangers of asbestos. On appeal, the Fifth Circuit affirmed the district court's findings that asbestos was unreasonably dangerous, that manufacturers of asbestos insulation were aware of the dangers of asbestos in the 1930s and 1940s when the plaintiff was first exposed, and that they had failed to give any warnings until 1964-65. These findings supported the court's decision to apply the Texas law of strict products liability, which follows Section 402A of the Restatement.

75. This is especially difficult in occupational and environmental disease cases, in which causation usually is defined in terms of epidemiological correlations. In this context, defendants can readily suggest intervening causes, since a well-defined causal chain of events is not presented by plaintiffs. See H. HART & A. HONORE, CAUSATION IN THE LAW (4th ed. 1976).

76. Comment j states:

Where, however, the product contains an ingredient to which a substantial number of the population are allergic, and the ingredient . . . is one which the consumer would reasonably not expect to find in the product, the seller is required to give warning against it, if he has knowledge, or by the application of reasonable, developed human skill and foresight should have knowledge, of the presence of the ingredient and the danger.

RESTATEMENT (SECOND) OF TORTS § 402(A), comment j (1965).

Prosser notes that the initial products liability suits refused to find strict liability on the grounds that the maker could not have been expected to foresee the effects. Later decisions allowed recovery, as it became clear that the manufacturer knew of the defect. W. PROSSER, supra note 73, at 661.

Related to this is the issue of the temporal definition of foreseeability—foreseeability can be determined from the vantage point of the knowledge available at the time of the trial, or from that of the "state of the art" at the time the tort occurred. See M. FRANKLIN, supra note 71, at 502.

77. 493 F.2d 1076, 1086 (5th Cir. 1973), *cert. denied*, 419 U.S. 869 (1974). It should be noted that Borel, like most workers, was prohibited from suing his employer for damages due to workers' compensation laws. TEX. REV. CIV. STAT. ANN. art. 8306 § 3 (Vernon 1967).


79. *Id.* at 1091.

80. *Id.* at 1092-93.

81. *Id.* at 1106.

82. *Id.* at 1087, 1107.
3. The Use of Collateral Estoppel in Asbestos Litigation

The *Borel* decision is an extremely significant precedent. Not only has it spawned a large number of suits, but it also suggests the possibility of controlling hazardous substances, such as occupational carcinogens, through products liability actions. Yet the decision was not a panacea for those with asbestos-related disease. Each plaintiff has to follow Borel's strategy of assembling a team of experts to debate the dangers of asbestos with the industry's experts. Since experts are scarce and the amount of evidence necessary to prove a case is great, asbestos products liability suits are both expensive and time-consuming. Industry's strategy is to discourage litigation by exacerbating these factors.

At least partly in recognition of these circumstances, Chief Judge Fischer recently ruled that the offensive use of collateral estoppel could be applied to the *Borel* finding that asbestos products as manufactured, marketed, sold, or distributed are defective and unreasonably dangerous. Judge Fischer noted that the judicial efficiency aspects of collateral estoppel warranted its use in the asbestos litigation, for seriously ill 83.

The number of outstanding claims is now estimated to be 20,000. MacAvoy, *You Too Will Pay for Asbestosis*, N.Y. Times, Feb. 14, 1982, § 3 at 3, col. 2.

Presumably, if workers can make defense of products liability suits sufficiently burdensome on manufacturers, the manufacturers at some point will determine that it is more cost-effective to produce a safer product than to risk the burden of litigation. This is not, of course, the optimal solution, because it is based on after-the-fact controls; the high incidence of occupational disease that would occur before such a point is reached is undesirable. However, given the failure of OSHA's Generic Cancer Policy, this may be the only practical option.

84. Samples of such materials are on file with the Yale Journal of World Public Order.

85. It is estimated that the average cost to the plaintiff for a $35,000 recovery is $25,000, and the defendant is estimated to spend $35,000. See Kakalik, *Costs of Asbestos Litigation* (1983). In the last five years, approximately $660,000,000 has been spent to provide $236,000,000 to plaintiffs in 3,800 cases. Id.


Until recently, collateral estoppel could be applied only to re-litigation that involved the original plaintiff and defendant. A number of decisions since 1972, however, have broadened significantly the uses of the doctrine. In Blonder-Tongue Laboratories, Inc. v. University of Ill. Found., 402 U.S. 313 (1972), the Supreme Court permitted the defensive use of collateral estoppel, estopping the plaintiff from re-litigating the validity of a patent after a federal court had ruled the patent invalid. In Parklane Hosiery Co. v. Shore, 439 U.S. 324 (1979), the Court for the first time allowed the offensive use of collateral estoppel, estopping the defendants from litigating issues that previously had been decided against them. However, *Parklane* did not provide much guidance on several controversial issues arising out of the offensive use of collateral estoppel, which have yet to be settled. See Currie, *supra*, at 285-86; Semmel, *supra*, at 1466-67.
asbestos workers could not adopt a "wait-and-see" attitude with regard
to litigation.\textsuperscript{87}

This decision has been followed and expanded by several courts,\textsuperscript{88} but
others have refused to grant collateral estoppel.\textsuperscript{89} An appellate court
decision recently countenanced caution. In \textit{Hardy v. Johns-Manville
Sales Corp.},\textsuperscript{90} the Fifth Circuit overturned a district court's collateral es-
toppel order, thus confusing the rule of collateral estoppel in asbestos
litigation. Nevertheless, some commentators have argued that at least
certain aspects of asbestos workers' suits will be standardized so that de-
cisions will be made routinely and quickly.\textsuperscript{91}

\section*{B. The Access of Foreign Workers to United States Courts: The
Doctrine of Forum Non Conveniens}

The above discussion illustrates some of the issues facing workers from
other countries in conducting asbestos litigation in United States courts.
Before they can argue these issues, however, they must gain access to
United States courts.

Plaintiffs in these actions should be able to establish that federal courts
have competence to hear their cases. Section 1332 of Title 28 of the
United States Code grants original jurisdiction to district courts where
the matter in controversy is greater than $10,000 and is between
"(2) citizens of a State and citizens or subjects of a foreign state."\textsuperscript{92} So
long as plaintiffs meet the jurisdictional amount requirement of $10,000,
the district court will have subject matter jurisdiction.\textsuperscript{93}

After establishing that the United States court has competence to hear
their claims, foreign plaintiffs then must overcome the doctrine of forum
non conveniens which the Supreme Court announced in \textit{Gulf Oil Corp. v.
Gilbert}\textsuperscript{94} and elaborated in \textit{Piper Aircraft Co. v. Reyno}.\textsuperscript{95} This doctrine

\begin{footnotes}
The judge reasoned that a seriously ill asbestos worker would not likely delay bringing his suit
until another worker had prevailed on the strict liability issue just so that he might take advan-
tage of the prior judgment and avoid the burden of proving that issue.


89. Tretter v. Johns-Manville Corp., 88 F.R.D. 329 (E.D. Mo. 1980); McCarty v. Johns-

90. 681 F.2d 334 (5th Cir. 1982).

\textit{See also} Comment, \textit{Offensive Collateral Estoppel in Asbestos Litigation: Hardy v. Johns-


93. \textit{See, e.g.}, Pain v. United Technologies Corp., 637 F.2d 775 (D.C. Cir. 1980), cert. de-
nied, 454 U.S. 1128 (1981); In re Richardson-Merrell, Inc., 545 F. Supp. 1130 (S.D. Ohio

\end{footnotes}
Export of Hazardous Industries holds that even when it has jurisdiction over the subject matter and venue is appropriate, a federal court can dismiss a suit if the plaintiff’s choice of forum is unreasonably inconvenient for the defendant or if trial in the selected forum would administratively encumber the court. Since Gilbert, legislative and judicial developments have narrowed the applicability of the doctrine. Nevertheless, it is still widely invoked to deny foreign plaintiffs access to American forums. In Reyno, the Supreme Court raised the original Gilbert obstacles still higher.

1. Gulf Oil Corp. v. Gilbert: Factors to be Considered

Gulf Oil Corp. v. Gilbert was a diversity suit brought in the Southern District of New York for recovery based on damage to plaintiff’s warehouse in Virginia. The district court dismissed the case on forum non conveniens grounds, and the circuit court reversed. In upholding the district court, the Supreme Court attempted to enunciate a “bright-line” standard. First, the Court noted that the doctrine “presupposes at least two forums in which the defendant is amenable to process.” Next, the Court elaborated a list of public and private factors governing access to federal courts. The private factors emphasized consideration of convenience to the individual litigants, while the public factors focused on the choice of law issue and the burden placed on the Court’s docket.

97. Section 1404(a) of the Judicial Code, passed by Congress in 1948, demands transfer rather than dismissal of suits when one federal forum is more convenient than another. 28 U.S.C. § 1404(a) (1976).
99. See, e.g., Farmanfarmaian v. Gulf Oil Corp., 588 F.2d 880 (2d Cir. 1978) (Iranian citizen denied federal court for breach of contract action). The doctrine still is valid when the alternative forum is a state rather than a federal court. See supra note 97.
102. 153 F.2d 883 (2d Cir. 1946).
103. 330 U.S. at 508. The Court allowed that it was impossible to catalogue any circumstances mandating dismissal.
104. Id. at 507.
105. The private factors include “the relative ease of access to sources of proof; availability of compulsory process for attendance of unwilling, and the cost of obtaining attendance of willing, witnesses; possibility of view of premises [if appropriate]; and all other practical problems that make trial of a case easy, expeditious, and inexpensive.” Id. at 508.
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by cases wholly outside its territorial jurisdiction. The Court emphasized that "[t]he doctrine leaves much to the discretion of the court. . . unless the balance is strongly in favor of the defendants, the plaintiff's choice of forum should rarely be disturbed." Since Gilbert, foreign plaintiffs have been able to sue defendant corporations with continuous business operations in the forum state if the district court decides, in its discretion, that public and private favors weigh in the plaintiff's favor.

106. The public factors include:

the administrative difficulties flowing from court congestion; the "local interest in having localized controversies decided at home;" the interest in having the trial of a diversity case in a forum that is at home with law that must govern the action; the avoidance of unnecessary problems in conflicts of law, or in the application of foreign law; and the unfairness of burdening citizens in an unrelated forum with jury duty.


Moreover, until recently federal courts consistently held that a defendant's burden was much greater if dismissal forced an American plaintiff abroad to litigate. Note, Forum Non Conveniens and American Plaintiffs in the Federal Courts, supra note 96, at 379. However, the Second Circuit's en banc holding in Alcoa S.S. Co. v. M/V Nordic Regent, 654 F.2d 147 (2d Cir. 1981), that "neither the admiralty nature of an action nor the American citizenship of a plaintiff justifies creating a special rule of forum non conveniens," appears to indicate that the foreign citizenship of a plaintiff is not to be a factor in weighing an American defendant's forum non conveniens motion. Id. at 159.

Although not explicitly mentioned in Gilbert, several other plaintiff status issues have been considered as factors. Most important is the plaintiff's financial ability to sue. For instance, in Odita v. Elder Dempster Lines, 286 F. Supp. 547, 550 (S.D.N.Y. 1968), the court noted that "even if plaintiff were admitted to Great Britain, he would be financially unable to support himself during the period prior to trial; and he would be unable to obtain adequate legal representation there because the contingent fee is unlawful in Great Britain." See also Fiorenza v. United States Steel Int'l, Ltd., 311 F. Supp. 117 (S.D.N.Y. 1969) (discussion of foreign plaintiff's inability to pay attorney's fee in home forum).

Another factor of some importance is that the courts are more willing to grant a forum non conveniens motion when the majority of the litigation involves foreign co-defendants as well as foreign plaintiffs. See, e.g., Mohr v. Allen, 407 F. Supp. 483, 488 (S.D.N.Y. 1976).

Finally, forum selection clauses that are built into contract language will influence forum non conveniens determinations, often precluding inquiry by a court. See Note, The Convenient Forum Abroad Revisited: A Decade of Development of the Doctrine of Forum Non Conveniens in International Litigation in the Federal Courts, supra note 96, at 757-64. The force of such clauses recently has been reiterated by the United States Supreme Court in The Bremen v. Zapata Off-Shore Co., 407 U.S. 1 (1972). This decision, however, has been minimized by several subsequent district court opinions. See Copperweld Steel Co. v. Demag-Mannesmann-Boehler, 347 F. Supp. 53 (W.D. Pa. 1972) (designated forum must be reasonable); Morse Electro Prods. Corp. v. S.S. Great Peace, 437 F. Supp. 474 (D.N.J. 1977) (clause waived unless raised immediately in response to request for supplemental briefs on the matter).

In addition, since the holding in Bremen is based on the assumption that a contract is the product of "negotiation by experienced and sophisticated businessmen," 407 U.S. at 12, it
2. *Piper Aircraft Co. v. Reyno*: Closing the Door

Against this background, the Supreme Court decided the case of *Piper Aircraft Co. v. Reyno*.109 Reyno, the representative of the estates of Scottish citizens killed in an air crash of a chartered plane in Scotland, had sued Piper Aircraft, the manufacturer of the plane, and Hartzell Propeller, Inc. (Hartzell), the manufacturer of the plane’s propeller, in California to take advantage of that state’s products liability laws.110 Pursuant to 28 U.S.C. § 1404(a), the case was transferred to the Middle District of Pennsylvania, the site of Piper’s manufacturing plant, where the defendant’s forum non conveniens motion was granted.111

Employing the Gilbert analysis, the district court found that both public and private interests favored dismissal. While allowing that the critical evidence of design, manufacture, and testing of the plane and propeller was located in the United States, the court determined that most of the necessary evidence was located in Scotland.112 The court also noted that because the actions against the pilot and the charter company had begun in Scotland, contribution actions following a decision in the United States might lead to inconsistent verdict problems.113 The court concluded that the private interests favored litigation of all issues in Scotland.

With regard to public interests, the district court concluded that Pennsylvania product liability law applied to Piper, and Scottish law to Hartzell.114 This meant that the court would have to apply Scottish law, with
which it was unfamiliar, thus creating a burden on the court and citizens of the Middle District of Pennsylvania, who had no real interest in this apparently Scottish matter.  

On appeal, the Third Circuit rejected each of the rationales relied upon by the District Court. First, it determined that the private interests were not in defendants' favor because the defendants failed to establish that critical evidence would be unavailable or that inconsistent verdicts were a major problem, for both Pennsylvania and Scotland could apply principles of res judicata. Second, public interests did not countenance a forum non conveniens dismissal. Not only was application of Scottish law not burdensome, it was also unnecessary. The Third Circuit's own interpretation of Pennsylvania choice of law rules indicated that Pennsylvania, not Scottish, law should apply to Hartzell. Third, the court emphasized that "a dismissal for forum non conveniens, like a statutory transfer, 'should not . . . result in a change in the applicable law.'" Because dismissal in favor of a Scottish forum would have resulted in the loss of the strict products liability claim, the court ruled that a forum non conveniens dismissal was inappropriate.

The Supreme Court granted the petition for certiorari in order to decide whether the prospect of an unfavorable change in law was sufficient to prohibit a forum non conveniens dismissal. Writing for the major-
ity, Justice Marshall based the Court's reversal on two grounds. First, he argued that the case of Canada Malting Co. v. Paterson Steamship Co.,\(^{122}\) decided fifteen years before Gilbert, was dispositive in holding that a forum non conveniens determination should not consider the resulting law.\(^{123}\) Justice Marshall then cited Gilbert for the proposition that forum non conveniens determinations were to be flexible, emphasizing the discretion of the district court.\(^{124}\) If judges were to grant or deny forum non conveniens motions on grounds of the remedy granted by foreign jurisdictions, forum non conveniens determinations would become a complicated but mechanical process in which likely results in various jurisdictions could be calculated.\(^{125}\) Moreover, American courts would be flooded with litigation because American product liability laws are more favorable than those of most other countries.\(^{126}\)

However, the Court did not hold that the possibility of an unfavorable change in the law should never be a relevant consideration in a forum non conveniens inquiry:

Of course, if the remedy provided by the alternative forum is so clearly inadequate or unsatisfactory that it is no remedy at all, the unfavorable change in the law may be given substantial weight; the district court may conclude that the dismissal would not be in the interests of justice.\(^{127}\)

Justice Marshall explained in a footnote that there could not be a dismissal where the alternative remedy was clearly unsatisfactory, or where the alternative forum did not permit litigation of the subject matter of the dispute.\(^{128}\) Such was not the case here. Although a product liability cause of action was unavailable to the plaintiffs, and the potential damage

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122. 285 U.S. 413 (1932).
123. 454 U.S. at 247.
124. Id. at 249-50.
125. Id. at 251.
126. Id. at 252. Justice Marshall makes this point very strongly in a footnote, where, in addition to the products liability law situation, he lists several other factors that make American courts especially favorable to plaintiffs: the multiple options presented by the 50 state jurisdictions and choice of law rules; readily available jury trials; contingent attorney fees without tax on losing parties; and more extensive discovery. Id. at 252 n.18.
127. Id. at 254.
128. Id. at 254 n.22. Justice Marshall cites Phoenix Canada Oil Co. v. Texaco, Inc., 78 F.R.D. 445 (D.C. Del. 1978), as clarification for this holding. Phoenix concerned tort and unjust enrichment claims. The plaintiff argued that Ecuador, the alternative forum, possessed no remedies for these claims.
awards smaller, the plaintiffs nevertheless would be treated fairly in Scottish courts.129

After finding invalid the court of appeal’s “unfavorable law/forum non conveniens” ruling, the Supreme Court analyzed the district court’s balancing of public and private interests. First, Marshall reiterated that a foreign plaintiff’s choice of forum was not to be given the automatic deference due American plaintiffs.130 Next, he allowed that there were sufficient evidentiary difficulties to show that the district court had not abused its discretion in ruling that the private interests favored dismissal.131 Without ruling on the Pennsylvania choice of law issue, he also found that public interest factors favored dismissal: Scotland’s interest in this case was great and “the incremental deterrence [ensuring American companies manufacture safe products] that would be gained if this trial were held in an America court [was] likely to be insignificant.”132

3. Recent District Court Applications of Reyno

Several district court cases recently have interpreted Reyno.133 Three of these deserve special mention. The first of these is In Re Aircrash Disaster Near Bombay134 in which Judge Fitzgerald of the Western District of Washington denied the defendant aircraft manufacturer’s forum non conveniens motion in a suit on behalf of the deceased passengers and crew. After accepting the plaintiffs’ contention that Indian law time-barred their suit,135 Judge Fitzgerald focused on the alternative forum language of Reyno.136 The determinative factor was that Indian law precluded Indian jurisdiction; therefore the court refused to consider private and public interests, and denied the forum non conveniens motion.

129. 54 U.S. at 255.
130. Id. at 255 n.23. The dissent protested the legitimacy of this analysis. Id. at 261-62.
131. Id. at 257-58. He also noted that indemnity actions, if burdensome, could contribute to a forum non conveniens dismissal. Id. at 259.
132. Id. at 260-61.
134. 531 F. Supp. 1175 (W.D. Wash. 1982).
135. Judge Fitzgerald was forced to make an intensive analysis of Indian legal history leading up to the Limitation Act of 1963. He concluded that the filing of the action in United States court would not toll the Limitation Act, id. at 1180, and that defendant’s offer to waive a limitation defense would not be competent in Indian Court, id. at 1181. In addition, the lack of assurances that Indian courts would promptly decide Indian legal issues prohibited a conditional forum non conveniens dismissal such as had been orderd in Scherteinleif v. Traum, 589 F. 2d 1156 (2d Cir. 1976). Id.
136. See supra notes 127-28 and accompanying text.

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In Lake v. Richardson-Merrell, Inc., Judge Battisti of the Northern District of Ohio was less confident that the "no alternative forum" point was dispositive and chose to consider public and private interests as well. The decision systematically analyzed the Reyno dicta concerning unsatisfactory and nonexistent forums and concluded that the law of the alternative forum should be considered at both the preliminary and the balancing stages. The court first noted that the law of Quebec, the alternative forum for these Canadian plaintiffs suing defendant Ohio drug company Richardson-Merrell, Inc. (RMI), would time-bar any action.

Proceeding somewhat tentatively to public and private interests, the court delineated why the case should not be dismissed. Plaintiffs' contentions that much of the evidence regarding liability was at the Ohio manufacturing site, and that most of the expert witnesses would be in the United States, outweighed the availability of evidence which existed in Quebec. The court also held that the burden imposed by the possibility of conflicting verdicts was largely illusory because both forums followed principles of res judicata.

As for public interests, the court ruled that Ohio choice of law rules mandated that Ohio products liability law should apply. Ohio's governmental interest in regulating RMI was given special weight because of the degree of wrongful activity that had occurred in Ohio. Finally, the

138. Id. at 265-67.
139. The court reached this conclusion even though forum non conveniens doctrine was "designed in part to help courts avoid conducting complex exercises in comparative law." Id. at 268 (quoting Reyno, 454 U.S. at 251).
140. Quebec law disallows a defendant's offer to waive its limitations defense. Lake v. Richardson-Merrell, Inc., 538 F. Supp. at 269.
141. Judge Battisti never appeared to be entirely sure whether it was necessary to proceed beyond his original finding of an inadequate Quebec forum. He noted, for instance, that the situation in this case was much more dispositive than that of the Phoenix case which the Reyno Court cited as an example of an inadequate forum. Id. at 270 n.12.
142. Id. at 270.
143. Id.
144. The court noted that the defendant had failed to show the importance of the testimony of those witnesses beyond compulsory process. Id. at 271. Thus the decision on private interests is not dispositive with regard to what evidence is critical in a toxic substance products liability suit.
145. Id.
146. Ohio uses a lex loci delicti rule modified by governmental interests to determine choice of law. Id. at 273. Defendants argued that strict adherence to lex loci delicti required application of Canadian law. The district court, however, cited more recent Ohio cases that stress governmental interest and make a very good case for Ohio law. Id. at 273-74 (citing Henry v. Richardson-Merrell, Inc., 508 F.2d 28, 33-34 n.14 (3d Cir. 1975); Fox v. Morrison Motor Freight, Inc., 25 Ohio St. 2d 193, 195-99, 267 N.E.2d 405 (1971)).
147. The court quoted extensively from plaintiffs' brief the compelling governmental interests that required application of Ohio law. These included the facts that:

the defendant (1) was headquartered in Ohio when it negotiated its license . . . ; (2) 'or-
The court stated that “the docket of this court will never be so overloaded as to require the dismissal of cases legitimately brought before it.”

The Lake decision was not the final word on forum non conveniens determinations with regard to RMI’s liability. In In Re Richardson-Merrell, a decision published four months after Lake, Chief Judge Rubin of the Southern District of Ohio took the opposite point of view on almost every public and private interest factor and granted a forum non conveniens dismissal. There is a critical difference between the cases: In Re Richardson-Merrell concerned plaintiffs from the United Kingdom, where a cause of action existed, at least in theory.

The conflicting decisions of these two Ohio district courts provide two significant footnotes to the Reyno decision. First, even after the Supreme Court’s apparently unambiguous decision in Reyno, district courts will often reach different results after weighing public and private interests. Second, a plaintiff would be well advised to argue to a district court judge that a foreign forum is inadequate, or, for practical purposes, nonexistent when trying to defeat a United States defendant’s forum non conveniens motion.

C. Case Studies: Mexico and India

The following case studies on asbestos plants in Mexico and India attempt to illustrate how foreign workers seeking to sue American asbestos companies in United States courts could overcome forum non conveniens

organized, ordered, planned and conducted clinical studies of thalidomide [in Ohio]; (3) planned its ‘New Drug Application’ . . . [in Ohio]; (4) prepared advertising [in Ohio] for thalidomide; (5) claimed to have performed clinical studies [in Ohio] regarding the drug’s safety; (6) fraudulently composed a medical journal [in Ohio] . . . ; (8) learned in Ohio of the deformities thalidomide caused; (9) decided [in Ohio] not to issue adequate warnings regarding use of the drug; and (10) decided [in Ohio] to withdraw the drug and organized a plan for its withdrawal from the market.

538 F. Supp. at 274 n.17.

148. Id. at 275.

149. 545 F. Supp. 1130 (S.D. Ohio 1982). In terms of private interest, the court found, on much the same facts as existed in Lake, that more critical evidence was found in Britain than in Ohio, and thus that convenience favored a British forum. Id. at 1134. Public interests cut the same way. The court also decided that New York choice of law rules demanded that British law be used to determine liability. Id. at 1135. Moreover, the court found that Ohio had minimal interest in the safety of products that are manufactured overseas, even when the manufacturer was a wholly-owned subsidiary of an Ohio-based corporation and the safety testing and development of the drug was completed in the United States. Id. at 1135. On policy grounds as well, the court thought it best to make the United Kingdom responsible for setting its own standards of safety for drugs sold within its borders. Id. at 1136.

150. The plaintiffs did not raise a statute of limitations bar as proof that the United Kingdom forum was inadequate. Id. at 1134. The court appeared to acknowledge that this difference was critical: “In two of the cases considered by Judge Battisti the Canadian plaintiff had the equivalent of no remedy at all under the law of Quebec because its rule of prescription had extinguished their right of action.” Id. at 1136.
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obstacles in practice. They are designed to reflect how foreign plaintiffs could bring suit in United States courts against the American companies.

It should be noted at the outset of this analysis that in each of the case studies the American corporation that is the potential defendant in these suits is related to the foreign factory in a dual capacity. First, both American corporations are the parent corporations of the Mexican and Indian subsidiaries. Second, each American corporation supplies its foreign subsidiary with raw asbestos fiber for use in the plant's finished product. Therefore, by characterizing the suit as one in products liability, the foreign plaintiff will be able to sue the American corporation directly, avoiding the need to persuade the court to "pierce the corporate veil" to reach the parent.

Ordinarily, a plaintiff must convince the court to pierce the corporate veil in order to assert liability against the parent. However, courts generally view a parent and subsidiary as two separate entities and are reluctant to pierce the corporate veil except in those cases where it is deemed necessary in order to prevent fraud, or where the parent so dominates the subsidiary that the subsidiary may be viewed as a mere instrumentality of the parent.

Even if the foreign plaintiffs convince the courts to pierce the corporate veil, they may stand to gain little. In fact it is often the case that when a worker sues his employer, which is a subsidiary of a parent corporation, the parent corporation, and not the plaintiff, will ask the court

151. These case studies are used only to illustrate various points about the possibility of foreign plaintiffs' products liability suits in the United States. They will be discussed throughout this Article's analysis of the Gilbert factors, but this is not meant to imply that they are necessarily typical situations. Rather, their importance lies in their illustrative value.

152. In each case, the American corporation supplies its foreign subsidiary through a Canadian affiliate. See infra notes 163-74 and accompanying text.

153. See supra note 71 and accompanying text. See also supra notes 72-91 and accompanying text.

154. This Article does not address in depth the question of whether a parent corporation may be held liable for the torts of its subsidiary. The recent Supreme Court case of Verlinden B.V. v. Central Bank of Nigeria, 461 U.S. 480 (1983), in which a foreign plaintiff was permitted to sue a foreign corporation in United States courts, at first glance appears to obviate any problems that a parent-subsidiary distinction may pose. A careful reading of the case reveals, however, that this broadened jurisdictional boundary applies only in the specific instance where a foreign plaintiff sues a foreign sovereign under the Foreign Sovereign Immunities Act of 1976. Id. at 4569. In the case studies, the question is not whether a foreign plaintiff can sue his home government, but rather whether he can reach the parent United States corporation.

155. See, e.g., FMC Finance Corp. v. Murptree, 632 F.2d 413, 423 (5th Cir. 1980).

156. See, e.g., Krivo Indus. Supply Co. v. National Distillers & Chem. Corp., 483 F.2d 1098, 1102-03 (5th Cir. 1973), modified per curiam, 490 F.2d 916 (5th Cir. 1974).
to pierce the corporate veil.\textsuperscript{157} The theory is that if the parent and subsidiary are viewed as a single entity, the parent will be considered the worker's employer and entitled to workers' compensation immunity. The plaintiff accordingly would be restricted to recovery under workers' compensation statutes.

A number of courts, however, have refused to allow a parent to pierce its own corporate veil in order to avoid tort liability.\textsuperscript{158} Thus, a plaintiff may bring an action directly against the parent. In order to succeed, however, the plaintiff must assert that the parent performed independent acts of negligence.\textsuperscript{159} This would depend largely upon the degree of control the parent exercises over the premises where the worker was injured.\textsuperscript{160}

Of course, the necessity of proving an independent tort is obviated by a products liability theory of recovery.\textsuperscript{161} It is assumed, for the purposes of this analysis, that the plaintiffs will include products liability as an alternative cause of action.

1. Details of the Case Studies: Health Conditions in Asbestos Plants

The first case\textsuperscript{162} involves two asbestos textile plants located just across the border from Mexico.


\textsuperscript{159} See Love, 647 F.2d 1058 (plaintiffs' negligence action properly dismissed where plaintiffs failed to allege independent acts of negligence against the parents); Boggs, 590 F.2d 655 (district court's order to dismiss reversed where plaintiffs had asserted independent acts of negligence on the part of the parent).

The case studies illustrate how such an analysis might affect foreign workers bringing suit against an American parent of a foreign subsidiary. \textit{See infra} notes 163-93 and accompanying text. The Mexican asbestos plants are wholly-owned by Amatex, an American Corporation. \textit{See infra} note 163 and accompanying text. Should a court disregard the corporate entity, Amatex would be considered the worker's employer, and the worker would be restricted to the limited recovery available under the Mexican Worker's Compensation Law. \textit{See infra} note 178. A similar result would be reached in the Indian case study. This is unlikely because several courts have exhibited a disinclination to do so. \textit{See} Peterson, 555 F. Supp. at 832, and cases cited therein. Indeed, the District Court for the Northern District of Illinois has repeatedly refused to do so regarding asbestos litigation against Johns-Manville. \textit{In re} Johns-Manville Asbestos Cases, 511 F. Supp. 1235 (N.D. Ill. 1981); McDaniel v. Johns-Manville Sales Corp., 487 F. Supp. 714 (N.D. Ill. 1978).

\textsuperscript{160} See Boggs, 590 F.2d 655; Peterson, 555 F. Supp. 827. It is not clear from the facts available the degree of control Amatex and Johns-Manville exercised at the respective foreign plants, so it is difficult to predict whether a foreign plaintiff could surmount this obstacle. It is certain, however, that the parent corporations were aware of the hazardous conditions at these plants. \textit{See infra} notes 166 and 172 and accompanying text. Failure to take affirmative action under the circumstances might constitute an independent tort on the parent's part.

\textsuperscript{161} \textit{See supra} note 71.

\textsuperscript{162} The factual information for this case study is the result of research published by Barry Castleman in the International Journal of Health Services. \textit{See Export of Hazardous
the Mexican-United States border in Agua Prieta and Ciudad Juarez. The plants are wholly-owned by the Amatex Corporation of Norristown, Pennsylvania. In 1972, Amatex closed a five-year-old asbestos yarn plant located in Pennsylvania, and began importing large amounts of processed fiber from the new Mexican plants. The asbestos fiber used at these Mexican mills is imported from Canada by the firm; the Mexican operation is, in effect, a processing stopover for the American asbestos textile market.

In 1977, dangerous work conditions within the Agua Prieta plant were revealed. Soon after, some “cosmetic” improvements were made, but neither respiratory protection nor fiber level monitoring has been provided.

The second case is the Shree Digvijay Cement Company of India, whose plant annually manufactures 68,000 tons of asbestos-cement water pipe and sheeting material for markets in India, Southeast Asia, and Africa. The Johns-Manville Corporation, a Colorado-based multinational corporation, was paid $250,000 in royalties for the design

Factories, supra note 18. Castleman was forced to base his findings on investigations by local newspapers. Id. at 576-77. This dearth of information illustrates the problems involved in assessing the risk of exported hazardous industries—one must rely on one's own surreptitious investigation or on those of investigative reporters.

163. The location of the Amatex plant just over the United States border is the result of Mexican foreign investment policy which, despite the country's socialist rhetoric regarding foreign participation in the economy, has encouraged a large number of American corporations to establish operations in special export processing zones. These zones entail minimal restriction from the Mexican government and offer greater freedom from restrictions on ownership and labor practices. See Grunwald, Restructuring Industry Offshore: The U.S.-Mexico Connection, BROOKINGS REV., Spring 1983 at 24-25.

In contrast, under the 1973 Foreign Investment Law, “Mexicanization” of foreign investment outside the border area is required. This requires most foreign investors to place at least 51% of invested equity in the hands of Mexican nationals; in addition, 90% of the workers and managers in foreign operations must be Mexicans. See AMERICAN CHAMBER OF COMMERCE OF MEXICO, BUSINESS MEXICO 11-24 (1981).

164. Export of Hazardous Factories, supra note 18, at 576. The two million pounds imported in 1975 were 25% of the entire United States asbestos textile volume.

165. Id. This would appear to be the most brazen type of export of hazardous industries: a dangerous plant is placed just across the border from an industrialized country, with the processes and dangerous raw materials imported.

166. A newspaper account revealed that:

Asbestos waste clings to the fence that encloses the brick plant and is strewn across the dirt road beyond the plant where children walk to school. Inside, machinery that weaves yarn into industrial fabric is caked with asbestos waste and the floor covered with debris. Workers in part of the factory do not wear respirators which could reduce their exposure to asbestos dust.

Id. at 576.

167. Id. at 577. Castleman discussed several other cases of American multinationals exporting hazardous waste. However, he did not include any concrete industrial hygiene data or health reports. The authors currently are in the process of collecting such data.

168. As with the Mexican study, a series of investigations by Barry Castleman provide the details for this case study. See Castleman, Double Standards: Asbestos in India, NEW SCIENTIST, Feb. 26, 1981, at 522, 523 [hereinafter cited as Double Standards]. The story has been
technology of the plant and, in turn, paid $500,000 for a ten percent interest in the project.\textsuperscript{169} Johns-Manville continues to provide asbestos fiber for the plant from Manville affiliates in Canada.\textsuperscript{170} Few of the safety precautions that must be observed in the United States are employed at the plant.\textsuperscript{171} Although Manville’s management has been notified of these conditions, no action has been taken.\textsuperscript{172}

2. Lack of Home Remedy in the Workers’ Home States

If conditions in the Mexican and Indian plants are as bad as the reports indicate, some workers eventually will contract asbestosis, mesothelioma, and/or lung cancer. Without sufficient recourse under their nations’ laws, employees of the Indian or Mexican plants might choose to sue the asbestos suppliers in the United States court under American strict products liability law.\textsuperscript{173} Before being allowed to litigate the products liability claim, the plaintiff will have to demonstrate the lack of a remedy under her country’s law.\textsuperscript{174} The case studies illustrate this point.


\textsuperscript{169} Wyrick, \textit{supra} note 168, at 7, col. 1. Indian policy toward foreign corporations and foreign investment generally has been strongly nationalistic regarding foreign ownership and employment of nationals. \textit{See} N.S. SIDDHARTHAN, \textit{CONGLomerates and MULTINATIONALS IN INDIA: A STUDY OF INVESTMENT AND PROFIT} 93 (1981). However, some loosening of foreign investment policies recently has been seen, and India now has decided to allow foreign investment in such areas as petroleum exploration and high technology equipment. \textit{See} Dreiberg, \textit{Indian Mission Seeks to Change Investment Image in the US}, Journal of Commerce, May 6, 1982, at 12a; Morehouse, \textit{Letting the Genie out of the Bottle: The Micro-electronics Revolution and the Global Political Economy in the 1980’s}, \textit{reprinted in TECHNOLOGY AND INTERNATIONAL AFFAIRS, supra} note 61, at 239. In general, however, foreign companies are allowed only minority ownership, and reinvestment of profits or remittances abroad are closely controlled, as are goods imported for foreign industries. \textit{GOVERNMENT OF INDIA, DIRECTORATE GENERAL OF TECHNICAL DEVELOPMENT, HANDBOOK OF FOREIGN COLLABORATION} (1980).

\textsuperscript{170} Wyrick, \textit{supra} note 168, at 7, col. 2.

\textsuperscript{171} For example, there are no ‘wet processes’ to reduce the level of airborne asbestos. \textit{Id.} at 22, col. 1. Industrial filter masks, which provide protection against asbestos exposure, are issued to permanent workers only; temporary workers do not receive any masks. \textit{Id.} Workers wear their own clothes into the workplace and no laundry facilities are provided. \textit{Id.} All of these practices are prohibited in the United States by the OSHA permanent standard on asbestoses. \textit{See} 29 C.F.R. 1990.151, Table 2 (1983).

\textsuperscript{172} In 1980, Castleman documented conditions around the plant and presented his findings to Paul Kotin, Johns-Manville’s Senior Vice President for Health and Safety. \textit{Double Standards, supra} note 168. Although Kotin found the report “terribly disturbing,” no improvements have been made, to the knowledge of the authors. Wyrick, \textit{supra} note 168 at 23.

\textsuperscript{173} This strategy parallels that of domestic workers who have opted to sue the suppliers of the now largely defunct United States manufacturing plants.

\textsuperscript{174} A motion to dismiss on forum non conveniens grounds most likely will be denied when an alternative is so unsatisfactory as to be nonexistent. \textit{See} \textit{supra} notes 128-29 and accompanying text. It appears that at a minimum, a foreign plaintiff must present the court with evidence that no adequate remedy exists in her home forum. \textit{See} \textit{supra} notes 148-72 and accompanying text. While this factor may not be dispositive of a motion to dismiss on forum
The protection of workers' health has a relatively long history in Mexico, but there are no specific health regulations to protect workers from asbestos. Moreover, Mexican law prohibits any recovery for a worker beyond the two or three years of minimal wages provided under workers' compensation. A products liability tort action is simply not available.

An argument can be made that the Mexican government has legislated against double recovery through workers' compensation and products liability grounds, see Piper Aircraft Co. v. Reyno, 454 U.S. at 254-55, its weight should not be underestimated. See supra notes 148-78 and accompanying text.

It should be further noted that, in the absence of pre-trial discovery procedures, one cannot set forth all the facts necessary for a judicial resolution of a forum non conveniens motion. The case studies cited herein thus provide merely a broad framework for exploring the feasibility of foreign plaintiffs' products liability suits.

175. Following the Mexican Revolution, the Constitution of 1917 included a paragraph that stated: "Employers shall be liable for industrial accidents and occupational diseases arising from or in the execution of the trade or work; therefore, employers shall pay the proper indemnity, according to whether death or merely temporary or permanent disability has ensued, according to the provisions of the law." M. CLARK, ORGANIZED LABOUR IN MEXICO 230 (1937).

Despite employers' attempts to repeal this part of the Constitution, the new Federal Labor Law, enacted in 1931, advocated worker health protection. Id. at 231. Labor law has continued to carry constitutional force in Mexico. J. HERGET & J. CAMIL, AN INTRODUCTION TO THE MEXICAN LEGAL SYSTEM 30 (1978) (discussing Article 123 of the Mexican Constitution, which dealt with workers' compensation).

176. Articles 472-515 of the Federal Labor Law deal with occupational disease and industrial hazards. MEXICAN LABOR LAW (CCH Span.-Eng. ed. 1978). However, there is no mention of acceptable levels of asbestos.

177. Articles 484-87 of the Federal Labor Law concern the calculation of compensation to which a worker is entitled, the general rule being minimum wage to twice the average wage of the region. Articles 482-96 deal with various limitations on the normal stipend, and articles 500-02 limit compensation to 735 days of wages when a worker dies. Finally, article 513 exhaustively lists the variety of occupational diseases for which compensation is granted; asbestosis and mesothelioma caused by asbestos are included, but bronchogenic lung cancer is not.

178. Civil law in Mexico is based on the 3,060 articles of the Mexican Code, a descendant of the classic Code Napoleon of 1804. J. HERGET & J. CAMIL, supra note 175, at 33-35. Article 1910 of the Civil Code provides that: "He who acting illegally or against good customs causes damage to another, is obliged to repair it, unless he proves the damage occurred in consequence of the fault or inexplicable negligence of the victim." Id. at 43. There is no recovery for pain and suffering; the emphasis is on repair of damages. Money damages are limited to the amount available under the Federal Labor Law's workers' compensation schedule. Indeed, not only is tort recovery tied to workers' compensation, but Articles 23-29 of the Social Security Law also base social security benefits on workers' compensation. See O.A.S. Document, supra note 25, at 139.

This means not only that "the typical recovery in a personal injury or death action is much less than one would expect to find in Anglo-American jurisdictions," but also that the injured worker has no additional products liability tort remedy under Mexican law: a worker's death is worth no more than two years of wages to his family, no matter what legal theory is utilized. Id. at 143.

Mexican law does provide for strict liability for damages caused by dangerous items. J. HERGET & J. CAMIL, supra note 175 at 45. However, this is of little importance to the injured workers as the workers' compensation provisions place a ceiling on the maximum recovery, and are governed, as in the United States, by strict liability principles. Id. at 31.
ability tort claims. This argument fails for two reasons. First, a supplier's liability could be reduced by the amount of the workers' compensation award. Second, courts generally should refrain from policy considerations when making an initial determination of the existence of alternative forums. Consequently, a district court would probably conclude that there was no alternative forum for the Mexican workers' claims.

Since 1923, Indian workers have been entitled to compensation for illness or injury arising out of their work. Although a small compensation is provided for asbestosis, there are no provisions for asbestos-related lung cancer or mesothelioma. Workers can seek a common law remedy for their injuries, but if such a suit is filed, a worker cannot receive compensation under the Workmen's Compensation Act. Thus, a worker cannot institute a products liability tort action in India if he already has received workers' compensation of any sort.


180. For example, in In Re Aircrash Disaster Near Bombay, 531 F. Supp. 1175 (W.D. Wash. 1982), the court ruled that there was no alternative forum and denied a forum non conveniens motion. See supra notes 134-36 and accompanying text. The lack of an alternative forum resulted from a statute of limitations time bar. A policy argument could have been made at this point that India did not want to hamper commerce and so set down a strict one-year statute of limitations. This argument should not succeed; the focus rightfully is on the alternative forum for the particular claim brought in the United States, not on the policies underlying the differences in law.

181. Even assuming the statutory provisions are not enough to foreclose plaintiffs' claims, there are no contingency fees allowed by Mexican law, so it is doubtful that a Mexican plaintiff could get or afford adequate representation in court. This factor often is weighed in a United States court's forum non conveniens determination. See supra note 108.

182. See B. Bhar, A HANDBOOK OF LABOUR LAWS 166 (1969). The employer is strictly liable. Id. at 167. The Workmen's Compensation Act defines partial and total disablement, establishes compensation schedules, and defines employer liability. See, G. Sinha & P. Sinha, INDUSTRIAL RELATIONS AND LABOUR LEGISLATION 562-81 (1977). The amount of compensation for permanent total disablement varies from $1250 to $5000 depending on the worker's wage. Id. at 572. In reality, compensation often is much less than this. Vilanilam recounts the crushing death of a 26-year-old laborer caused by an unguarded machine in a tire plant; his family eventually received $250 in compensation. Vilanilam, supra note 12, at 234.

183. Occupational disease specifically is provided for in Schedule III of the Workmen's Compensation Act. See B. Bhar, supra note 182, at 173.

Occupational health and safety conditions are addressed in the Indian Factories Act of 1948, which was patterned after the British Factories Act of 1937. See G. Sinha & P. Sinha, supra note 182, at 376. The effectiveness of these provisions is undermined by a lack of state enforcement action. Vilanilam notes:

Even today, despite the existence of laws and regulations, there is no effective monitoring machinery to detect flaws in the implementation of various acts. Implementation of labour laws cannot succeed because of the availability of cheap labor. Employers can flaunt laws with impunity when workmen acquiesce to any indignity or ill treatment for the sake of sheer survival.

Vilanilam, supra note 12.

184. See B. Bhar, supra note 182, at 173.

185. Id. It is notable that strict liability tort law, while recognized in India, has not devel-
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Consequently, assuming that a worker at the cement plant has received a small compensation for asbestosis and has now contracted mesothelioma, he or she would have no alternative forum due to Indian law prohibiting a tort claim once workers' compensation is granted.\textsuperscript{186} Thus, it is unnecessary for a reviewing district court to consider whether the miniscule compensation available to an Indian worker is adequate, whether an Indian worker would be able to get legal representation in the absence of contingency fees, or whether the statute of limitations for personal injury action had tolled.\textsuperscript{187} The Indian alternative forum is quite nonexistent.

3. Analysis of Other Reyno/Gilbert Factors

Although the lack of home remedy is a strong argument against forum non conveniens dismissal, a court considering suits by our foreign plaintiffs may weigh other factors in the Reyno/Gilbert formula.\textsuperscript{188} Like the courts in the Richardson-Merrell litigation cases,\textsuperscript{189} the court may analyze other Reyno/Gilbert conditions in order to determine whether an American forum is available.

The actual forum in which the plaintiff chooses to litigate will to a large extent determine the outcome of the court's analysis of the Reyno/Gilbert factors.\textsuperscript{190} This is because the location of the trial will determine those practical considerations "that make trial of a case easy, expeditious, and inexpensive,"\textsuperscript{191} and which these factors are designed to balance. For simplicity of discussion, this Article will assume that the Mexican plaintiff would sue Amatex in the Eastern District of Pennsylvania, where the Amatex headquarters is located,\textsuperscript{192} and the Indian plaintiff would bring suit in federal district court in Colorado, the state in

\textsuperscript{186} Indeed, it is difficult to see how any products liability forum exists in India unless a worker sues initially in an Indian court under a Borel rubric, a foolhardy move given the rudimentary development of strict liability in India. See supra notes 184-85 and accompanying text. This would be a poor strategy even if strict liability were well developed. Few workers in the United States, for instance, would pass up the often inadequate but relatively automatic workers' compensation for a chance at a products liability recovery.

\textsuperscript{187} The court in the Bombay Air Crash case addressed all these considerations. See supra note 134 and accompanying text.

\textsuperscript{188} See supra note 174.

\textsuperscript{189} See supra notes 137-50 and accompanying text.

\textsuperscript{190} These other factors are discussed in notes 100-32 supra and accompanying text.

\textsuperscript{191} Gilbert v. Gulf Oil, Inc., 330 U.S. at 508.

\textsuperscript{192} This would effectively moot the Erie question with regard to forum non conveniens. Throughout the Reyno litigation, all courts assumed that Federal and Pennsylvania law of forum non conveniens were identical. See, e.g. Reyno v. Piper Aircraft Co., 630 F.2d at 158 n.20.
which Johns-Manville is headquartered. 193

a. Private Interests

The two principal concerns of the private interest inquiry 194 are the relative availability of sources of proof and the relative ease of joining necessary parties to the litigation. 195 In both the Mexican and Indian cases, the balance appears to be tipped in favor of denying the forum non conveniens motions on grounds of the relative availability of sources of proof.

For example, in the Mexican litigation, most of the evidence concerning employment records, export of asbestos raw material, and fiber production would be located in Pennsylvania. 196 Expert witnesses qualified to testify on the ill-health effects of asbestos also would be readily available on the East Coast of the United States. 197 Defendants could argue, of course, that a Mexican forum, where medical records, plant conditions, and other testimony might be found would be more appropriate. 198 The court’s final determination would depend on the specific facts of each litigant’s case. 199 A Pennsylvania forum certainly would not be ruled out simply on the basis of the availability of witnesses and evidence.

In the Indian plaintiff’s suit, private factors do not appear to favor defendants. Experts on the plant design as well as medical experts may be found in the United States, and not in India. 200 As in the Mexican


194. See supra note 105 and accompanying text.


196. The defendant asbestos supplier would be a United States corporation with Canadian operations. The forum in which the corporate headquarters is located might provide a better forum. There, one would find export records concerning asbestos shipped to Agua Prieta and Ciudad Juarez.

197. A collateral estoppel ruling would obviate the need to litigate the “unreasonably dangerous” issue. See supra notes 87-91 and accompanying text.

198. This evidence could be made available by means of affidavits. See Piper Aircraft Co. v. Reyno, 454 U.S. at 259 n.27.

199. See id. at 249 citing Gilbert, 330 U.S. at 508.

200. Johns-Manville designed the Shree Digvijay plant. See supra notes 168-72 and accompanying text.
situation, medical testimony about the worker's illness could be made available by affidavit, and collateral estoppel would simplify the evidentiary issues.\(^{201}\)

The joinder issue also would likely not prove fatal to the foreign plaintiff's suit.\(^{202}\) Asbestos producers usually join other producers as co-defendants.\(^{203}\) This requires that defendants litigate in jurisdictions removed from what might be their most convenient forum. Thus a Mexican plaintiff's bringing suit in Pennsylvania would be no more onerous than the usual asbestos product liability case. Moreover, the sole party in Mexico whom the asbestos suppliers may wish to join is Amatex, which likely would be immune from further liability.\(^{204}\)

Johns-Manville's role as sole supplier of asbestos as well as part-owner of the Indian plant would similarly appear to obviate most joinder problems.\(^{205}\) In summary, it is difficult to see how a Pennsylvania or Colorado venue would vex or harass, respectively, Amatex or Johns-Manville.\(^{206}\)

b. Public Interests

In analyzing the public interest factors,\(^{207}\) one must first address choice of law rules. A court will often find great inconvenience when choice of law rules demand that foreign law be applied by the court.\(^{208}\) It does not appear that this situation would be encountered if the Mexican plaintiff sues in Pennsylvania court.

In the \textit{Reyno} litigation, the circuit court carefully analyzed Pennsylvania law and concluded that Pennsylvania applied a governmental interest analysis.\(^{209}\) Therefore the court must inquire whether "the be-

\(^{201}\) See \textit{supra} notes 87-91 & 197 and accompanying text.

\(^{202}\) See, \textit{e.g.}, role of multiple defendants. Hardy v. Johns-Manville Sales Corp., 681 F.2d 334 (5th Cir. 1982) (consideration given to the role of multiple defendants).


\(^{204}\) If the Mexican plaintiff first had sought relief under workers' compensation, the asbestos suppliers would be unable to join the employer of the plaintiff, due to the limit on liability granted to employers by the workers' compensation law. See \textit{supra} notes 177-78 and accompanying text.

\(^{205}\) It is difficult to see whom Johns-Manville would join, unless the Indian co-owner of the plant, plaintiff's immediate employer, were brought in. However, this kind of joinder normally is prohibited by workers' compensation laws. India is no exception. See \textit{supra} notes 158-60 & 183-85 and accompanying text.

\(^{206}\) The \textit{Gilbert} Court stated "that the plaintiff may not, by choice of an inconvenient forum, 'vex,' 'harass,' or 'oppress' the defendant by inflicting upon him expense or trouble not necessary to his own right to pursue his remedy." 330 U.S. at 508.

\(^{207}\) See \textit{supra} note 106 and accompanying text.

\(^{208}\) See \textit{Reyno} v. Piper Aircraft Co., 479 F. Supp. 727, 734-37 (M.D. Pa. 1979); see also \textit{supra} note 114.

\(^{209}\) 630 F.2d at 180. This finding was not overruled specifically by the Supreme Court.
behavior giving rise to the contact furthers or abrogates a state policy." In the Mexican case, it can be argued that Mexico has a governmental interest in protecting its citizens' health, and that Mexico has significant contacts with the Amatex plants. Nevertheless, it is Amatex, a resident of Pennsylvania, which has exported the hazardous workplace, maintaining complete control over the factory while supplying it with the asbestos. Under our federal government, the state must accept responsibility for the regulation of industry; arguably, the citizens of Pennsylvania are thus responsible for the ill-health effects caused by asbestos that is exported from that state. This analysis suggests that the proper party upon whom costs should be imposed is the exporter of the hazardous industry, Amatex. Because Pennsylvania has the greatest governmental interest in regulating Amatex, Pennsylvania law should apply, thus avoiding the court's reluctance to apply unfamiliar law.

It is not so clear what law a Colorado court would apply in the Indian case. In the case of First National Bank v. Rostek, the Colorado Supreme Court, following the Restatement (Second) of Conflicts § 145, rejected the lex loci delicti doctrine "in favor of a more flexible and rational choice of law approach in multi-state tort cases." Section 145 recommends that "the law of the state which . . . has the most significant relationship to the occurrence and the parties . . ." be applied. While it might seem that India would have the most significant contact with an Indian plaintiff's products liability suit, and thus Indian law should apply, it is a relevant Colorado policy to regulate the corporation headquartered there. An argument accordingly can be made for the application of Colorado law in this case, simplifying matters for the district court.

The other principal public factor, the increased load on court dockets, would go against both a Mexican plaintiff suing in Pennsylvania and an Indian plaintiff suing in Colorado. The load would, of course, be minimized if collateral estoppel were granted. Even if collateral estoppel were not granted, it seems unlikely that a court would approve a forum

210. Id.
211. As Judge Battisti noted in the Lake case:
The purpose of much of the law of torts and product liability is to deter wrongful activity, as well as to compensate the victims thereof and to impose on the proper party the cost of insuring against risks of a certain activity.
538 F. Supp. at 274; see also RESTATEMENT (SECOND) OF TORTS § 402A, comment c (1965).
213. Id. at 443-44, 514 P.2d at 317.
215. See supra note 202 and accompanying text.
216. See supra notes 87-91 and accompanying text.
non conveniens motion solely because of a burdened docket. This is especially true when the alternative forums, Mexico and India, do not provide the plaintiffs with an adequate remedy.

Balancing all of the factors, it appears a Mexican plaintiff has a good chance of gaining access to a Pennsylvania forum applying Pennsylvania law to his product liability claim against Amatex. Similarly, an Indian plaintiff would probably defeat a forum non conveniens motion and be able to sue Johns-Manville under a strict products liability rubric in Colorado district court that would probably apply Colorado law. Neither public nor private interests clearly compel dismissal. The nonexistence of an adequate home remedy thus would appear dispositive. As the court stated in Lake, “if recourse . . . to law in the other forum is so unsatisfactory as to provide no remedy at all, dismissal of [this case] would not be in the interests of justice.”

Conclusion

As our case situations demonstrate, foreign plaintiffs can conceivably overcome forum non conveniens problems and gain access to U.S. courts. When they do, they will be able to take advantage of favorable products liability laws, and collateral estoppel will enable them to bypass time-consuming evidentiary matters and speed litigation of their claims.

This will result in asbestos suppliers being as liable for asbestos processing done outside the United States as for that done within the U.S. Consequently, U.S. asbestos suppliers will be encouraged to apply the same incentives to Third World asbestos plants that suppliers exert directly or indirectly on asbestos processors in the U.S., resulting in the adoption of safer occupational practices in hazardous industries.

Thus, the prospect of suits by foreign plaintiffs in U.S. courts can provide an impetus for controlling the export of hazardous industries. Efforts by international bodies or home country nations to raise awareness of the problem of hazardous industries or to construct internationally effective standards are still to be highly desired, but the legal recourse of suits by foreign plaintiffs in U.S. courts may offer a more immediately effective solution.

The idea that private legal action be taken in the United States as an attempt to control a problem that is, narrowly, the domestic concern of host Third World nations, raises some interesting issues for international

law and politics. Not least of these is the implication that the U.S. law could be, de facto, widely extended to events occurring within many other regions of the world, particularly in light of the inability of international bodies to resolve difficult issues posed by the international spread of hazardous technology. A successful action by a developing country worker against an American company under U.S. law would undoubtedly cause a flurry of concern. One by-product may be revision of host country legislation or MNC contracts to prevent further such suits. We hope that another by-product will be a more careful examination of occupational health and safety issues by the home governments, as well as a higher level of concern on the part of the companies and international organizations.