

4-1-1983

Antitrust, Technology Transfers and Joint Ventures in Latin American Developments

Robert J. Radway

Follow this and additional works at: <http://repository.law.miami.edu/umialr>



Part of the [Antitrust and Trade Regulation Commons](#)

Recommended Citation

Robert J. Radway, *Antitrust, Technology Transfers and Joint Ventures in Latin American Developments*, 15 U. Miami Inter-Am. L. Rev. 47 (1983)

Available at: <http://repository.law.miami.edu/umialr/vol15/iss1/5>

This Article is brought to you for free and open access by Institutional Repository. It has been accepted for inclusion in University of Miami Inter-American Law Review by an authorized administrator of Institutional Repository. For more information, please contact library@law.miami.edu.

ANTITRUST, TECHNOLOGY TRANSFERS AND JOINT VENTURES IN LATIN AMERICAN DEVELOPMENT

ROBERT J. RADWAY*

I. INTRODUCTION

The approach to technology transfer in Latin America,¹ although governed by a complicated set of laws, regulations and government policy, arises from the context of economic development rather than from competition law or antitrust. Antitrust laws exist in Brazil,² Argentina³ and Chile,⁴ and antitrust concepts are scattered throughout some consumer protection regulations and other policies in Mexico. Enforcement of these antitrust policies extends more to distribution and pricing issues than to merger policy, abuses of dominant position or combinations in possible restraint of trade. This result is predictable in countries at an earlier stage of industrial development than the United States, members of the European Economic Community (EEC) or Japan, and in countries accustomed to economic control by a colonial power or a dictatorship. Market forces are not yet strong enough in these countries to require intervention by anti-monopoly laws, but, at the same time, other types of intervention are required. Economic development, including the encouragement of foreign capital and technology, is generally a higher priority at this stage, although not in every case and not necessarily forever. In the context of investment and development, joint ventures are perceived as a vehicle through which

* Member of the firm of Radway & Dalto in New York City; Former legal advisor to Council of the Americas, the author has published numerous articles on doing business in Latin America.

1. For the purposes of this paper, the Latin American countries shall be defined as Mexico, the Central American countries and those Spanish- and Portuguese-speaking countries in South America. The discussion will address only Brazil, Mexico, Argentina, and to a lesser extent Chile and the five members of the Andean Common Market or Pact (Colombia, Venezuela, Peru, Ecuador and Bolivia).

2. Law No. 4.137 of 1962 (Law for Repressions of Abuse of Economic Power).

3. Decree No. 22.262 of Aug. 5, 1980, *BOLETIN OFICIAL*. (This law became effective on December 1, 1980).

4. Decree-Law 280 (1973) (in defense of free competition); Decree-Law 280 (1974) (established rules to safeguard national economic activity).

technology and capital can be transferred more effectively, since the transferor and recipient each have an equity interest and, therefore, a greater stake in the success of the transfer process.

II. ANTITRUST

A. *Colonialism, Independence and Development*

When the Latin American countries were colonized by Spain, and later, Portugal, the principal objective of colonization was the extraction of gems, mineral wealth, spices and other valuable agricultural commodities from the New World for the mother countries. The independence of the Latin American countries from Spain and Portugal in the early nineteenth century did not alter this practice to any great extent. Wars and revolutions during the mid-nineteenth century and the industrial revolution in the last half of the nineteenth century merely institutionalized the process. During this period, foreign investment in the Latin American countries, particularly Argentina, Brazil and Mexico, came primarily from the metropolitan or Imperial countries (England, France, Spain, Portugal, Holland, Italy and later the United States). This foreign capital was used to build up the infrastructure (railroads and other forms of transportation, communications, electric power and utilities) in order to expand the mines and transport the minerals to ports for shipment to Europe and, later, to North America. An outward-oriented development was taking place in the colonies at that time which subsequently continued to evolve.

B. *Dependency Theory*

Revolutions which began around the turn of the century centered around property ownership and the exploitation of the lower classes by the local land-owning aristocracy, often in conjunction with the church and/or the sources of foreign investment abroad. As a result of needs arising during World War I, the Great Depression and World War II, economists realized that fundamental changes were required in the development patterns which had evolved over several centuries. Shortages were suffered during these periods, and the problem of sharply fluctuating prices for commodities exported to the metropolitan markets was exacerbated by these global crises. Export earnings of hard currency could not pay for necessary imports which were purchased from the more industrialized countries.

The beginnings of the theory of *dependencia* emerged during this period. This theory held that the colonial countries (later referred to as the industrialized countries) formed the centers of the international economic order or system, with the developing countries at the periphery. Agricultural and mineral commodities (now beginning to include hydrocarbons as well as minerals) from the periphery supplied fuel for the engines of growth in the industrialized countries. The periphery suffered from extreme vulnerability due to the highly cyclical fluctuation in the prices of the commodities being exported, and its absolute dependency on the foreign centers of capital and technology for vital imports. Whatever industrial technology had been sent to the Latin American countries by the industrialized countries had accumulated in "enclaves" controlled by local elites who were closely linked to the foreign centers of capital and decision-making power.

C. *Import-Substitution Development Strategy*

After World War II and the formation of the United Nations, its Economic and Social Council, and the regional economic commissions (including the Economic Commission for Latin America), traditional developmental theory became subject to revision and re-evaluation. While European economists were busy integrating Europe through the framework laid by the Marshall Plan, Latin American economists were attempting to execute the vision of Simon Bolivar to integrate the political and economic systems of the countries in their region. It was determined that a strategy was required which would emphasize a more inward-oriented development. Instead of relying on imports of all capital and consumer goods, local production would have to be encouraged. Nontraditional exports of light industrial products and additional commodities from the agricultural sector required development. Economies of scale were to be encouraged by the regional economic integration scheme conceived by Dr. Raul Prebisch,⁵ the first Director General of the Economic Commission for Latin America (later the first Secretary General of the United Nations Conference on Trade and Development (UNCTAD)). The conception and design stages of the regional economic integration took place throughout the 1950's, concurrent with the process in Europe. Consultations be-

5. For a discussion of Dr. Prebisch and the regional integration schemes, see Radway, *The Next Decade in Latin America: Anticipating the Future from the Past*, 13 CASE W. RES. J. INT'L L. 6-15 (1981).

tween economists in the two regions occurred, but the fundamental resources with which each of the two groups were working differed sharply.

D. *Development Means Protectionism*

The import-substitution strategy of economic development fostered protectionist policies, creating largely inefficient industries in each of the Latin American countries. To encourage capital formation, host governments agreed to limit the number of producers in given industries, in order to permit the local industrial elites and foreign investors a reasonable return on the capital invested. Protectionism also included: limitations of imports; price controls; local content rules; other forms of State intervention; and extremely paternalistic labor force laws and policies. The strategy was carried to the extreme in such cases as the Argentine automotive industry where, by the mid-1970's, eleven producers were engaged in the production of automobiles with a total domestic market of no more than 220,000 units. Studies on economic concentration, which were previously scarce or unavailable, began to emerge in the 1970's. These studies identified the structural impact of the import-substitution development policies. The effects of these policies continue to hamper balanced economic development of all of the Latin American countries, to this date.

E. *Protectionism v. Competition*

In the course of defining and refining development strategy in Latin America, it was determined that government must play a critical role in operating the machinery of the economies. The role of the government varies in each of the countries in the region, and each has a different version of "mixed economies" or "State capitalism." Monopolies do exist in these countries and are invariably owned by the State. These so-called "parastatal enterprises" are common in most basic industries (e.g. petroleum, steel, mining, railroads, electric power and telephone), and are also often found in communications, transportation, publishing and other strategically vital or sensitive sectors. Investment laws in some Latin American countries expressly reserve investments in these sectors to the government or to national capital. Administrative practices in other Latin American countries operate similarly.

Many complaints are heard from individual Latin American

government and regional economists and technocrats about oligopolies, or parallel investment by a limited number of prominent transnational enterprises (e.g. automotive, pharmaceutical and chemical). But the anomalies remain: economic development implies (indeed, may even require) protectionism; protectionism implies controlled monopolies and oligopolies, not competition.

Another fundamental consideration is the absence of a policy resembling articles 30-36⁶ of the Rome Treaty. At present, there is no policy effectively encouraging the free flow of goods among the members of Latin American Integration Association (formerly Latin American Free Trade Association (LAFTA)),⁷ but only empty political statements.

III. TRANSFERS OF TECHNOLOGY

Many technocrats from these countries and from regional and international organizations have expressed the view that Latin American transfer of technology laws are a form of antitrust regulation. They have listened to United States and European antitrust experts. They have also read descriptions of the workings of some of the pro-competition or antimonopoly components of regulatory mechanisms which are applicable to highly sophisticated and industrially developed market structures. However, a little bit of knowledge has often been known to be dangerous. The technology transfer laws and regulations in the Latin American countries contain some of the concepts, indeed, even some of the phrases, embodied in numerous antitrust cases decided in U.S. courts. The language, however, is not transferred as easily as the technology.

A. *Influence from Antitrust Policy: Exchange Controls*

The technology transfer laws were conceived as part of an overall mechanism to regulate foreign exchange amid a severe balance of payments crisis. The balance of payment problem was brought on by recurrent sharp fluctuations in the prices of the

6. Treaty of Rome, Mar. 25, 1957, art. 30-36, 298 U.N.T.S. 11 (establishing the European Economic Community) (sets forth, *inter alia*, the strong policy encouraging the free flow of goods among the member states).

7. See Montevideo Treaty, Feb. 18, 1960, reprinted in INTER-AMERICAN INSTITUTE OF INTERNATIONAL LEGAL STUDIES: INSTRUMENTS RELATING TO THE ECONOMIC INTEGRATION OF LATIN AMERICA 207 (1968) [hereinafter cited as THE INTERAMERICAN INSTRUMENTS]; The Latin American Integration Association (LAIA) has replaced LAFTA. See Agreement creating the Latin American Integration Association, signed at Acapulco, Mexico, June 27, 1980.

commodities which dominate the economies of developing countries. In Brazil and Colombia, coffee prices were most affected; in Chile and Peru, copper prices were involved; and in Venezuela, the price of oil was the concern. In other Latin American countries coffee, cotton, cocoa, bananas, copper, iron ore and oil were of paramount importance.

Technology transfer laws first appeared in Brazil. Certain tax regulations issued in the late 1950's and the Exchange Control Law of 1962,⁸ contained provisions specifically designed to address remittance of foreign currency abroad. This included remittance of technology royalties, technical assistance fees, management fees, profits or dividends on invested capital and interest on foreign loans. Lessons were also being drawn from the "Japanese model" of economic development, which was the centerpiece of many conferences among developing countries. Japan's example of regulation of the inflow of capital and technology and the outflow of payments was emulated in different degrees by the Latin American countries.

Certain "abuses" were gleaned from studies performed on technology transfer arrangements throughout the 1960's and into the 1970's. These studies were made by organizations in Brazil, Mexico and Argentina, as well as regional or international organizations (i.e., LAFTA and UNCTAD.) The alleged abuses purportedly subjected developing countries to virtually complete dependence on external centers of decision-making and control as a price for the technology being received.

"Dependency theorists" dominated the discussions and debates in the 1960's. These talks led to the enactment of the Colombian law in 1967,⁹ which was the forerunner of the well-known Decision 24¹⁰ of the Andean Pact.¹¹ Argentina enacted the first of its

8. Profit Remittance Law, No. 4131 of Sept. 2, 1962, as amended by Law No. 4390 of Aug. 19, 1964. For a discussion, see Nattier, *Brazil, in Technology Transfer: Laws and Practice In Latin America* 145 A.B.A. SEC. INT'L L. Monograph No. 2, 1978 [hereinafter cited as A.B.A. Monograph]. For a chronology of all the laws passed in Latin America on the subject, see Radway, *Comparative Evolution of Technology Transfer Policies in Latin America: The Practical Realities*, 9 DEN. J. INT'L L. P. 204-6 (1980).

9. Decree 444 of Mar. 22, 1967, 30 LEGISLACION ECONOMICA 191 (1967).

10. Andean Common Market Foreign Investment Code, Decision 24: Common Regime for Treatment of Foreign Capital and Trademarks, Patents, Licenses and Royalties, Dec. 31, 1970, effective July 31, 1971. See 11 I.L.M. 126 (1972).

11. The Andean Pact, sometimes known as the Andean Common Market or ANCOM, was an attempt by the middle income countries of the Latin American Free Trade Association (LAFTA) to improve their bargaining power vis-a-vis the "big three" (Argentina, Brazil

four transfer of technology laws in 1971,¹² patterned after Decision 24. Mexico followed with a decree drafted in 1972, which became effective in 1973.¹³ The intent of the laws was clear: regulation and control through State intervention to steer the course of economic development.

In practice, however, economic development was still the ultimate objective in many cases. Foreign suppliers of technology strongly resisted the rigid requirements of the newly enacted technology transfer laws. With inexperienced and inadequately trained technocrats in the newly created government agencies charged to review and approve the licensing and related agreements, the bargaining power was clearly unequal. Most of the suppliers of technology, or their representatives before the agencies, knew far more than the government technocrats about the relevant development needs of the host country in their industry, and the ability of the foreign supplier to fill those needs. Thus, exceptions were made in those countries where the critical nature of the technology outweighed the concern over the loss of foreign reserves in payment of royalties, fees and other remittances.

Brazil and Colombia, while known to be the most astute and sophisticated of the Latin American countries in policy formulation, have consistently followed the most rigid implementation policies. Both countries also have consistent histories of exchange controls. From 1971 to 1976, Argentina pursued a policy which was so ill-conceived and ill-designed that it resulted in a virtual drying-up of the flow of technology to that country. When Venezuela joined the Andean Pact in 1974, and enacted laws implementing Decision 24 internally,¹⁴ the new government agency charged with the re-

and Mexico) who had gained a disproportionate share of the initial benefits of LAFTA. See Agreement on Andean Subregional Integration (Agreement of Cartagena) signed May 26, 1969 by Bolivia, Chile, Colombia, Ecuador and Peru, 8 I.L.M. 910 (1969) (effective Oct. 16, 1969).

12. Law No. 19,231 of Sept. 10, 1971, ANALES DE LEGISLACION ARGENTINA.

13. Law on the Registration of Contracts and Agreements Regarding the Transfer of Technology, Dec. 28, 1972, (effective Jan. 30, 1973). DIARIO OFICIAL, (Dec. 30, 1972) See 12 I.L.M. 421 (1973). See also, Radway, *Doing Business in Mexico: A Practical Legal Analysis*, 14 INT'L LAW. 361 (1980), and Hyde & Ramirez de la Corte, *Mexico*, A.B.A. MONOGRAPH, *supra* note 8.

14. Decree 62, GACETA OFICIAL 1650 (Apr. 28, 1974); See 13 I.L.M. 1220 (1974). Decree 63, GACETA OFICIAL 1650 (Apr. 29, 1974); See 13 I.L.M. 1220 (1974). See generally, Radway, *Venezuela: Certain Legal Considerations for Doing Business*, 8 CASE W. RES. J. INT'L L. 289 (1976). See also, Radway & Hoet-Linares, *Venezuela Revisited: Foreign Investment, Technology, and Related Issues*, 15 VAND. J. TRANSNAT'L L. 1-45 (1982).

sponsibility of implementation, *Superintendencia de Inversiones Extranjeras* (SIEX) took a position based more clearly on political necessity than on a sophisticated bargaining strategy. The Mexicans, as has been traditional in that country, followed a more moderate, middle-of-the-road course. In 1977, Argentina, in its third law on the subject (a 1974 law¹⁵ superceded the 1971 law and included even more restrictive provisions), became the second country (Chile was the first) to swing toward a more free-market technology policy. Chile's policy was liberalized in 1974¹⁶ after a change of government, and was further liberalized in 1977¹⁷ after Chile withdrew from the Andean Pact. Argentina then continued the process, and in 1981¹⁸ passed its fourth law in ten years.

In the meantime, Brazil had issued a set of regulations in 1975¹⁹ (the Brazilian equivalent of the laws enacted in other countries) which clarified, redefined and elaborated an overall integrated technology transfer policy. This 1975 policy, referred to as Normative Act No. 15, is technically not a law but an administrative regulation of an agency of the Ministry of Industry and Commerce. The fact that it is not a law has not hindered its rigid application or that of several subsequent Acts promulgated from 1976 through 1982.²⁰ Brazil's policy position and the practical implementation of its regulations, however, arose from a balance of payments problem related to the oil price increases of the 1970's. The massive transfer of resources instigated by the oil-producing and exporting countries resulted in a severe blow to the "great Brazilian miracle," a period of nearly ten years when economic growth rates averaged nearly 10% per year. Thus, technology and payments for technology became highly visible political scapegoats in the Brazilian government's valiant struggle to recover from its devastating balance of payments reversal.

15. Law No. 20,794, sanctioned Sept. 27, 1974. See also Radway & Giacchino, *Argentina*, A.B.A. MONOGRAPH, see *supra* note 8.

16. Decree No. 600 of July 13, 1974, DIARIO OFICIAL. See 13 I.L.M. 1176 (1974).

17. Published as Decree 1748, (Mar. 18, 1977). See 17 I.L.M. 134 (1978).

18. Law 22,426 of Mar. 12, 1981.

19. Normative Act No. 15 of Sept. 11, 1975, 256 REVISTA DE PROPRIEDADE INDUSTRIAL (Sept. 16, 1975); see also Nattier, A.B.A. MONOGRAPH, *supra* note 8; and Daniel, *The Legal Ins and Outs of Technology Transfer*, BRAZILIAN BUS. 17 (Nov. 1977).

20. Normative Act No. 30 DIARIO OFICIAL 380 (Jan. 30, 1978); Normative Act No. 32 of May 5, 1978, DIARIO OFICIAL 394 (May 9, 1978); Normative Act No. 53, DIARIO OFICIAL (Feb. 16, 1981); Normative Act No. 55 of Sept. 1981; Normative Act No. 60 of Mar. 24, 1982, 599 REVISTA DE PROPRIEDADE INDUSTRIAL (Apr. 13, 1982); Normative Act No. 61 of Mar. 24, 1982, 599 REVISTA DE PROPRIEDADE INDUSTRIAL (Apr. 13, 1982).

In Mexico, the necessity of creating approximately 750,000 new jobs per year (due to an earlier population growth rate of approximately 3.5% per annum) resulted in a policy favoring technology which would lead to the creation of jobs, particularly in labor-surplus regions of the country. This policy, which had previously motivated the formation of an extraordinarily successful in-bond assembly industry²¹ was consistent with what was later embodied in the country's National Industrial Development Plan (NIDP),²² issued in 1979.

B. *Objective of Technology Transfer Laws*

Among the stated objectives of the laws enacted in these countries during the period described above, was the registration of all agreements embodying a flow of technology in order to begin to prepare profiles on that process. A similar process had been undertaken during that period with respect to the flow of capital by the enactment of foreign investment laws in the same countries. As mentioned above,²³ one of the principal objectives was the reduction of payments for royalties and technical assistance fees abroad, along with the reduction of remittance of interest and dividend payments on equity and debt capital.

Greater local control of industrialization remained another principal objective, one which was enormously broad and elusive. According to theorists, the alleged abuses identified in the studies mentioned earlier²⁴ led to an attempt to shift some control to local industrialists in order to facilitate the economic development process. The laws all contained prohibitions against the so-called restrictive provisions, now frequently referred to as Restrictive Busi-

21. Program Nacional Fronteriza, commonly known as the Maquiladora program; see address by Minister Campos Salas, Ministry of Industry and Commerce (Aug. 1965). See also, Radway, note 13 *supra*, at 369-71; and Inman & Ortiz Tirado, *A Mexican Dividend: Las Maquiladoras*, 9 INT'L LAW. 431 (1976).

22. The Mexican Plan was established by a series of four Federal Executive Decrees: Feb. 2, 1979 (Decree which establishes geographical zones for the execution of the Program of Incentives for the Territorial Deconcentration of Industrial Activities as anticipated in the national Plan of Urban Development); Mar. 6, 1979 (Decree that establishes Fiscal Incentives for the Development of Employment and Investment in Industrial Activities); Mar. 9, 1979 (Agreement that establishes the Fiscal Incentives for the Development of Employment and Investment in Industrial Activities); Mar. 19, 1979 (Decree that orders the execution of the National Plan of Industrial Development and establishes the bases for its fulfillment). See Radway, *supra* note 13, at 371-72.

23. See *supra* p. 52.

24. See *supra* p. 52.

ness Practices (RBP's), which were believed to hinder autonomy and development.

In Mexico, for example, the registration criteria contained in article 7 of the 1973 law²⁵ (now superseded by a 1982 version)²⁶ contained fourteen RBP's. Six of the RBP's required a mandatory denial or *per se* rejection of technology transfer agreements if: the technology was freely available in Mexico; the agreement contained provisions limiting exports or the recipient's R & D efforts; it provided for an excessive term (the Mexican law limited the agreements to a maximum of ten years); it contained grant-back clauses; or it stipulated that the applicable law or courts to which disputes were to be submitted for settlement were non-Mexican. The other eight RBP's described were open to exception. In other words, a rebuttable presumption was created and a "rule of reason" approach was applied to evaluation of the agreement. This approach was applied where: the royalty or fee was "excessive" (guidelines established in each country usually allowed a maximum of 3% and less in certain industries); "tie-in" clauses were involved; the output was exclusively sold to the supplier; the supplier was permitted to intervene in the management of the recipient of the technology; the use of complementary technology was prohibited; production volume or selling price limitations were imposed; sales representation was required by the supplier; or the recipient was required to employ or use personnel designated by the supplier.

The most controversial of these clauses in Mexico, Brazil and the Andean Pact countries were those which involved export restrictions, royalties, the treatment of confidential information (secrecy clauses), tie-ins and grant-backs. Several of these laws have now been modified. The present policy trend in Latin America appears to be that many of these items are still negotiable and may be accepted where the technology supplier can establish the use of arm's length dealing, reciprocity and generally accepted international market prices (for parts, raw materials, etc.) Limited export restrictions are permitted when exportation to the supplier's home country market is involved. Frequently, limited restrictions also apply to countries where the supplier can show registered patents or a pre-existing network of license agreements. Grant-backs are

25. *Supra* note 13.

26. Law on the Control and Registration of Transfers of Technology and the Use and Exploitation of Patents and Trademarks (effective Feb. 10, 1982), DIARIO OFICIAL (Jan. 11, 1982).

accepted but the royalty-bearing conditions, terms and other aspects must be reciprocal.

Royalty rates are still aggressively negotiated in most of the countries. Argentina and Chile are most flexible, in line with their recent economic strategies. Venezuela has loosened up somewhat since 1980.²⁷ In 1978, officials of the Mexican government technology agency stated that, the government had saved \$500,000,000 in royalties due to the skillful application of the technology transfer laws and policies during the five years of operation of the National Registry of Technology Transfer (NRTT). In Brazil, where balance of payments remains the number one priority, royalty rates and technical assistance fees are extremely low. The question has been repeatedly raised as to whether this has resulted in Brazil acquiring second-rate technology in some cases. Those who answer this question in the affirmative point to the inefficiencies in many of the recipient companies as evidence of the fact that lower level technology is all that suppliers will transfer under the restrictive terms still prevailing in most of these countries.

The problems of protecting confidential information and restricting the use of such information after the agreement expires linger to this day. Many suppliers of technology have agreed to shorten non-disclosure periods. Most suppliers, however, have vigorously resisted the desire of some of the registries to permit recipients of the technology to "mix and match" technologies with those from other suppliers from the same or other countries. The position of the Latin American and other developing countries has been that they have the right to "own" the technology after payment for the limited term permitted by the laws of their country. Suppliers are more concerned that competitors will get cheap access to expensive developments.

The final objective of the laws in these countries has been to produce an inventory of, or to identify, the categories of technology being received and the transfer patterns. The desire to design and implement regional technology policies in order to encourage the indigenous development of important technology in the Latin American countries has emerged in declarations and decrees over the last number of years. To date, these regional cooperative technology policy efforts have met with minimal success.

27. See Radway and Hoet-Linares, *supra* note 14, at pp. 24-27.

C. Negotiating Technology Agreements with the Competent Authority

The host government criteria for negotiation of these technology transfer agreements by its technocrats²⁸ incorporate several important economic development goals. One goal is to attract technology which will fill the needs of those industries which the government has designated as priority sectors for development. Another is the promotion of exports, which has formed the core of the modern strategy of economic development and has, to a great extent, replaced the import-substitution strategy. However, economic development has many facets, and some countries in Latin America have begun to follow the Japanese model and have examined comparative advantage as the basis for building strong, export competitive industries. The general rubric of economic development also specifies increased local content (national integration) in such industries as the automotive industry. A multiplier effect is thus created, having the objective of establishing a supplier infrastructure for those industries.

Employment, or the creation of jobs for that segment of the population entering the eligible work force, is a very important criterion, particularly in Mexico and Brazil. Extremely high population growth rates prevailed in Mexico, Brazil and other Latin countries until very recent years, when they began to drop impressively. Argentina has less of a growth rate problem, since its population has remained relatively constant in recent years. Therefore, in many cases, technology which will create more jobs (i.e., labor intensive) may be given a higher priority in the evaluation criteria.

Finally, improvement of the balance of payments is a crucial criterion in all of the countries. At minimum, achieving this goal entails promotion of exports, substitution or reduction of imports, and minimization of foreign currency payments abroad, particularly in those countries with exchange controls. On September 1, 1982, Mexico joined Brazil, Colombia, Peru, Chile and others in the category of countries with exchange controls.²⁹ Argentina has drifted in and out of this category, most recently rejoining the group after its conflict with the United Kingdom over the Falkland

28. See, generally Radway, *Negotiating with Latin American Governments: Technology Transfer & Service Agreements*, 9 LAW. AM. 282 (1977).

29. Decree that Establishes the Generalized Exchange Controls, DIARIO OFICIAL (Sept. 1, 1982).

Islands further damaged its economy and further deteriorated its exchange reserve position. In February 1983, Venezuela joined the ranks of this group as well.

As a practical matter, the technocrats, who have become increasingly sophisticated over the last decade, now screen and evaluate technology transfer agreements in conjunction with proposals for new investment approvals or approvals of plant expansions. Coordination and cross-indexing have also become more sophisticated in these countries. Qualitative as well as quantitative studies are now being performed which show that the domestic market can profitably support only two or three plants of a particular nature. The technocrats, particularly in Mexico since a mid-stream policy change in 1978, have shown greater appreciation of the investor's need to realize an adequate return in order to continue the capital formation process.

The supplier of capital and technology negotiates with the authorities for approval of the "manufacturing plan" submitted in conjunction with the investment application. Frequently, a technology agreement is submitted simultaneously. For a variety of reasons, (often new or relatively new technology is involved, the investment may be in a pioneer industry, new plants require a reasonable start-up period in order to become profitable, etc.) the investor/technology supplier is in a relatively good position to negotiate with the host government technocrats for some limitations (protections) which are essential to permit realization of an adequate return on invested capital. Another important protection granted the investor during the course of the negotiations is an agreement to restrict imports of competitive products. Sometimes this restriction lasts for a limited period of time; other times it is of indefinite duration.

A pragmatic investment approval process has evolved in Mexico, which has nevertheless resulted in protectionism. Unfortunately, the 1982 economic disaster in Mexico may have reversed the progress made by government technocrats during the preceding four years in attracting foreign investment to that country. It is still premature to evaluate what the policy on investments and transferring technology will be for the new government which took office on December 1, 1982.

D. *Host Government Technology Dilemma*

Where employment or job creation is a high priority for the host government, labor-intensive technology has been expressly preferred, both publicly and privately, by many of the technocrats. The local entrepreneurs, however, often appreciate the importance of capital-intensive technology to improve efficiency and productivity. These governments, facing increasingly serious balance of payments problems, due to interest payments and repayment of principal on expanding foreign debt burdens, have imposed export objectives or requirements on foreign investors. Sometimes the new export commitments sought are equal to the required imports to feed the new plant (offset agreements).

Both the foreign and the local entrepreneur appreciate that an improved level of quality, efficiency and training is required in order to achieve export competitiveness. These factors are also objectives of the technology transfer laws and policies. The Latin American countries find themselves caught on the horns of the proverbial dilemma: How to create additional employment to minimize the political risk of a disenchanted labor force (and the population as a whole) while at the same time attempting to attract more efficient technology which will improve the competitive position of exports and restore a balance of payments equilibrium.

E. *Protection of Industrial Property*

The discussion of technology transfer would not be complete without some mention of the treatment of the industrial property underlying the transfer process. The Mexican Law on Inventions and Trademarks of 1976³⁰ is useful to illustrate the erosion of industrial property rights protection. This law designates areas of the economy for priority in development and innovation. These sectors also received stronger emphasis and priority in the NIDP (1979).³¹ The food and agricultural sector, for example, is given a high priority for development under the NIDP. Many innovations and discoveries falling within this general category are therefore no longer patentable under the Inventions and Trademarks Law. In-

30. Law on Inventions and Trademarks, DIARIO OFICIAL (Feb. 10, 1976). See also Radway, *supra* note 13, at 368-69; Hyde and Ramírez de la Corte, *Mexico's New Transfer of Technology and Foreign Investment Laws—To What Extent Have the Rules Changed?*, 10 INT'L LAW. 231 (1976).

31. See *supra* note 22.

cluded in this group are: vegetable varieties; animal breeds; alloys; industrial processes for obtaining alloys; chemical products (but not new processes or new uses); chemical/pharmaceutical products; medicines; food and beverages for human or animal use; fertilizers; pesticides; herbicides; and fungicides. Also regarded as unpatentable are inventions related to nuclear energy, security and anti-pollution apparatus and equipment. (The growing concern over pollution is also evident from the NIDP policies on deconcentration of industry.) In essence, no monopolies are granted through the patent system for any of the areas which national policy dictates should be "opened up" for indigenous technological development.

Trademarks have also been subject to increasing scrutiny and criticism on so-called "public interest" grounds. Actual use of registered marks in accordance with established criteria is now required. Registration of idle marks lapses after three years. The owner has a priority right to re-register if the original registration lapsed for non-use. One stated objective of this practice is to lower prices to the consumer by reducing advertising expenditures. Some suggest that the government also has a "public interest" justification in prohibiting the use of trademarks on certain products (e.g., cosmetic, pharmaceutical and medicinal products) and to require sale of such products under generic names.

The same 1976 law contains the well-known trademark "linking" rule which requires that products manufactured locally under a foreign-registered trademark be linked with a new, local mark of equal prominence. However, enforcement problems were so great that implementation of this requirement has been postponed annually. Another example of the reduced protection given to industrial property is compulsory licensing.

Finally, "unpatented knowhow" is given virtually no protection in any of the Latin American countries. "Unpatented knowhow" is the subject of some of the most precious and critical licenses designed to improve industrial efficiency and productivity. It is also contained in the supply of basic and detailed engineering used in major infrastructure and processing plant projects. Brazil's Normative Act No. 17 of 1976³² has gone so far as to expressly declare that "unpatented knowhow" is part of the public domain. None of the laws on technology transfer afford any protection to

32. Normative Act No. 17 of May 11, 1976, 292 REVISTA DA PROPRIEDADE INDUSTRIAL (May 25, 1976).

this type of industrial property. Even linking together provisions in the civil, commercial, labor and penal codes of any given Latin American country does not provide adequate protection for the unauthorized use of this type of industrial property. The concept of "unfair competition" is loosely defined in these countries. The concept closest to our "trade secret laws" provides only minimal protection against an employee disclosing information gained during the course of his employment to a third party. However, injunctive relief is not available in any of these countries to prevent the use of this information by a third party.

F. New Developments in Computer Software Technology Transfer

The tremendous surge of computer software transfer is the most significant phenomenon in the entire field of technology transfer. This subject is now being recognized as having a significant impact on the development of technology, locally and on industrial development generally. Brazil addressed one aspect of the "high technology" problem during the mid-1970's when the government issued a regulation requiring local ownership and control of all new joint ventures in the telecommunications industry.³³ Shortly thereafter, Brazil established a program for the development of the mini-computer industry. This program also required Brazilian ownership and control of new joint ventures. Formation of a limited number (specifically, four) of new joint ventures, as well as an entirely Brazilian company, was approved to produce indigenous mini-computers in that country. Software and peripheral equipment were to be addressed in subsequent stages, however, the software policy has not yet been clarified. The Brazilian mini-computer program got off to a stormy beginning. Critics now take the position that since the mini-computer technology transferred to Brazil belongs to an earlier generation, their products will not be export competitive. In addition, the Brazilian industrial development program suffers from a lack of the most up-to-date technology for internal use.

In late 1981, Mexico announced its own development program for the mini-computer industry. Two United States companies received approval for new investments to build mini-computers in

33. Ministry of Communications Portaria 622 of June 19, 1978, DIARIO OFICIAL, June 23, 1978.

Mexico. These companies were permitted to retain 100% control, which is a clear exception to the Mexican Foreign Investment Law. A third company's previously approved 100% investment is currently being revised to comply with the new program. At least two additional applications are known to have been received. The Mexican government is again exhibiting sufficient flexibility in an attempt to attract the technology required for its industrial development. The 1982 Technology Transfer Law, however, contains some important new provisions³⁴ which will affect the transfer of technology involving computer software. Under the new law, any agreement "related to computer software" must now be registered with the government technology registry.³⁵ Officials have indicated, both publicly and privately, that they will not subject such agreements to the same criteria used in the past for traditional licenses. The economic crisis of 1982 has probably further complicated the clarification and implementation of this policy. The software revolution is likely to encounter regulatory barriers from the technology transfer laws, from the policies being formulated within UNESCO and other U.N. agencies under the "New World Information Order", and from the attempts to regulate transborder data flow.

IV. JOINT VENTURES

The importance of technology and capital flow to the development process was identified in the early 1960's. This new awareness followed previous concentration by the U.N. and international conferences on trade and the commodity price fluctuation problem. As attention shifted from trade to investment (including the technology flow), the focus became: How the Latin American countries could best shift some degree of control to nationals, encourage the local development of technology, and bring more decisions into the host country and away from the foreign centers of decision-making. Foreign investment laws were enacted as part of larger "regulation and control systems" in an attempt to accomplish these objectives. The Mexican Foreign Investment Law³⁶ and Decision 24³⁷ of the Andean Pact are the two most well-known pieces of

34. *Supra*, note 26.

35. *Id.* art. 2(m).

36. Law to Promote Mexican Investment and Regulate Foreign Investment, DIARIO OFICIAL (Mar. 9, 1973).

37. See *supra* note 10.

legislation in this area and will be discussed below.³⁸

A. *Increasing Capital Formation*

Since the independence of the Latin American countries from Spain and Portugal, each of the major countries has experienced periods of dictatorship. The most famous dictatorship in recent times was in Argentina where General Juan Peron, reigned in the early 1940's and the 1950's and again in the 1970's. In Brazil, Getulio Vargas, reigned until the mid-1950's and, in Mexico, the reign of Porfirio Diaz, spanned roughly from 1870 until the outbreak of revolution in 1910. These benevolent dictatorships were successful in attracting new foreign investment. Modern developmental objectives of attracting capital and technology while at the same time increasing national control over the industrial development process are often inconsistent and sometimes irreconcilable. Nevertheless, the decision was made that the State must assume a more active role in ownership as well as in the regulation and control of the economies. The State may, in modern times, fill the role formerly held by the dictator.

The objective in recent years has been to encourage local savings and investment (the capital formation process) to blend with the foreign capital and technology being sought. The joint venture became an increasingly popular suggestion during the 1960's and 1970's, as resourceful and creative Latin American economists examined various alternatives and drafted new legislation. It was argued that the joint venture would limit the control by foreigners to 49% or less. This would give the foreign supplier of capital and technology a high enough stake in the enterprise to ensure its success, while requiring control and majority ownership to be in the hands of local shareholders. The complexities of the joint venture form of operation were yet to be realized.

B. *Increasing Local Control over Investment and Development*

Increased local control proved to be an elusive concept, however, as transnational enterprises and other suppliers of technology were reluctant to transfer the secrets of their industrial success into the hands of local majority shareholders whose decisions they cannot control, either legally or operationally. In view of the confi-

38. See *infra* pp. 65-68.

dentiality and other provisions of the technology transfer laws described above,³⁹ it was apparent that the objective of these laws was to transfer and assign actual control over the technology to locals. As had been predicted, United States and European investors, assisted by their own counsel as well as creative local counsel in the Latin American countries, discovered ingenious ways of complying with the letter of the law but not necessarily the spirit. This was not a new approach, since bearer shares and straw men had been used for many years in various international operations. In addition, the use of offshore holding companies was invoked in order to structure control in such a way that it essentially remained in the hands of the foreign suppliers of capital and technology.

C. *Parastatal, National and Foreign Companies*

The new policy frameworks clearly addressed the objective of increasing the control by the State. This was to be accomplished through: direct ownership of basic and other industries; the parastatal or quasi-governmental corporations in the oil and gas sector (e.g., Petrobras in Brazil, Pemex in Mexico and YPF in Argentina) the iron and steel sector, railroads, communications, electric power and other basic industries; and by completely (100%) nationally owned private companies, or those companies where nationals had a majority equity and control position.

D. *Approaches to Joint Ventures in Different Countries*

Brazil's approach to joint ventures did not require the explicit use of a decree or law stating the limitations on percentages of ownership in various industries as did the Mexican law and, to a great extent, Decision 24 of the Andean Pact countries.⁴⁰ Instead, Brazil established a series of financial institutions during the early 1970's⁴¹ to provide attractive financing as an incentive for investment in various sectors of the economy. The charter of each of the financial entities, as well as the criteria for qualifying for financial

39. See *supra* pp. 55-57.

40. See *supra* note 11.

41. The Brazilian National Economic Development Bank (BNDE) established four subsidiaries to finance projects in specific sectors: FINAME, the Special Agency for Industrial Financing (machinery); EMBRAMEC, the Mechanics Corporation (capital goods); FIBASE, the Basic Inputs Corporation (raw materials); and IBRASA, the Investments Corporation (capital).

assistance on significantly advantageous terms, favored those companies with a 51% or greater Brazilian equity and control. In addition to the financial structure, the Technology Transfer Law, coupled with the Industrial Property Code,⁴² prohibited the payment of royalties or certain related fees from a Brazilian subsidiary to its controlling foreign parent. Thus, to receive a stream of royalty and technical assistance payments for most transactions, the foreign parent would have to divest itself down to 49% or less ownership of its Brazilian subsidiary. The operating effect was the same as formally limiting the percentage of ownership. In addition, Brazil passed more explicit decrees and regulations in three particular industries: banking, telecommunications and the mini-computer industry discussed above.⁴³

Mexico's approach, on the other hand, was to enact the Foreign Investment Law,⁴⁴ effective in 1973. This law specified various categories of investments, some of which were reserved to the State and others which were reserved to parastatal enterprises. A third category of investments was reserved to enterprises composed exclusively of Mexican nationals or companies with a "foreign exclusion" clause in their by-laws. A fourth category was reserved for those investments in which foreign participation was limited to a maximum of 49%. In certain industries (automotive, petrochemical, and mining) foreign participation was limited to 40% or less by specific provisions and other sector-specific regulations. At the same time, however, the Mexican government, which did not limit dividend remittances to a percentage of registered capital (as does the Brazilian, Argentine and Andean Pact legislation) reduced the allowable royalty in the technology transfer process when the supplier of technology owned 49% of the technology recipient (joint venture/licensee). Thus, using a different approach than the Brazilians, the Mexicans also attempted to limit the overall foreign exchange (return on investment) for the foreign investor/technology supplier.

In the countries of the Andean Pact,⁴⁵ Decision 24 defined three different types of enterprises which were permitted to exist within the regional integration scheme: national companies which

42. Law No. 5772 of Dec. 21, 1971, DOU-I of Dec. 31, 1971, 35 LEX 1740 (Sao Paulo, 1971).

43. See *supra* pp. 62-63.

44. See *supra* note 26.

45. See *supra* note 11.

were 80% or more owned by national investors; mixed companies which were between 50% and 79% owned by nationals; and foreign companies which were 49% or less owned by nationals.⁴⁶ New enterprises were required to comply with the new rules. Pre-existing enterprises were required to conform, which involved divestment (fade-out) over varying periods of from 15 to 22 years. Limitations were placed on the sectors which were accessible to foreign companies and to mixed companies for investment purposes. One of the areas that caused the greatest amount of controversy, particularly in Venezuela and Colombia, was the reservation to national companies of the area of "internal commercialization" of goods, or distribution/marketing companies. Complicated rules evolved, particularly in Venezuela, which provided for different combinations of manufacturing and distribution companies. These rules set forth the relevant criteria for approval, including export quotas and a requirement that certain percentages of national content be incorporated into the products. If a company met both standards, it would receive approval by the necessary government agency to go forward with its investment.⁴⁷ Companies which exported 80% or more of their product were exempt from these complicated regulations. In addition, companies which did not seek to take advantage of the other features of the regional integration program did not have to comply with the ownership requirements, but were still excluded from the prohibited sectors.

During the second Peron administration, Argentina enacted a severe Foreign Investment Law⁴⁸ which contained provisions similar to some of those included in the policies of Brazil, Mexico and the Andean group. Argentina's rigid over-enforcement of its Foreign Investment and Technology Laws resulted in an effective curtailment of new investment and technology, which was reversed by a change of government in 1976.

Chile, one of the original members of the Andean Pact, adhered to the Andean Pact rules to some degree. However, Chile also imposed its own socialist pattern of nationalization of industries across the board. The military government which acceded to power in 1973, after the overthrow of Allende, embarked on a different course (as did the military government in Argentina emerg-

46. See *supra* note 10, at art. 1.

47. Venezuelan Decree 62, *supra* note 14, at art. 1(c).

48. Foreign Investment Law 20,557 1977 C. ANALES 3670. See 12 I.L.M. 1489 (1973).

ing in 1976). The Chilean government issued a decree in 1974⁴⁹ governing foreign investment. Although generally following the patterns of Andean Pact Decision 24, the Chilean decree tended to be somewhat more liberal. That law was never enforced with the same degree of rigidity as those in Colombia, Venezuela and Peru. In 1976, Chile, partly due to a major alteration of economic policy, withdrew from the Andean Pact.⁵⁰ A much more liberal foreign investment law was enacted in that country in 1977,⁵¹ opening the door wide to the "free market" investment and technology transfer policies referred to as "Chicago school" economics.

E. *Practical Problems with Joint Ventures in Latin America*

The approaches taken by each of the countries referred to above were quite different. Even the countries within the modified Andean Pact embarked on different courses and in different directions. Only Brazil enforced its rules rigidly. Columbia made the fewest exceptions in its joint venture/foreign investment and technology transfer policies. Exceptions were more the rule in Venezuela. Mexico followed a pragmatic path, particularly after the early years of experience with its new set of laws. The patterns that emerged through the last years of the 1970's and into the 1980's have shown, for the most part, a much greater degree of tolerance and flexibility with respect to the requirements, needs and objectives of the foreign investor.

Recognition has emerged throughout Latin America of the difficult and complicated nature of the joint venture form of doing business. Although it may be a vehicle to attract technology and facilitate the development process, in many cases the joint venture is seen as a transitory form. The average life of a joint venture in Brazil has been estimated to be between six and seven years. In Mexico, it is too early to tell what the lifespan will be, although joint ventures formed in the mid to late 1970's are already encountering serious problems. Many companies have changed partners in Mexico since the early 1970's, when the initial "Mexicanization" wave occurred and joint ventures were formed. A similar pattern is beginning to emerge in Venezuela, and to a lesser extent in Colom-

49. Decree-Law 600 DIARIO OFICIAL (July 13, 1974). See 13 I.L.M. 1176 (1974).

50. Additional Protocol Oct. 5, 1976. See also, *Chile Walks Out as Andean Talks Collapse*, LATIN AM. ECON. REP. 145 (1977).

51. Revised Decree-Law 600, published as Decree 1748, Mar. 18, 1977. See 17 I.L.M. 134 (1978).

bia and Peru. Argentina and Chile have attempted, in very different ways, to follow along a "free market" oriented path.

By dramatically lowering tariffs on most items, they permitted more imports during the late 1970's in order to increase competition and force many industries to modernize and improve their efficiency. The same policy was followed to a much lesser extent in Peru, Mexico and even in Venezuela. The results are not yet in, but it is clear that after four to six decades of protection in these countries, the entrepreneurs were not ready for free market economics. Competition has in fact destroyed elements of the private sector, particularly in Argentina and Chile.

The banking systems of many of these countries bear a great deal of the responsibility for some of this destruction. The absence of legislation of the Glass-Steagall type permits banks to be part of industrial groups in many of these countries. This and other traditions have encouraged indiscriminate lending policies by local as well as foreign banks. The energy crisis of the 1970's and 1980's, coupled with the world-wide recession which has emerged in the 1980's, has resulted in insolvencies and liquidity problems in many of these countries. The recent nationalization of the banks in Mexico⁵² is a reaction to the extreme financial crisis in which that country finds itself. Argentina suffered a rash of bankruptcies over the last two years, both in the financial and industrial sectors. Only Brazil has managed to avoid similar chaos. The foreign debts of Brazil and Mexico are the highest in the Third World, and that of Argentina is a distant third. Debt rescheduling has become the order of the day.

V. CONCLUSION

The economic systems in several of these countries are undergoing fundamental structural change. It is clear that the years ahead will pose formidable challenges for the government planners as well as for the captains of industry. Competition will begin to pervade the thinking, and the joint venture will continue to be used where selectively appropriate. Antimonopoly laws may well emerge in those countries where they are not yet present, and selective enforcement of these laws will increase in those countries where the laws already exist. Latin America must emerge from the

52. Decree that Establishes the Nationalization of Private Banks, *DIARIO OFICIAL* (Sept. 1, 1982).

decade of the 1980's much better prepared to compete with other newly industrializing countries, or it will again find itself in a position of *dependencia* - this time to the international financial community.