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## Comparative Evolution of Technology Transfer Policies in Latin America: The Practical Realities

### Keywords

Technology, Corporations, Corporations: Foreign, Multinational Corporations, Regulation

# Comparative Evolution of Technology Transfer Policies In Latin America: The Practical Realities\*

ROBERT J. RADWAY\*\*

## I. INTRODUCTION

This article attempts to identify some policies underlying the implementation of the regulation and control systems governing the transfer of technology to Latin America. In addition, an effort is made to urge sensitivity to, and careful analysis of, underlying problems and efforts to solve them, despite accompanying rhetoric and overly rigid enforcement by inexperienced, lower-level technocrats.

This discussion assumes that the reader possesses: (1) an elementary understanding of the laws and regulations governing the transfer of technology<sup>1</sup> enacted within the last few years in Brazil,<sup>2</sup> Argentina,<sup>3</sup> Mexico,<sup>4</sup> Chile,<sup>5</sup> and the Andean Common Market (ANCOM);<sup>6</sup> (2) some knowledge of the policies enunciated by these governments within the last few years; (3) an awareness of the "alleged abuses"<sup>7</sup> in previous technology transfer arrangements (particularly licensing agreements); and (4) an appreciation

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1. For a definition of "technology," see Radway, *Transfer of Technology to Colombia: A Proposal to Modify Decision 24*, 12 *LAW. AM.* 321, 325 (1980):

[Technology] encompasses, at least, all of the knowledge necessary for the productive functioning of a single operation, an enterprise or, perhaps, an entire society. The term customarily embraces 'hardware,' . . . 'software,' . . . [and] may or may not involve patents and trademarks, . . . 'industrial property rights' . . . and technical and managerial assistance in any element of the productive system.

2. Nattier, *Brazil*, in *TECHNOLOGY TRANSFER: LAWS AND PRACTICE IN LATIN AMERICA* 145 (American Bar Association Section of International Law, Monograph No. 2, B. Carl ed. 1978) [hereinafter cited as *A.B.A. Monograph*].

3. Radway & Giacchino, *Argentina*, *id.* at 217.

4. Hyde & Ramírez de la Corte, *Mexico*, *id.* at 1.

5. Wesley, *Chile*, *id.* at 132.

6. Danino, *Peru*, *id.* at 115; Pate, *The Andean Common Market (Special Focus on Colombia and Venezuela)*, *id.* at 59.

7. See Radway, *Negotiations with Latin American Governments: Technology Transfer and Service Agreements*, 9 *LAW. AM.* 282 (1977).

of the multitude of statements concerning so-called "restrictive business practices"<sup>8</sup> allegedly committed by transnational enterprises, frequently in agreements between parents and subsidiaries. Finally, this article presumes some appreciation of the state of "semi-confrontation" existing in this hemisphere between transnational corporations (TNC's) and host governments, but which in the last few years has given signs of a considerable "thaw," thereby producing a renewed interest in constructive dialogue and cooperation.<sup>9</sup>

## II. BACKGROUND

Frustrations arising out of failures in the economic development plans and programs of countries in the inter-American system have caused certain governments, partly for political reasons, to assume adverse positions towards TNC's. Some of these reactions have been extreme and unnecessary, and many of them in turn have generated similar reactions on the part of TNC's. Thus arises the resulting state of tension.

Part of the failure of economic development plans and programs has arisen from "inflation economics,"<sup>10</sup> and part from socioeconomic and political reluctance on the part of many government officials in North,<sup>11</sup>

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8. See Joelson, *The Proposed International Codes of Conduct as Related to Restrictive Business Practices*, 8 LAW & POL'Y INT'L BUS. 837 (1976). For examples of so-called "prohibitive clauses" contained in laws, see Appendices, A.B.A. Monograph, *supra* note 2, at 234-360, especially Mexico's Law on Transfer of Technology, art. 7, at app. A-1, *see also* note 53 *infra*; ANOM's Dec. 24, arts. 20, 25, 51, at app. B-1; *see also* note 47 *infra*; Colombia's Decree 1234, art. 2, at app. C, *see also* note 51 *infra*; Venezuela's Decree No. 746, art. 1, at app. D-1, *see also* note 60 *infra*; Brazil's Normative Act No. 15, arts. 2.5.2, 4.5.2, 5.5.2, 6.5.2, at app. F, *see also* note 61 *infra*; Argentina's Law No. 21,617, art. 10, at app. G, *see also* note 69 *infra*.

9. United Nations Conference on Trade and Development Roundtable on the Role of Transnational Enterprises in the Latin American Integration Process, Lima, Peru, June 12-16, 1978, Opening Statement by the Chairman. [Hereinafter cited as UNCTAD Roundtable-Lima.] For a synopsis of what occurred at the UNCTAD Roundtable-Lima, *see* CTC REP., Sept. 1978, at 25.

10. See G. EDER, *INFLATION AND DEVELOPMENT IN LATIN AMERICA* (1968). Eder and others have spoken (often critically) of the Economic Commission for Latin America, especially for its former Secretary-General, Raul Prebisch, and other Keynesian economists who believed that development was fostered by rapid industrialization which required massive borrowings (Central Bank credits) to pay for imported capital goods and raw materials for these purposes. This overemphasis on import substitution without corresponding export development led to spiraling deficit financing and inflation. Another unfortunate corollary of these theories was the regrettable neglect of agricultural sector development in these countries, which has only recently received the attention and priority necessary to rectify this disequilibrium. Since this "merry-go-round" contributed to large outflows of foreign exchange to pay for capital goods and raw material imports, some say it contributed to the imposition of the same exchange controls which, as they have evolved, have been increasingly used to regulate foreign investment (especially dividend or profit remittances) and technology. For a detailed historical review of the development philosophy adopted by Dr. Prebisch and ECLA, *see* Radway, *The Next Decade in Latin America: Anticipating the Future from the Past* (forthcoming 1981).

11. "North America" is defined as Canada, the United States, and Mexico.

Central,<sup>12</sup> and South America<sup>13</sup> to make the necessary commitment to regional economic integration. However, at the regional and subregional levels integration offers advantages and benefits which can facilitate social and economic development. In fact, one theme of this article is that greater accountability on the part of government officials is required, as is increased cooperation among governments and between governments and TNC's.

### III. HOST GOVERNMENT POLICIES OF REGULATION AND CONTROL

#### A. *Structural Misalignments*

Structural problems in various markets have been identified as factors motivating the passage of recent technology transfer regulatory and control laws in Latin America.<sup>14</sup> This has brought to a head one of the fundamental problems of developing countries: competition versus protection. In order to foster economic growth and development, it is desirable to take steps necessary to increase competition so as to promote efficiency in the productive process. Greater efficiency obviously is required to increase exports, a favorite policy objective of many of the countries under discussion. But exports must compete in the market place with products from third countries. Advocates of the market theory always take the position that this competition breeds greater efficiency. But developing countries must offer incentives to attract new industries. These include protective tariffs and other barriers to enable them to survive the difficult early stages and mature into viable enterprises. The issue is joined: protection versus competition.<sup>15</sup>

Attacks upon the "multinationals" (now called "transnationals") began in earnest in the mid-1960's.<sup>16</sup> At that time a wave of nationalizations swept Latin America,<sup>17</sup> primarily in the extractive sector, although certain well-known examples of expropriation in the manufacturing<sup>18</sup> and service<sup>19</sup> sectors are on record. These octopus-like enterprises were said to

12. "Central America" is defined as the five Central American Common Market members (Guatemala, El Salvador, Honduras, Nicaragua, and Costa Rica) plus Panama.

13. "South America" is defined as the rest of the countries south of the Panamanian border with Colombia.

14. UNCTAD Roundtable-Lima, *supra* note 9, Paper Presented by Constantine Vaitsos, *Who Integrates and with Whom, How and for Whose Benefit?*, TAD/EI/SEM.5 (1978). For a summary of this paper, see CTC REP., Sept. 1978, at 11.

15. Another author calls it the conflict between free trade and protectionism. Rubin, *International Trade Law: Recent Developments*, 1 HOUS. J. INT'L L. 127, 141 (1979).

16. See generally R. BARNETT & R. MÜLLER, *GLOBAL REACH: THE POWER OF THE MULTINATIONAL CORPORATIONS* (1974); R. VERNON, *SOVEREIGNTY AT BAY: THE MULTINATIONAL SPREAD OF U.S. ENTERPRISES* (1971).

17. For example, Peruvian Decree Law 17,066 of Oct. 9, 1968, operated to expropriate the International Petroleum Company's properties known as La Brea y Parinas. See generally A. LOWENFELD, *EXPROPRIATION IN THE AMERICAS: A COMPARATIVE LAW STUDY* (1971).

18. See generally LOWENFELD, note 17 *supra*.

19. Most expropriation in this sector occurred in the early 1970's in the wake of ANCOM Decision 24, note 47 *infra*. However, Venezuela's Banking Law of 1979 (G.O.E. 1454 of Dec. 30, 1970) provides that banks and finance companies are subject to severe

owe respect to no sovereign, and to be interested only in the strangulation of the developing countries for profit. Where this view was not believed, such rhetoric still remained politically expedient and popular in light of the growing frustration arising from the failures of the integration movement. It was seen at that time that the local private sector (frequently referred to as the "productive sector" by many of the government technocrats) had to be strengthened in order to minimize dependency<sup>20</sup> and reliance on these foreign sources of capital and technology.

State intervention was selected as the most expedient means of redressing this imbalance. In the course of planning the legislative framework for regulation and control of the flow of capital and technology, the planning models were all permitted to "lean" in the direction favoring the strengthening of the state enterprise. As this plan evolved throughout the 1970's, policies emerged in Brazil<sup>21</sup> and Mexico<sup>22</sup> designed to strengthen the "national" (as opposed to "state" or "multinational") enterprises.

#### B. *Alleged Abuses*

The abuses allegedly committed in transfer of technology arrangements included overcharges, which were quickly identified as a severe drain on precious foreign exchange reserves. It was hypothesized that, with the introduction of exchange control laws in Brazil<sup>23</sup> and Colombia<sup>24</sup> (and later several other countries), the TNC's would avoid the ceilings on profit remittance by extracting royalty payments and technical assistance fees from their subsidiaries through the use of agreements which transferred "intangible technology."<sup>25</sup>

In addition, an analysis of large numbers of license agreements for patents and trademarks revealed that various limitations on the management and control of the national enterprise had been imposed<sup>26</sup> in the

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deposit lending and foreign exchange restrictions until at least 80% of their capital, in the case of banks, and 60% in the case of finance companies is owned by Venezuelans. Article 29 states that credit restrictions may be imposed on companies 40% or more of whose equity is owned by foreigners.

20. Sunkel, *Big Business and Dependencia: A Latin American View*, 50 *FOREIGN AFF.* 517 (1972).

21. See Radway, *Joint Ventures in Brazil* (forthcoming 1980).

22. See Radway, *Doing Business in Mexico: A Practical Legal Analysis*, 14 *INT'L LAW.* 361 (1980). A series of four separate decrees issued between February 2, 1980, and March 19, 1980, via two Secretariats (Patrimony and Industrial Development, and Finance and Public Credit) constitutes Mexico's New Industrial Development Plan. The abridged version of the Plan (Secretaria de Patrimonio y Fomento Industrial, 1979) specifies in chapter 1 that this is one of the objectives.

23. See Nattier, note 2 *supra*.

24. See generally Radway, note 1 *supra*; Pate, note 6 *supra*.

25. "Intangible technological contributions shall give rise to the right of royalty payments, upon the prior authorization of the national competent entity, but they shall not be computed as a capital contribution . . ." ANCOM Decision 24, note 47 *infra*, art. 21 (author's translation).

26. See Soberanis, *Legal Aspects Concerning the Technology Transfer Process in Mexico*, 7 *GA. J. INT'L & COMP. L.* 17 (1977); Camp & Rojas Magnon, *Recent Developments*

provisions of those agreements. Thus, much of the productive sector of the host country was being managed and controlled externally. This is the so-called "dependencia" theory,<sup>27</sup> which resulted in a strong effort to minimize dependence on external decision-making centers. Referred to in this article as the "ship of state" approach, this translates into a desire for nationals to be making decisions which affect the productive sector, and therefore the entire economy of the host country. No one can quarrel with this objective.

### C. State Intervention

It was felt that the bargaining power between national enterprises and foreign TNC's had to be equalized because the national enterprises were at the mercy of the TNC's and were unable to negotiate fair and equitable technology transfer agreements.<sup>28</sup> In addition to the affirmative objective of strengthening the bargaining power of the national enterprises, there was the parallel objective of limiting the power of the TNC's. Enacting laws governing the transfer of technology and requiring the registration of all agreements (as defined in the statutes) with the appropriate national body accomplished several purposes. First, an inventory of the various types of provisions included in these agreements could be developed. This would facilitate analysis to improve the laws in the future. Second, criteria could be developed to evaluate the prices (in terms of royalties or fees) to be paid for the technology. Third, the technology itself could be inventoried and methods developed to survey the available alternative technology, both within the local economy and abroad. Subsidiary objectives included subjecting these agreements to the legal jurisdiction of national courts including the application of national law, which embodied half of the traditional Calvo Doctrine<sup>29</sup> in Latin America. The movement had been evolving in developing countries to assert greater sovereignty and control over the natural resources within their territorial limits.<sup>30</sup> Eventually this concept was expanded to mean control over all "economic activities,"<sup>31</sup> which loses the traditional justification invoked by the Calvo Doctrine<sup>32</sup> (control over natural resources) and exceeds reasonable bounds of the "ship of state" theory.

In addition to encouraging the strengthening of national enterprises,

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*Under the Mexican Foreign Investment Law and the Law Regulating the Transfer of Technology*, 8 LAW. AM. 1 (1976).

27. See generally F. CANDOSO & E. FALETTI, *DEPENDENCIA Y DESARROLLO EN AMERICA LATINA* (1969); Sunkel, note 20 *supra*.

28. See generally Radway, *supra* note 7, at 289-90.

29. See D. SHEA, *THE CALVO CLAUSE: A PROBLEM OF INTER-AMERICAN AND INTERNATIONAL LAW AND DIPLOMACY* (1955).

30. See Haight, *The New International Economic Order and the Charter of Economic Rights and Duties of States*, 9 INT'L LAW. 591 (1975).

31. *Id.* See also Charter of Economic Rights and Duties of States, art. 2, ¶ 1, contained in G.A. Res. 3281, 29 U.N. GAOR, Supp. (No. 31) 50, U.N. Doc. A/9631 (1974).

32. Radway & Zwart, *Dispute Settlement in Latin America: A Reassessment of the Calvo Doctrine* (forthcoming 1980).

the "unbundling" or disaggregation of technology packages was highly desired. This concept included separating financing from engineering and from construction in a turnkey project to build a plant. These separate components, it was thought, could be obtained independently at lower cost. However, this theory has never been substantiated, since throughout history efforts at "eliminating the middle man" have been notoriously unsuccessful in the United States and worldwide. Nevertheless, the objective of breaking down elements of the technology package in order to identify those raw materials which could be obtained locally was not only valid but meritorious and generally to the advantage of the technology supplier. One of the most valid and justifiable objectives was to assure more effective and "real"<sup>33</sup> transfer of technology. This goal, as shall be seen, eventually will require shifting emphasis from the supplier to the recipient which involves the entire process of selection, transfer, absorption, and effective utilization of the technology—an exceptionally complex process but essential to economic growth and development.<sup>34</sup>

#### D. Focus on Suppliers

As suggested above, attention had been directed at the source of technology. This source was, for the most part, the TNC's. They were the most convenient target for venting frustrations arising from disappointed growth expectations. But an entire decade of restrictive legislation has not changed the behavior of the TNC's to any great extent.<sup>35</sup> Some abuses have been identified and partially corrected in many cases. For example, the Mexican Government boasted a reduction of some 500 million U.S. dollars in royalty payments after five years of operation of the National Registry of Transfer of Technology.<sup>36</sup> Similarly, in Brazil, subsequent to January 1, 1974, and the dramatic increase in its foreign exchange bill for oil, the financial noose was tightened dramatically, resulting in substantial savings in foreign exchange for technology being acquired. Much of this savings has resulted from extremely astute implementation of national policies as opposed to legislative requirements.

Another result, much more difficult to document but apparently the consensus of observers in certain countries, has been a reduction of the flow of particular technology from United States firms to certain coun-

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33. Pate, *Present and Future Venezuelan Technology Policies: Implementation and Implications for Technology Suppliers and Foreign Investors*, in *THE ANDEAN COMMON MARKET: MANAGEMENT IMPLICATIONS OF APPLICATION OF TECHNOLOGY LEGISLATION* 12 (F. Robles ed. 1976).

34. See Contribution of Transnational Enterprises to Future World Development, a report of the Industrial Sector Advisory Group to the Secretary-General of the United Nations Conference on Science and Technology for Development (May 1979).

35. See note 14 *supra*.

36. Presentation by Lcda. Maria De Lourdes Jimenez C., former Legal Advisor to the Director of the National Registry of Transfer of Technology, Ministry of Patrimony and Industrial Development (Mexico), before the Association of the Bar of the City of New York in a seminar entitled *The Foreign Investment Battlefield: Transfer of Technology and the Third World* (Mar. 8, 1978).



tries in Latin America having the most restrictive laws and policies.

#### E. *Different Modalities of Transfer*

No analysis of this nature can afford to ignore the fact that technology is transferred in a variety of ways. This fact has been recognized in all of the major legislation enacted in the region. Perhaps the most obvious but least significant form for the true transfer of the most essential and critical technology is licensing. It is on licenses of patents and trademarks, however, that a great deal of attention seems to have been focused in the planning stages for the laws presently in existence. Part of the contention of this article is that the different modalities of transfer require entirely different types of treatment.

Technical assistance is the sort of intangible technological contribution for which fees and royalty payments are prohibited in the ANCOM countries and Brazil when the transfer is between a TNC parent and a local subsidiary. ANCOM Decision 24<sup>37</sup> and the application of Brazil's Normative Act 15<sup>38</sup> specifically prohibit these payments and the tax deductibility thereof in the event they are made. However, the real value of technology—including the capacity to adapt it to local conditions and to continue to train local technicians, engineers, and operators of equipment and machinery—results from ongoing technical assistance.<sup>39</sup> It is alleged that this category has been used by TNC's to extract additional payments from their subsidiaries for services rendered which may have been of questionable value. However, qualitative criteria should be established to evaluate these transactions in terms of benefit received or the "arm's length" test.<sup>40</sup> The absolute prohibition is like the giant net that catches all of the fish swimming within its jurisdiction, including those which were not sought.

Direct foreign investment has been identified as the source of an overwhelming majority of transferred technology. How can this factor be reconciled with the desirable objective of disaggregation of technology packages to permit the recipient of technology to evaluate, screen, and select only those elements which must be imported from abroad? Once again, a qualitative evaluation test is required. There are many transactions in which it is to the recipient's advantage to be able to acquire technology in a nice, neat package, along with the assurance that the supplier of the entire package has a continuing obligation to assist the recipient in commercialization of the technology.<sup>41</sup> An area which was inadequately understood and which has been gaining importance in recent years is that of engineering services contracts and turnkey projects. Several countries

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37. Note 47 *infra*, art. 21.

38. Note 61 *infra*. These prohibitions were first introduced in Brazil in the Profit Remittance Law of 1962, note 43 *infra*.

39. See Radway, note 1 *supra*.

40. *Id.*

41. See DRISCOLL & SANS, SUMMARY REPORT: BUSINESS GOVERNMENT SEMINAR ON TRANSFER OF TECHNOLOGY, Bogota, Colombia (June 4-5, 1979).

in Latin America are utilizing local engineering or similar organizations to intervene in a technology transfer in order to absorb the technology, assure its retention locally, and encourage its retransfer and diffusion throughout the local economy.<sup>42</sup> This is another example of the application of the "ship of state" theory. Increasing attention has been given to distinguishing between contracts for engineering services with companies that are in the engineering and/or construction business and other transactions involving the sale of equipment which includes some percentage of technical services for installation, modification, or adaption. This is an extremely important area in which more activity is to be expected in the future.

#### IV. CHRONOLOGY OF SELECTED LEGISLATION

To provide a graphic picture of the intensity and the orchestration of the technology regulation and control movement throughout Latin America, selected events and enactments are included in capsule form below.

1962: Brazilian Law Controlling Remittances/Foreign Exchange<sup>43</sup> (giving the Central Bank an important role).

1967: Colombian Decree 444<sup>44</sup> and Chilean Central Bank Regulations<sup>45</sup> (both of which regulated payments in foreign currency, including all technology payments).

1969: ANCOM created by Colombian technocrats and "Velazquistas" (Peru) with outside advisors from several nonmember countries.<sup>46</sup>

1971: ANCOM Decision 24;<sup>47</sup> Peruvian General Law of Industries;<sup>48</sup> Argentine Law on Transfer of Technology;<sup>49</sup> Brazilian Industrial Property Code.<sup>50</sup>

42. This has been explained to the author personally by officials of technology transfer agencies of the governments of Brazil, Colombia, and Mexico.

43. Profit Remittance Law, No. 4131 of Sept. 2, 1962, as amended by Law No. 4390 of Aug. 29, 1964. For facts, see A.B.A. Monograph, *supra* note 2, at 148.

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

45. "Normas sobre contratos de royalties," Central Bank Circular No. 887, July 24, 1967. This regulation was followed in 1969 by another one adding further clarification: "Normas para cancelar el pago por regalías y asistencia técnica," *Diario Oficial*, Aug. 4, 1969. See also Silverstein, *Sharing U.S. Energy Technology with the LDCs: A Model for International Technology Transfer*, 12 *J. INT'L L. & ECON.* 363 (1978); Wesley, *supra* note 5, at 134.

46. The Agreement on Andean Subregional Integration (the Treaty of Cartagena) was signed on May 26, 1969, by Bolivia, Chile, Colombia, Ecuador, and Peru. For text in English see 8 *INT'L LEGAL MAT.* 910 (1969).

47. 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, amended in 1976. For text in English see 11 *INT'L LEGAL MAT.* 126 (1972).

48. Decree Law 18,350 (June 30, 1970), *El Peruano*, July 30, 1970, regulated by Supreme Decree 001-71-I.C.-D.S. (Jan. 26, 1971). For text in English see 9 *INT'L LEGAL MAT.* 1225 (1970).

49. Law No. 19,231 of Sept. 10, 1971, *Anales de Legislacion Argentina*.

50. Law No. 5772 of Dec. 21, 1971, *DOU-I* of Dec. 31, 1971, 35 *LEX* 1740 (São Paulo)

1972: Colombian Decree 1234<sup>51</sup> on Transfer of Technology Contracts.

1973: Mexican Laws on Foreign Investment<sup>52</sup> and Transfer of Technology;<sup>53</sup> Argentine Law on Foreign Investment;<sup>54</sup> Colombian Decree 1900<sup>55</sup> implementing ANCOM Decision 24.

1974: Venezuelan Decrees 62<sup>56</sup> and 63<sup>57</sup> implementing ANCOM Decision 24; New Argentine Transfer of Technology Law<sup>58</sup> (superseding the 1971 Law); Chilean Decree Law 600<sup>59</sup> implementing ANCOM Decision 24.

1975: Venezuelan Decree 746;<sup>60</sup> Brazilian Normative Act 15<sup>61</sup> (both redefining technology transfer policy).

1976: Mexican Law on Inventions and Trademarks;<sup>62</sup> Argentine New Foreign Investment Law<sup>63</sup> (superseding the 1973 Law); Brazilian Normative Act 17;<sup>64</sup> ANCOM Decisions 103 and 109;<sup>65</sup> Ecuadorean Decrees 900

1971).

51. Decree Law 1234 of July 18, 1972, 41 LEGISLACION ECONOMICA 24 (1972), 11 Derecho de la Integración 324 (Oct. 1972).

52. Law to Promote Mexican Investment and Regulate Foreign Investment, *effective* May 8, 1973, Diario Oficial, Mar. 7, 1973. For text in English see 12 INT'L LEGAL MAT. 643 (1973). See generally Radway, note 22 *supra*, and 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).

53. 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. For English translation see 12 INT'L LEGAL MAT. 421 (1973). See generally Radway, note 22 *supra*, and Hyde & Ramírez de la Corte, note 52 *supra*.

54. Law 20,557 [1973] C. Anales 3670. For English translation see 12 INT'L LEGAL MAT. 1489 (1973).

55. Decree 1900 of Sept. 15, 1973, 43 Legislacion Economica 256 (1973).

56. Decree 62, Gaceta Oficial (Gac. Of.) 1650 Ex. (Apr. 29, 1974). For text in English see 13 INT'L LEGAL MAT. 1220 (1974).

57. Decree 63, Gac. Of. 1650 (Apr. 28, 1974). For text in English see 13 INT'L LEGAL MAT. 1220 (1974).

58. Law No. 20,794, *sanctioned* Sept. 27, 1974.

59. Decree 600 (July 13, 1974), Diario Oficial, July 13, 1974. For English translation see 13 INT'L LEGAL MAT. 1176 (1974).

60. Decree 746 of Feb. 11, 1975 (revised Mar. 1, 1975), 11 Derecho de la Integración 318 (Mar. & July 1975).

61. *Ato Normativo* No. 15 of Sept. 11, 1975, promulgated by the Ministry of Industry and Commerce, National Institute of Industrial Property, *Revista De Propriedade Industrial* No. 256 of Sept. 16, 1975; A.B.A. Monograph, *supra* note 2, at 283. See generally Daniel, *The Legal Ins and Outs of Technology Transfer*, BRAZILIAN BUS., (Nov. 1977), at 17.

62. Law of Dec. 30, 1975, and Regulations of Oct. 8, 1976. See also Hyde & Ramírez de la Corte, note 4 *supra*; Radway, note 22 *supra*; Hyde & Ramírez de la Corte, note 52 *supra*.

63. Law No. 21,382 of Aug. 13, 1976 [1976] C. Anales 2071. For English translation see 15 INT'L LEGAL MAT. 1364 (1976). The implementing law, Decree No. 283/77, was published Feb. 5, 1977. See generally Studwell & Cabanellas, *The New Argentine Foreign Investment Law: an Analysis and Commentary*, 1 HASTINGS INT'L & COMP. L. REV. 37 (1977); McKinnis, *The Argentine Foreign Investment Law of 1976*, 17 COLUM. J. TRANSNAT'L L. 357 (1978).

64. Published May 25, 1976. See generally Nattier, note 2 *supra*; Daniel, note 61 *supra*.

65. Dec. 103: Amends. to Dec. 24; Dec. 109: Amends. to Dec. 14. Twenty-first period (Nov. 1976).

A and B<sup>66</sup> (implementing ANCOM Decision 24).

1977: Chilean Revised Decree Law 600;<sup>67</sup> Argentine Industrial Promotion Law,<sup>68</sup> Transfer of Technology Law<sup>69</sup> (superseding the 1974 Law), and Tax Law Revisions;<sup>70</sup> Venezuelan Decrees 2031<sup>71</sup> and 2442<sup>72</sup> (superseding Decrees 62 and 63 of 1974).

1978: Peruvian Labor Stabilization Law<sup>73</sup> changed, and Export Incentive Law<sup>74</sup> enacted; Brazilian Normative Acts 30<sup>75</sup> and 32;<sup>76</sup> New Venezuelan Tax Laws Affecting Technology Transfer;<sup>77</sup> Colombian Resolution on Reinvestment of Earnings.<sup>78</sup>

1979: Mexican Industrial Incentive Decrees;<sup>79</sup> Regulations to Venezuelan Tax Laws Affecting Technology Transfer;<sup>80</sup> Argentine Mining Promotion Law.<sup>81</sup>

## V. PRACTICAL RESULTS OF NEW RULES AND REGULATIONS

### A. *Implementation of Policies*

In order to understand the practical application of this legislation by the various countries in the region, it is useful to consider a spectrum from left to right (no political suggestion intended). On the left would be the most rigid policy with respect to application of the technology transfer control and regulatory system. Brazil would have to occupy this position at the extreme end. Although its stated policy does not always read as the most rigid, the practical application in Brazil, often administered by able and well-informed individuals, produces some of the most intran-

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66. Published Nov. 26, 1976.

67. Published as Decree 1748, Mar. 18, 1977, after Chile's withdrawal from the Andean Pact in 1976 and its abrogation of Decision 24. For English translation see 17 INT'L LEGAL MAT. 134 (1978). Replaces 1974 version of Decree No. 600, reprinted in 13 INT'L LEGAL MAT. 1176 (1974).

68. Law No. 21,608 of July 23, 1977 and Regulations (Decree 2541 of Aug. 26, 1977).

69. Law No. 21,617 of Aug. 12, 1977.

70. Law No. 21,680 of Oct. 31, 1977. This law amended Law No. 21,280 of Apr. 2, 1976 (Tax on Transfer of Securities), Law No. 21,647 of Sept. 27, 1977 (Tax on Sale of Foreign Exchange), Law No. 21,604 of July 22, 1977 (Income Tax), and Decree 142 of Jan. 21, 1977, regulating Law No. 21,284 of Apr. 2, 1976 (Tax on Contingent Profits).

71. Decree 2031, Gac. Of. 31,171 (Feb. 9, 1977). For text in English see 16 INT'L LEGAL MAT. 1531 (1977).

72. Decree 2442 (Nov. 8, 1977).

73. Decree Law No. 22,126 of Mar. 21, 1978.

74. Decree Law No. 22,342 issued Nov. 22, 1978.

75. Published Jan. 19, 1978. See generally Nattier, note 2 *supra*; Daniel, note 61 *supra*.

76. Published May 9, 1978. See generally Nattier, note 2 *supra*; Daniel, note 61 *supra*.

77. See Decree 2932 of Nov. 7, 1978, and Decree 3106 of Feb. 28, 1979, containing regulations to art. 56 of the Venezuelan Income Tax Law (May 16, 1978), which defines "technical assistance" and "technological services" and the determination of net taxable income thereon.

78. Res. 29 of Dec. 1978 of the National Council of Economic and Social Policy (CONPES), 53 LEGISLACION ECONOMICA 348 (1979).

79. See Radway, *supra* note 22, at 371-72.

80. Decree 476 of Dec. 31, 1979 (Superseding Decrees 2932 and 3106, note 77 *supra*).

81. Law No. 22,095, published Nov. 1, 1979.

sigent results. In defense of the Brazilian Government, however, it is suggested that its balance of payments problem is the most serious in Latin America. Thus, it is essential for Brazil to negotiate the best possible terms and to use the "great Brazilian market" as attractive bait to lure the foreign technology supplier.

Next to Brazil would be Colombia, the most rigid of the Andean Group. Once again, part of the intransigence of the Colombian policy arises from attitudes on the part of members of the Royalty Committee<sup>82</sup> within that government with respect to the role of TNC's in their economy. Next to Colombia would be Venezuela, with its Decree 746 of February 1975 imposing some additional restrictions which go beyond those enumerated in Decision 24. Perhaps Peru would then fall next on the spectrum, approaching the middle of the array.

Mexico falls squarely in the middle. Mexico's pragmatic application of its laws and policies has resulted in considerable flexibility in order to accomplish the results the country deems to be in the national interest. Continuing toward the more liberal end of the spectrum, we would encounter Ecuador and Bolivia of the Andean Group. These states have not applied Decision 24 as rigidly as the countries previously mentioned. Ecuador has made creative interpretations to accommodate its development needs. Bolivia has not yet fully implemented that law, but has developed guidelines to suit its development needs.

Continuing to the other end of the spectrum, we find Argentina with its 1977 revision of two earlier laws on the subject. Officials of the Argentine Government expressly stated their intent to reverse the trend of the prior laws which had resulted, in their words, in a virtual "drying up" of technology flow to that country.<sup>83</sup> At the far right of the spectrum is Chile, which now boasts Latin America's most open and flexible laws and rules regarding technology transfer. Chile's Decree Law 600, although based to some degree on Decision 24, establishes a "rule of reason" approach and permits technology to be utilized as a capital contribution when fair market value can be established, even going so far as to permit the supplier to establish that value by a sworn affidavit which, if not challenged within 120 days, is accepted.<sup>84</sup> Argentina also has permitted technology to be capitalized, and the value must be established by negotiation between the supplier and the Registry.<sup>85</sup> Both of these laws would appear to give greater weight to the ability of local entrepreneurs to negotiate more effectively than was presumed by other governments.

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82. The Royalty Committee was established by Decree 444, note 44 *supra*, for the purpose of approving technology agreements in accordance with stated criteria. It is comprised of representatives of the Ministry of Development, the National Planning Department, the Superintendent of Foreign Trade, the Prefect of Exchange Control, and the Head of the Central Bank's Exchange Office. For further discussion, see Radway, note 1 *supra*.

83. See explanatory preface to Law No. 21,617, note 69 *supra*.

84. Note 67 *supra*, art. 2(c).

85. Law No. 21,617, note 69 *supra*, art. 12.

### B. *Relationship to Import Controls*

It is well known that the import control laws, regulations, and policies relate directly to transfer of technology policies.<sup>86</sup> Where countries must restrict imports for balance of payments purposes, the import controls establish severe obstacles for the importation of foreign raw materials and semi-processed and finished products. This may be reasonable in view of balance of payments constraints, but often has been misused as an arbitrary barrier to competition and the importation of capital equipment by TNC's and smaller enterprises. Improving prospects of economic growth would require reevaluation of import control policies throughout the hemisphere.

### C. *Relationship to Other Policies*

In Brazil, as indicated, the technology transfer policies arise directly from, and are a function of, the balance of payments problem presently being addressed. Brazil has developed the most outstanding program in Latin America for the creation of indigenous technology.<sup>87</sup> It has established a network of technology development centers across the country where exciting new developments are taking place with some frequency.<sup>88</sup> Since oil imports are the major item in the foreign exchange bill, considerable attention is being given to the development of alternative sources of energy. All of this is designed to strengthen control of the "ship of state."

Mexico's technology policy is affected by the formidable requirement of having to create approximately 750,000 new jobs per year to absorb the expanding work force. Thus, ranking high among the criteria utilized by the Mexican Government to evaluate technology agreements for registration is the contribution to the solution of this vital employment problem. Following the same logic, various countries have utilized their technology regulation and control systems to reflect the prevailing economic and political thinking. Critics, however, suggest that technology should not be utilized to solve political problems.<sup>89</sup>

### D. *Results of Policies*

The policy in Chile is beginning to pay off. Although the market is decidedly smaller than that of the other countries discussed, new invest-

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86. As evidence of this proposition, see "Importacion Procedimiento" for each of the Latin American countries, in *REGIMEN DE LA TRANSFERENCIA DE TECNOLOGIA EN LOS PAISES DE AMERICA LATINA: TEXTOS LEGALES Y PROCEDIMIENTOS ADMINISTRATIVOS* (Instituto para la Integración de America Latina, Banco Interamericano de Desarrollo 1977).

87. Decree 77,355 (Mar. 31, 1976) published in the Official Gazette, Apr. 5, 1976, *approving* II PBDCT (II Basic Plan for Scientific and Technological Development) of the Presidency of the Republic of Brazil. See also Radway, note 21 *supra*.

88. *Creating Alternatives to Imported Technology*, BRAZILIAN BUS., May 1978, at 18.

89. Somer, *A Survey of Development Efforts in Turkey*, in *THE TECHNOLOGICAL KNOWLEDGE BASE FOR INDUSTRIALIZING COUNTRIES* 163 (Proceedings of the NBS/AID UNCSTD Seminar, National Bureau of Standards, Gaithersburg, Maryland, Oct. 16-17, 1978, NBS Special Pub. No. 543, R. Sangster ed. Apr. 1979).

ment is beginning to show a dramatic increase. Argentina has not yet begun to "take off" in the same manner as Chile, but technology flow, along with new foreign investment, has increased notably since the implementation of new foreign investment and technology transfer laws within the last three years. Venezuela and Colombia, on the other hand, appear to have leveled off in terms of new investment and the flow of new technology. Although it is well known that technology has continued to flow into those countries from the TNC's, it is equally well known that much of the technology has been directed at mere maintenance of the existing operation (market share) and not necessarily at the expansion, modernization, and increased efficiency desired by the host countries and the firms themselves. The inference is that this omission is directly attributable to the inability of the TNC/technology supplier to recover separate economic returns for the separate contribution of intangible technology.<sup>90</sup>

Mexico's investment and technology statistics are improving dramatically. This is to a great extent attributable to increased wealth reported by that country. The foreign investment and technology regulatory system, however, has been modified during the present administration in order to attract the capital and technology which was definitely leaving Mexico toward the end of the last political regime. On the other hand, Brazil remains an anomaly. It may well be that the tactic of using the largest market in the region as bait for foreign capital and technology has been successful thus far. New investment and technology have continued to enter the country. However, the negative feedback is beginning to increase. Whether or not these complaints by the TNC's will accumulate to the level where decisions are made to change their policies is yet to be determined.

## VI. JOINT VENTURE SOLUTION

### A. *Focus on Recipient*

The solution advocated by more and more government planners, academicians, host country (quasi-governmental) corporations, and increasingly the foreign investment community, is the joint venture. The joint venture has gained momentum in Latin America in the last few years, particularly since the advent of the legislation discussed in this article.

One result of this movement has been to direct the attention of the host government back toward the infrastructure of its own economy. To encourage successful joint ventures and effective transfer of technology through this modality, the recipient (and its environment) must be capable of effectively absorbing and utilizing technology and adapting it to prevailing local conditions. Training programs that place a greater emphasis on increasing skill levels across all sectors of the economy have now been initiated in various countries in Latin America.<sup>91</sup> Moreover, at-

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90. See Radway, *supra* note 1, at 331.

91. See, e.g., Radway, *Venezuela: Certain Legal Considerations for Doing Business*, 8 CASE W. RES. J. INT'L L. 289, 306 (1976).

tention also has been directed at the structural character of the market within various industries. As mentioned above, oligopolies have been identified and criticized in most of these industries. Current thinking, however, begins to shift away from discouraging the TNC's and toward increasing competition, designed to facilitate the strengthening of local enterprises by increasing productive efficiency.<sup>92</sup> Accordingly, the whole question of import policies and protectionism has once more been brought under review. It is clear that Chile, Argentina, and to some extent Mexico have adopted policies designed to introduce more competition and to drive inefficient producers out of the relevant market. Public announcements in December 1979 by a high Venezuelan Government official<sup>93</sup> and the fact that Brazil will phase out its "similars" law<sup>94</sup> appear to have extended this trend. Although this results in short-term displacement, which is politically unacceptable, the government decision-makers apparently have accepted these consequences as the price of long-term improvements.

#### B. Objectives

These policies result in increased competition, improved efficiency, reduced inflation rates, improved capabilities for economic growth, job expansion, and more realistic negotiations for economic integration on the regional level. Similarly, promotion of exports should be a reflection of more realistic market forces, which should enable government planners to more accurately predict fluctuations in payments balances and assist them in establishing budgetary priorities for national planning purposes.

One of the most important results of all these policies, however, will be the creation of more indigenous solutions to the technological challenges facing each country. The joint venture vehicle has, as a major advantage, the opportunity for the local partner to identify those aspects of any particular process, piece of equipment, or product that can be replaced by local resources without sacrificing ultimate performance objectives or specifications. This technique has been successfully observed in an increasing number of joint ventures in the hemisphere.<sup>95</sup>

#### C. Control Problems

One of the constraints traditionally discouraging United States firms from entering into joint ventures with a minority equity position is the dual problem of management and control. Here the practicing attorney can play an important role since, within the limits of practicality and prudence, the attorney/advisor is in a particularly strategic position to interpret for his client the realities of the trends that evolved over the last

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92. "Production deepening" is one expression which has been used by leading technocrats to summarize this trend. See note 14 *supra*.

93. Speech by H. E. Luis Ugueto Arismendi, Minister of Finance of Venezuela, 15th Annual Meeting of the Council of the Americas, New York (Dec. 7, 1979).

94. Wall St. J., Dec. 10, 1979, at 19, col. 1.

95. Sources for this conclusion include a number of speeches by local business executives of leading industrial groups, particularly in Brazil and Mexico.



decade in Latin America. Many firms make decisions on the expectation that some of these laws will eventually be removed from the books. A more prudent prognosis would suggest occasional revisions and modifications of the laws, but that the blueprint would appear to be in place for the present. Thus, the advisor can point out that, although the law of the host country may require, or its policies may dictate, a minority equity position by the foreign TNC, there may be distinct advantages in this position. These include a lower profile for the TNC in an era which has seen "creeping expropriation" in addition to outright nationalizations. Also, the TNC as supplier of technology will be able to realize a greater return on the technology, particularly the intangible portion (know-how, technical assistance), through qualifying by virtue of the minority equity position to receive the technical assistance fees and royalties in those countries in which such payments would otherwise be prohibited.

In addition, it is well known that many joint ventures are actually controlled on an operational basis by the party who maintains control of the technology. This is achieved through continuous infusions of new improvements and developments, a constant flow of technical assistance, and sheer experience on a global basis with the application of its technology in a variety of environments. Control of the joint venture is also maintained by the firm which has the ability to assist in the distribution of the product or the output of the process due to its great experience in marketing accumulated over many years. This fact, when coupled with parallel experience in procuring a constant flow of the supplies vital to maintaining continuous production, results in a degree of practical control which may not be offset by legislation.

#### D. *Technological Adaptation*

One factor which has not yet been fully appreciated is the ability of the local partner to identify the unique local resources which strengthen the utility of the product or process when applied to the conditions prevailing locally. This can reduce expenditure of scarce foreign exchange reserves used to import elements that may be readily obtained from local resources, or by more labor intensive methods of accomplishing certain aspects of a process or operation. Moreover, adaptation of the technology is facilitated by the ongoing interaction between appropriate representatives of the local enterprise and the local government officials who grant approvals for related activities. The local partner then is in a unique position, and maximum mileage can be obtained from such conscientious efforts by the joint venture. This is often referred to as the local partner supplying the "know-who" while the foreign firm supplies the "know-how."

#### E. *Capital Resource Allocation*

Aside from the lower profile for the TNC and realization of a greater return on the technology when transferred to a minority-held subsidiary, the allocation of the human resources in the TNC's own organization is an increasingly complex management problem. By giving greater emphasis to the development of more formalized training for local management

personnel programs, TNC's can extend their own limited human resources and at the same time satisfy an important objective of the host countries. This results in the requirement of fewer home country nationals being sent abroad. The realities are that changes in home country tax laws (for example, I.R.C. § 911) have made it increasingly difficult to accept foreign assignments.

#### F. *Creation of New Sources of Technology*

The indigenous solution that creative Brazilians will inevitably develop may, in fact, be applicable to a particular plant location in Wyoming, Canada, Australia, or elsewhere. Due to constraints existing in various countries in Latin America, the motivation is extremely high to develop new solutions to difficult problems within available resource limitations. This kind of mentality creates technological leadership and innovation. The message is clear: indigenous development under joint venture arrangements can contribute to increasing the "improvements pool" maintained by technology suppliers with worldwide licensing networks, or worldwide arrangements for engineering services or technical assistance agreements.

### VII. RESTORING EQUILIBRIUM

#### A. *Bargaining Power (Negotiations)*

The problem of equalizing bargaining power, which has been identified by every LDC government,<sup>96</sup> has no easy solution. In the long term, the training programs being offered by various United Nations agencies (for example, the World Bank) and other institutions, generally called "Technical Cooperation for Developing Countries," will improve capabilities of more host government officials to negotiate with TNC's.<sup>97</sup> In the near term, however, more governments in the region are retaining consultants to assist with evaluations and negotiations of large technology projects. In addition to technical consultants, who have been retained for many years, governments are now retaining more financial, economic, and legal advisors, many of whom are experienced negotiators and even participate in the direct negotiations themselves.

#### B. *Resolving Conflicting Objectives*

Many of the objectives of host governments have been referred to earlier. They include preserving scarce foreign exchange reserves, increasing jobs, decentralizing industrial concentrations and population, improving training and skill levels of the work force, and promoting exports.<sup>98</sup> The objectives of the suppliers are also well-known, including among other things: (1) gaining a position for a new product or market entry, or

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96. See Radway, *supra* note 7, at 289-90.

97. See, e.g., Transnational Corporations: Issues Relevant to the Development and Implementation of Technical Co-operation Programmes and Projects in Developing Countries, United Nations Centre on Transnational Corporations Pub. No. 78-40859, Feb. 1978. See also *Negotiating with Transnational Corporations: Workshops for Developing Country Officials*, CTC REP., Dec. 1977, at 18.

98. See Radway, *supra* note 7, at 288.

expanding or maintaining existing market position; (2) ensuring adequate return on investment of capital, including technology and human resources; (3) protecting a reputation for quality and service worldwide; (4) maintaining the confidentiality of trade secrets and confidential processes; and (5) protecting industrial property rights. Some of these respective objectives are in direct conflict with each other, and again the attorney or other advisor has an important role in the negotiation process: accommodating the conflicting objectives in order to promote the interests of the client within the context of profitable business operations and economic and social development.

### C. *Long-Term Attitude*

Appreciation of long-term attitudes requires mutual sensitivity on the part of host governments and TNC's. The host government, for its part, must contribute to the creation and maintenance of a stable climate for investments. TNC's require certainty and predictability in order to make decisions on resource allocations to specific projects. For its part, the TNC must make a commitment and a contribution to the social and economic development of the host country. The firm is, after all, a guest in the foreign country. Most United States technology suppliers are fully willing to make this type of commitment, within reasonable limits.

Within the context of cooperation, not confrontation, it is suggested that regional economic integration and oligopoly are both here to stay. The latter is the result of efficiency factors within the market forces operating in any given industry and is not, by definition, an evil. In fact, it may result in substantial benefit to the ultimate consumers, the society as a whole. The issue is not necessarily reduction of dependence on foreign sources of control, capital, and technology. The question may well be what kind of interdependence can be created to facilitate economic growth and development, and to provide opportunities for Latin American countries to export their technology, now and increasingly in the future, without attracting retaliation. A similar problem has preoccupied experts in international trade matters for years.

### D. *Host Governments Should Offer Incentive for Effective Transfer*

The bottom line is that the technology transfer transaction has to be in the interest of each party. Thus, when the government identifies priorities that involve selection of a particular technology, it must make a commitment to obtain that technology and insure to the extent possible an effective transfer. This could include various incentives such as those involving the taxation of various economic activities. It is not necessary to elaborate, since many of these alternatives have been discussed in virtually each government in the region.

There are also other special provisions which could be applied to high priority technical projects, and in fact have been for years. These provisions include a qualitative evaluation of the technology and its role in national priorities, which could result in granting longer durations than those permitted by law, protection of confidentiality for longer periods

than presently permitted, and protections for the supplier as are included in the Argentine law as an added assurance and incentive for the supplier concerned about protecting trade secrets. In other words, the host country must accept the economic realities of the TNC's.

*E. TNC's Must Respond in Kind*

The TNC's, in order to meet their own economic objectives, must be prepared to accept and accomodate those vital and national objectives of the host country. Among the more obvious negotiating trade-offs is the commitment to training which should be made by the companies in virtually every major technology transfer project. This could include training more than the minimum number of welders, electricians, production foremen, or other skilled personnel required for a project. The TNC should be prepared to design a program to train additional numbers of nationals, both in its own interest (for example, to build a reserve force of skilled craftsmen to replace those attracted elsewhere) and also to contribute to the satisfaction of national training objectives. It is contended that this is not necessarily "uneconomic" or "unproductive" in the long run. The backup system<sup>99</sup> is already in use in certain countries.

Another obvious trade-off which can be offered by the TNC's is what will be termed "adaptation centers." The well-known development engineering techniques, which have been perfected in the United States in a variety of industries, can be applied to the development of small (two or three persons) centers devoted to the investigation and application of those elements of technology (the product, process, equipment or materials) which can be replaced by a local equivalent without sacrificing product or process integrity. This should be obvious in the agribusiness sector but is equally applicable to most aspects of industrial activity. Also, by staffing these centers with one foreign engineer or technician and possibly two national counterparts, the kind of training that may be transferred to the local engineers or technicians working with the expatriate would be of the highest possible caliber.

### VIII. CONCLUSION

State capitalism is a way of life in many countries in Latin America, as well as in Europe and elsewhere. But state capitalism does not preclude cooperation between governments and TNC's in accomplishing social and economic development objectives that each respect. The decade of the 1970's has witnessed enormous activity in this hemisphere as governments sought appropriate regulatory vehicles to satisfy their goals. At the same time, normal developments resulted in various changes of governments in the region. This contributed to a perception of instability by suppliers of foreign capital and technology. Whether or not this perception is accurate, the result has been the creation of additional constraints

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99. The backup system includes an extra individual for each specific position in the organization so that when the initially-trained individual leaves, the replacement is already trained.

on the development and integration of the region.

Pragmatism and flexibility are required on the part of the government officials implementing technology transfer laws and policies, and also on the part of attorneys and others who advise TNC's in the United States and Latin America. Creative methods must be designed to accommodate the objectives of the TNC's and those of governments.

There is no lack of opportunity for profitable business operations in Latin America in the 1980's. However, there is a shortage of resources, including capital, technology, and human resources. The joint venture would appear to present a viable vehicle for the transfer of technology and the allocation of resources in such a way as to meet the principal objective of the suppliers of technology while satisfying overriding national requirements of host governments. This would result in a strengthening of national enterprises and of the private sector throughout Latin America. To implement these concepts effectively, a certain long-term attitude and vision is required of TNC's and host governments, as well as of negotiators who advise either. It is hoped that increased sensitivity and awareness will contribute to those creative solutions required to meet the challenges of the 1980's and 1990's.

