CONTROL OF TECHNOLOGY IN LATIN AMERICA:

A STUDY OF MULTINATIONAL CORPORATIONS PERCEPTION

by

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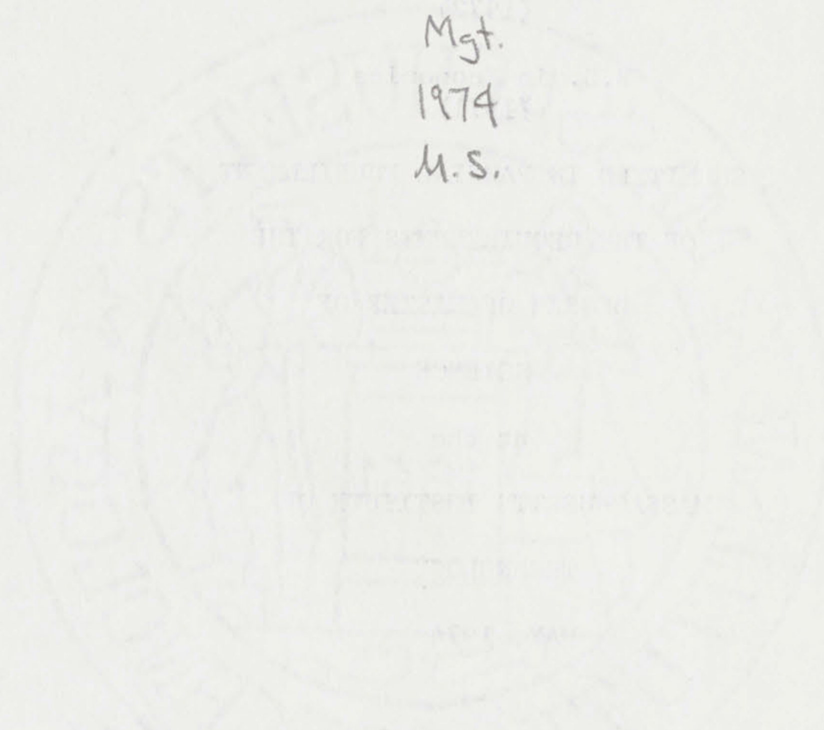

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A STUDY OF MULTINATIONAL CORPORATIONS PERCEPTION

Ricardo Borzutzky

Submitted to the Alfred P. Sloan School of Management in May, 1974 in partial fulfillment of the requirements for the degree of Master of Science.

ABSTRACT

The need of the less developed countries for access to technology and multinational corporations' ability to provide such technology requirements, have brought the multinational corporations (MNC) into a close relationship with the less developed countries (LDC). However, this close relation has not always been a "happy" one. Both systems have interest and attitudes that potentially conflict. The past history of these relations has already shown that these conflicts are not only potential but that they have resulted in serious confrontations, not only between the multinational corporations and developing countries but between the home country of the companies and the host country.

The governments' policies toward multinational corporations are guided by the governments' perception of the goals of the multinational corporations and by government thinking on how MNCs will perceive the benefits and constraints of their policies. One of the gravest impediments to the improvement of relations between MNCs and LDCs is a lack of understanding by the latter, of the practices, motivations, and perceptions of the enterprises they confront and a lack of understanding by the former, of the host countries' objectives.

This thesis focuses on the perceptions of MNCs of the policies affecting their investment in LDCs. This involves (1) research of the published literature in the field, (2) analysis and comparison of relevant Andean Pact, Argentinian, Brazilian, and Mexican legislation, and (3) in intensive interviews with two multinational corporations who are participating in U.S. Latin American business.

The methodology of the thesis is largely expository, in that the perceptions of multinational corporations in terms of technology transfer, ownership, financial, and management controls, as they relate to legislation and comparative local application are presented with no intent to apply value judgements to the legislation, the local application or for that matter, to the perceptions.

The presentation is organized in four parts: (1) conceptualization of technology transfer phenomena, (2) analysis of relevant legislation, political objectives, and factors of multinational corporations' relationships with Latin America, (3) theoretical model of Latin America - MNC relationship, vis-a-vis technology transfer, and (4) the realities of the relationship.

The depth of analysis represented in the two cases differs considerably. This is in part due to differences in the products and markets involved, but also reflects the fact that executives in one firm were unusually well informed about Latin America developments and were actively seeking new and more mutually beneficial business arrangements.

The conclusion is that the perceptions of the legislations, by the MNC decision-makers, are not congruent with the perceptions of the Latin American law makers. The expectations of both have been somewhat frustrated, but there is evidence to suggest both are flexible in seeking mutually beneficial arrangements.

Thesis Advisor: Donald R. Lessard
Title: Visiting Assistant Professor of Management

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It has sometimes been frightening to think of the enormous debt which I have built up over the past two years for the kindness of a rather large number of people. Among those who have played an important part in my master's work, I especially thank:

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INTRODUCTION

> "Science and Technology offer genuine instruments for Latin American progress and must be given unprecedented impetus at this time".
>
> (The Declaration of the Presidents of America at Punta del Este, April 1967)

There is a general recognition of Technology as a critical factor in accelerating economy and social progress. Its importance is all the more for the developing countries, for technology can help reduce the widening gap between the less developed and highly industrialized nations. But, there is considerable confusion over what technology is and a lack of understanding of what technology does. If there has been a great debate about the role that technology plays, there has been an even greater debate about "how to transfer technology".

Decisions on technology transfer in the past have been based primarily on non-economic considerations. Even more so today it is not sufficient to plan for economic development through allocation of resources, but it is necessary to plan the transfer of the adequate technology to all countries, and in particular to the developing countries.

Most of the developing countries suffer from a weak technological base. Therefore, increased access to technology to strengthen this base is a principal objective of less developed countries. The question is how can this be done. Should they develop their own technology or import technology from other countries? The development of their own technology

is a luxury that developing countries cannot afford, because of the need to "catch up" with the developed countries and to meet the challenge of rising expectations of their people, there is no rationale to develop technology already available. Thus, the question is reduced to one of finding the best way to transfer technology from other countries. The choice of means for transferring technology often can be seen in policies, based on the goals of the different countries. Unfortunately, as often is the case, neither the goals nor policies are very clear or well defined.

Definitions of Technology

Technology may be defined as the means or capacity to perform a particular activity. (1) Less developed countries will be concerned with those technologies that have to do with activities that are of primary interest for these countries. The interest of a particular country defines a priority system unique from all others which usually addresses one's comparative advantage. The Japanese experience is a case in point. From another point of view, technology would be seen as an essential input to production, and as such it is bought and sold in the world market as a commodity. (2) In this respect there is a great debate if technology, as a commodity, should be a public or essentially free good or if it should be a private good with a certain value attached to it. The large amounts of research and development with the high costs involved, and the necessary incentives to induce different organizations

to get involved in scientific and technological research, have made technology a valuable commodity. There is a general agreement and it is accepted to assign a value and pay a particular technology.

Technology seen as a commodity, can be bought and sold in the world market in one of the following forms:

(a) In the form of capital goods and sometimes intermediary goods;

(b) In the form of human labour, usually skilled and sometimes highly skilled and specialized manpower, with the capacity to make correct use of equipment and techniques and to master the problem-solving and information-producing apparati;

(c) In the form of information, whether of a technical or of a commercial nature, which is either readily available in markets or subject to proprietory rights and sold under restrictive conditions. (3)

The Transfer of Technology

The transfer of technology is the utilization of an existing technique in an instance where it has not previously been used. The transfer could be the acceptance by the user of a practice common elsewhere, called "adoption". The spread of such adoptions is the "diffusion of technology". On the other hand, the transfer may be the application of technology in a new way, that is called "innovation", (4). Here we are concerned with the "diffusion of technology", which is the process whereby a technology is transferred from one nation, section or industrial enterprise to another. (5)

Technology can be transferred through various institutional mechanisms, namely:

(a) The flow of books, journals and other publicized information;

(b) The movement of persons from country to country;

(c) Education and training;

(d) Exchange of information and personnel through technical co-operation programs;

(e) Employment of foreign experts and consultancy arrangements;

(f) Import of machinery and equipment and related literature;

(g) License agreements for production processes, use of trade marks and patents, etc;

(h) Direct foreign investment. (6)

For the most part, technology has been transferred through the last two mechanisms: license agreements* and direct foreign investment**. The kind of organization that has acted as a conduit for these two mechanisms has been the subsidiaries and affiliates of multinational corporations (MNCs) in developing countries.

---

*Quantitative measures of the phenomenon are hard to find. One indication albeit quite imperfect, is that in 1972, U.S. enterprises received about $300 million from subsidiaries and affiliates in developing countries in royalties and fees, and about $72 million from unaffiliated foreigners in such countries. Survey of Current Business, December 1973, pp. 16-17.

*In 1972 flows of foreign direct investment to developing countries amounted to $4.3 billion in U.S. dollar equivalents. Development Cooperation: 1973 Review (Paris: OECD, 1973), Table II-2, p. 42. (7)

Thesis

The need of less developed countries for access to technology and multinational corporation's ability to provide such technology requirements, have brought the Multination Corporations into a close relationship with the Less Developed Countries. However, this close relation has not always been a "happy" one. Both systems have interests and attitudes that potentially conflict. The past history of these relations has already shown that these conflicts are not only potential, but that they have resulted in serious confrontations, not only between the multinational corporations and developing countries but between the home country of the companies and the host country.

The governments' policies toward multinational corporations are guided by the governments' perception of the goals of the Multinational Corporations and by government thinking on how MNCs will perceive the benefits and constraints of their policies. One of the gravest impediments to the improvement of relations between MNCs and LDCs is a lack of understanding by the latter, of the practices, motivations, and perceptions of the enterprises they confront and a lack of understanding by the former, of the host countries' objectives.

This thesis has the ambitious objective of helping to reduce the conflict of interest between the MNCs and the Developing countries by bringing a mutual understanding between the parties involved. Some developing countries have already set up policies in the form of laws and codes to regulate the transfer of technology and direct foreign

investment. These different laws and codes have produced varying results, hinging largely on the reactions of the MNCs to these laws.

This thesis, to achieve the aforementioned objective, examines the perceptions of MNCs regarding the benefits and constraints provided by the Technology Transfer Laws of Argentina, Brazil, Mexico, and the Andean Pact, bearing in mind the close interrelation of these laws with the constraints imposed by the Foreign Investment Laws of each country.

Hopefully this examination will serve as an informative resource for policy-makers of LDCs.

Methodology

In achieving the main objective of this study, several stages are necessary. They are the following:

(1) An analysis, highlighting the principal issues of the Transfer of Technology and Foreign Investment Laws of the Andean Pact, Argentina, Brazil, and Mexico. The identification of potential problems arising from the laws through a conceptual approach involving a literature survey, seminars and discussion with academicians, and through a practical approach based upon interviews with MNCs specialists.

(2) Two case-studies. The case-studies are based on interviews with staff and management of two MNCs which have on-going operations in at least two of the countries under consideration.

(3) Conclusions.

More methodological details will be given in the chapters that constitute this study. The chapters are the following:

Chapter I - Introduction

Chapter II - Description and Analysis of the Technology Transfer and Investment Laws in:
- Andean Pact
- Argentina
- Brazil
- Mexico

- Institutions that implement the laws
- Potential Problems or Constraints:
  - Technology Transfer constraints
  - Ownership Controls
  - Financial Control
  - Management Control

Chapter III - Two Case Studies:

1) A Pharmaceutical Company

2) A Chemical Company

- Company Description
- Operating Problems and Present Solutions
- Future Plans
- Foreign Competition

Chapter IV - Conclusions.

References

(1) W. Gruber, and D. Marquis, "Research on the Human Factors in the Transfer of Technology", in W. Gruber and D. Marquis (ed.), Factors in the Transfer of Technology, p. 225.

(2) United Nations, Guidelines for the Study of the Transfer of Technology to Developing Countries, (TD/B/AC. 11/9), (New York: 1972), p. 5.

(3) Ibid., p. 5.

(4) W. Gruber and D. Marquis, op. cit., p. 256.

(5) National Academy of Sciences, Office of the Foreign Secretary, (Washington, D.C., 1973), U.S. International Firms and R, D & E in Developing Countries, p. XVII.

(6) United Nations, op. cit., p. 8.

(7) R. Vernon, "Multinational Enterprises in Developing Countries: An Analysis of National Goals and National Policies", Paper prepared for United Nations Industrial Development Organization, March 1974, p. 1.

(8) Ibid., p. 3.

CHAPTER II

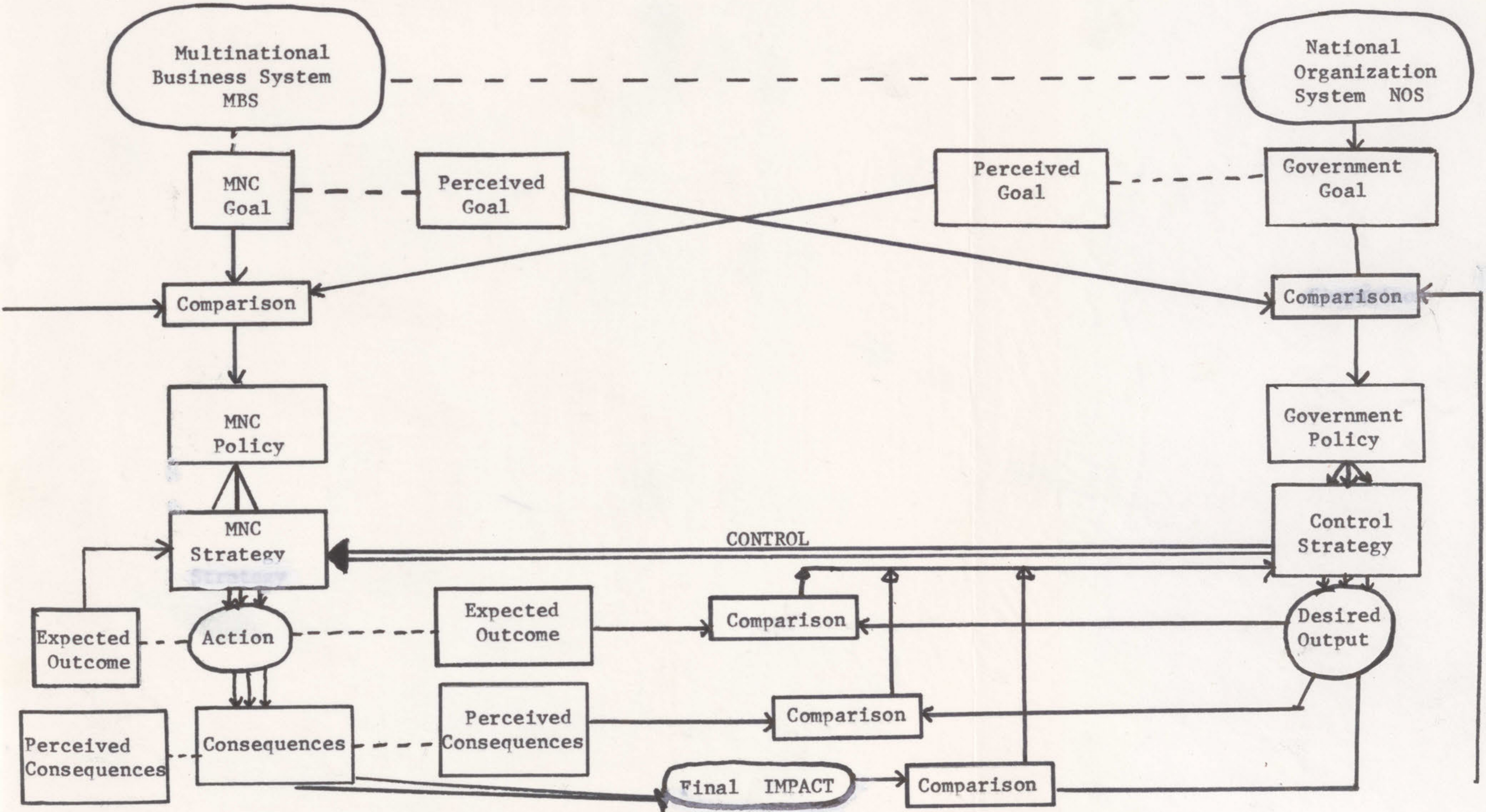
As described in Chapter I, the setting of this study involves two principal actors: less developed countries (LDCs) and multinational corporations (MNCs).

It is generally agreed that the MNCs can be of benefit to the development of the LDCs economy. The benefits that developing countries seek from links with foreign entities have already been identifed: capital, technology or other kinds of information, and access to markets (8). These benefits obtained will have possible costs associated with them, and LDCs would naturally like to influence or control the corporate activities in order to reduce these costs and/or realize the greatest possible benefits from these foreign links. In this work, we are primarily concerned with the benefits and costs of technology for LDCs in their association with MNCs In order to understand better the control function of channelling foreign technology, we illustrate it within a model for the policy and decision making process of the MNC -Government system in a developing country, suggested by Jan-Olaf Willums (9). (fig. 1).

The model, in figure 1, illustrates how the goals of both the MNC and the Government are generated by a system of "interacting interest". One the government side, the National Organization System (NOS) describes this interaction (figure 2 and 3). Vernon points out that to some extent, goals, priorities and tradeoffs are a function of the political ideology and social values of each country, but to a considerable degree, they also

Figure 1*

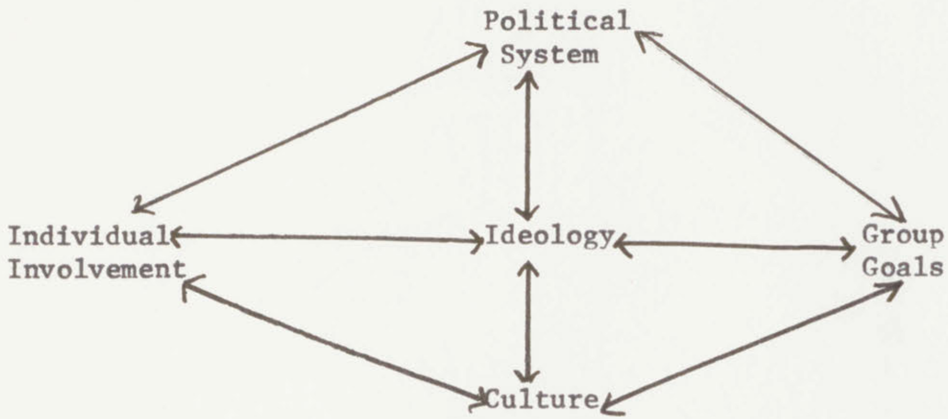
Policy and Decision Making Process of the MBS-NOS System



*Willums, Op. cit., p.2.

Figure 2*

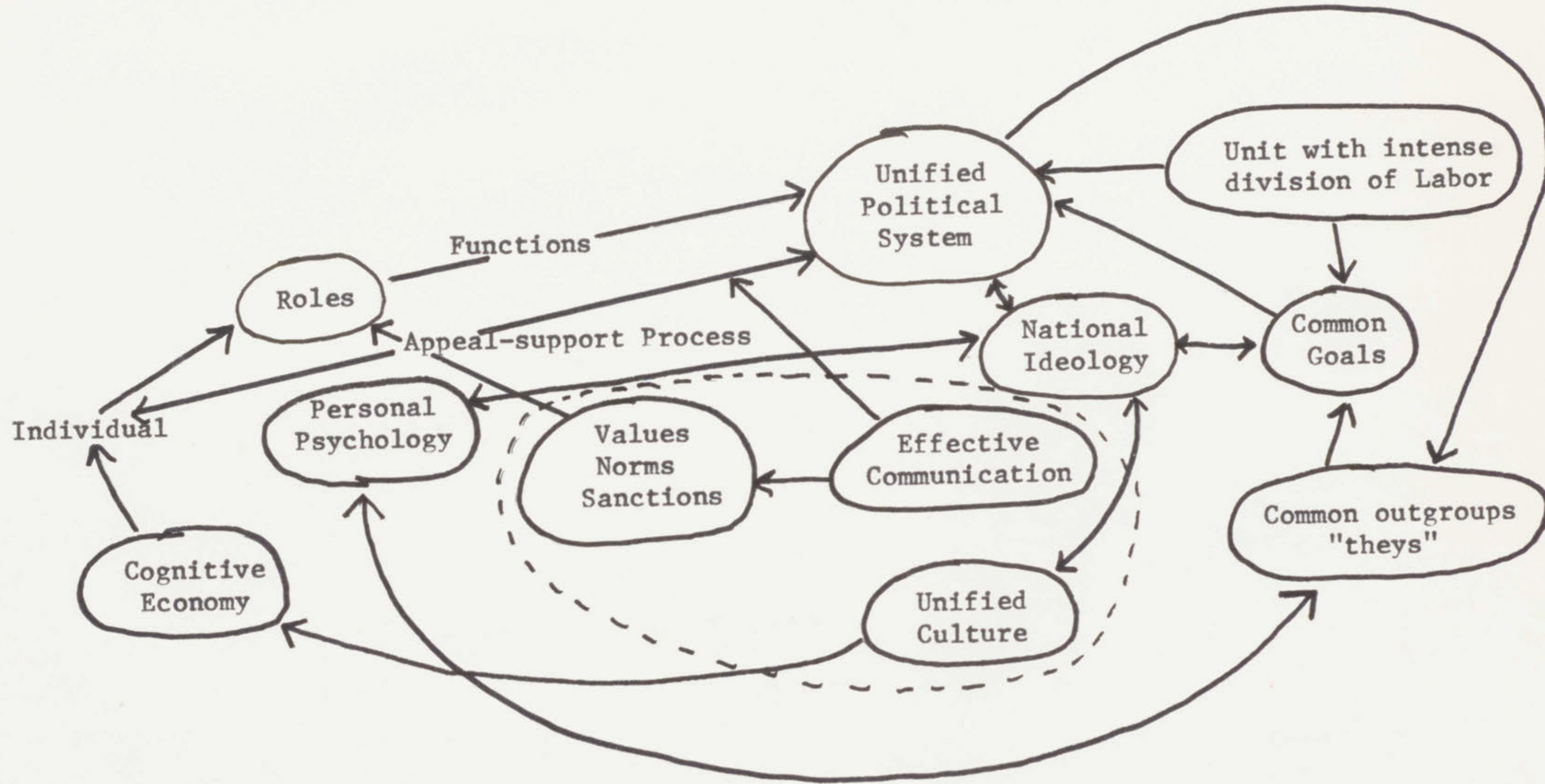
Components of the National Organizational System



*Willums, Op. cit., p. 3.

Figure 3*

Integration of Components of the National Organizational System



*Willums, *op. cit.*, p. 3

are determined by the country's objective conditions. Of these, the size of a country, the stage of development of its economy, and its national endowments, are key factors. (10)

Before continuing, with the analysis of the Multinational Business System in Willum's model, let's have a brief look at these key factors that will be relevant later when we will analyze the technology and foreign investment laws of Argentina, Brazil, Mexico and the Andean Pact.

The size of a developing country, measured by population and income, will have an important effect on the kind of relation that a LDC will have with a MNC. Due to the attractiveness of their markets, large size countries will have greater possibilities through their greater bargaining power of protecting their markets to give the opportunity to local producers to learn and achieve efficiency neccessary to compete internationally and of, developing distinctive products and technologies suitable to the conditions of the country.

The stage of development, measured as total output and production structure, will also have an influence in the kind of link between LDCs and MNCs. In the early stages of development the problems with which the LDCs have to cope do not require high levels of technology. As economies develop, however, the type of organization, knowledge, and skill that is needed for fruther growth tends to change in character; and dependence on outside sources of technology is required. It has been suggested (11) that

developing countries are confronted with a technological dependence problem that can be stated in a series of causal propositions: success in the development process requires the mastery of technologies of increasing complexity; increasing complexity connotes increasing organizational size, the requirements of organizational size are commonly greater than the internal capabilities of the country to satisfy the need; accordingly, even as the older technologies are mastered, assimilated and placed under the control of national entities, the size requirement pushes the country in the direction of added ties with foreign establishments, through which technological capabilities and market connections are secured.

The national endowments of any individual country also will have a definitive influence on the link with foreign enterprises. The endowments yield unequal bargaining power to countries of unequal scarce resources, like oil in the '70's, or natural nitrate to a country like Chile which had a world monopoly at the beginning of the century.

Returning to the Willums model a parallel system on the business side can be defined. MNCs function in LDCs as business entities, social institutions or as an agents of the home country, the first function being the dominant one. This Multinational Business System (MBS) interacts strongly with the National Organization System (NOS). The MBS and the NOS generate goals for the MNC and the government (figure 4), which are put into policies. In order to implement the policies a certain set of strategies is selected. This selection is strongly guided by the expected outcome

Figure 4*

LDC GOALS VS. MNC OBJECTIVES IN TECHNOLOGY TRANSFER

DEVELOPING COUNTRY (DC)	POTENTIAL CONFLICT OF INTEREST	MULTINATIONAL CORPORATIONS (MNCs)
1. Social cost-benefit (12)	vs.	Profit-maximizing strategies
- national - employment - balance of payments - consumer welfare		- global revenues - allocation of overhead - tax incidence - credit and currency flows - transfer pricing
2. Long-term growth and development objectives and goals (13)	vs.	Global strategies and operational modes
- increased productivity and competitiveness of domestic industry - development of technical manpower resources and skills - evolution of technological self-reliance - provide more extensive employment to low skilled and rural elements of labor force - provide expanded industrial opportunities to earn foreign exchange or save foreign exchange at efficient resource costs - adapt products to country's stage of development and income levels		- selling packages of goods and services that will maximize long-term corporate earnings - develop corporate resources and capabilities to support long-term goals and strategies - maximize corporate earnings through beneficial spread of overhead costs, tax incidence, currency exchange flows, and transfer pricing
3. Sovereignty	vs.	Corporate ownership and managerial control
- controls over foreign investment - screening of acquired technology - develop local enterprise and technological capabilities		- maintain proprietary rights over industrial assets and capabilities - maintain managerial control and flexibilities in allocating corporate resources on a global basis

Figure 4 (cont.)

LDC GOALS VERSUS MNC OBJECTIVES IN TECHNOLOGY TRANSFER

DEVELOPING COUNTRY (DC)	POTENTIAL CONFLICT OF INTEREST	MULTINATIONAL CORPORATIONS (MNCs)
DC bargaining position	vs.	Corporate bargaining position
- DC will continue to seek ways and means to enhance its bargaining position vis-a-vis MNC		- MNC managers have a basic responsibility to the corporations' stockholders, to maximize long-term profits within a reasonable range of social responsibility
- DC will seek to maximize derived benefits from MNC without becoming dominated by MNC or permitting unwarranted distortions in its economy		- What MNCs are able to contribute depends in large part upon the DC's stage of industrial development and technological absorptive capabilities
- DC will seek alternatives to foreign private investments to provide a continuing flow of industrial technology and expanding access to world markets		- Much of what is to be gained in the way of technological progress will depend upon the maturing of national competitive and bargaining power
- DC will expand their efforts to develop national design and engineering capabilities that will permit an expanding technological self-reliance		

and consequences of the action triggered by the strategy. The system is very similar on the business side and the government side (figure 5) (14).

The government policy is guided by the governments' perception of the MNC's goals and the comparison of present policies and strategy outcomes and their discrepancy from the governments' desired outcome in earlier encounters with MNCs. This will lead to a control strategy which will be determined by the perception of the expected outcome of the MNC's action and actual outcome of earlier actions.

In an effort to assert their control, host countries face the danger of imposing regulations that are too restrictive, that is, the ends desired may be accomplished with few restrictions, and those imposed may have undesired impacts not foreseen at the time the controls are imposed and enforced. Alternatively, to gain the benefits of foreign investment, host countries may offer such a variety of incentives that there are few gains remaining from the investment inflows. Such competitive postures are self-defeating in the long run. Developing countries will want then, a control over foreign interests without limiting too strongly their beneficial inputs to the economy. Thus, a careful balancing of restrictive and incentive measures must be the goal on the strategy level.

What control mechanisms are available to the LDCs? The control mechanisms used will be influenced by the kind of arrangements that LDCs chose to have with foreign entities as a way of obtaining the three prin-

cipal benefits provided by MNC: capital, technology, and access to the market. Three kinds of arrangements can be distinguished:

1) the unambiguous package: a subsidiary wholly owned and managed by foreign owners, representing a conduit for the contributions of capital, technology, and market access;

2) the ambiguous package: a subsidiary jointly owned by foreign and local interests with some agreed division of managerial responsibilities and prerogatives;

3) the unpackaged elements: a locally owned enterprise that has assembled such foreign capital, technology and market access as it requires for its operations. (15)

In order to select the optimum strategy, all reasonable possible strategies must be taken into consideration. The control strategies available can be categorized with respect to the business strategies they control (figure 5):

a) Sales strategy control;

b) Supply strategy control;

c) Labor strategy control;

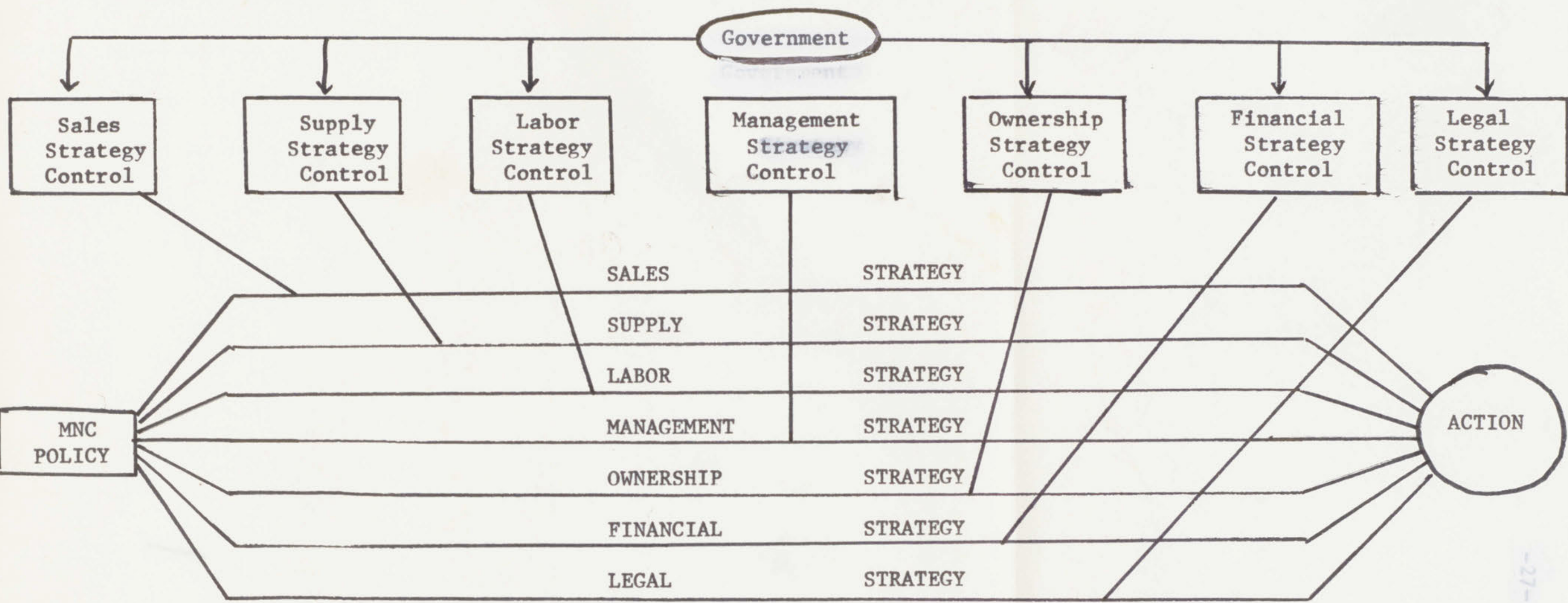
d) Management strategy control;

e) Ownership strategy control;

f) Financial strategy control; and

g) Legal strategy control.

Figure 5*



Government - MNC Strategies

*Willums, op. cit., p. 5.

We will now proceed to analyze the strategies to control foreign entities used by the Andean Pact, Argentina, Brazil, and Mexico. These strategies were implemented in each country through two kinds of laws: A Transfer of Technology Law and a Foreign Investment Law. In analyzing these laws, we will place more emphasis on the Legal, Financial and Ownership Control Strategies, which were the ones considered the most relevant from the point of view of MNC.

Andean Pact:

Profile. In area, the Andean Pact region, with 2,114,001 square miles, is second in size after Brazil (3,286,470 square miles) in Latin America, or half the size of the United States. With the entrance of Venezuela, into the area (Feb. 1973), the Andean region offers a marketing population of 70 million and a Gross National Product (GNP) similar to that of Brazil. Some basic economic data are shown in Table 1. The six countries offer a combined import market of about $5 billion. Despite an upsurge in the Andean Group exports in the last few years, imports have grown faster than exports. As a result, the five original Andean members have run a trade deficit for a number of years. Venezuela has had a positive trade balance since 1960 (16).

Intra-Andean exports among the original five countries increased US $100 million in the three years since the Cartagena Agreement was signed (May 1969), which represents 170% growth (17) and now constitute about 5% of total exports. (Table 2)

Table 1

Some Basic Economic Data of the Andean Group, 1970

COUNTRIES	AREA a Thousands of square kms	POPULATION a		GROSS NATIONAL PRODUCT b	
		Total (thousands)	Active (%)	Total (Million US$)	Per Capita (US$)
BOLIVIA	1,098.6	4,658.1	34.1	906.3	195
COLOMBIA	1,130.3	21,160.3	29.6	8,055.1	363
CHILE	756.9	9,778.8	32.6	6,028.3	616
ECUADOR	270.7	6,027.0	31.4	1,750.6	290
PERU	1,280.2	13,585.0	31.5	5,145.2	378
VENEZUELA	912.0	10,755.0	31.4	9,008.2	837
TOTAL	5,456.7	69,964.2	31.3	36,615.	527

a Provisional data (1970)
a Source: Board of the Cartagena Agreement
b

Agency for International Development, Office of Financial Management, Statistical and Reports Division, Latin America A.I.D. Economic Data Book.

Table 2 --ANCOM: Imports, Total and Intra-ANCOM, 1970-71

(thousand dollars)

	Bolivia	Chile	Colombia	Ecuador	Peru	Venezuela	ANCOM Total
1970							
Imports, total world	158,529	343,575	842,960	247,578	618,839	1,753,327	3,964,808
From ANCOM, total	4,646	45,334	39,696	30,562	45,789	18,936	184,963
Bolivia		1,207	1	--	674	10	
Chile	1,920		10,366	3,929	11,146	7,047	
Colombia	474	16,314		18,471	26,723	5,905	
Ecuador	102	9,032	9,965		2,439	107	
Peru	2,116	7,096	9,841	2,578		5,867	
Venezuela	34	11,685	9,523	5,584	4,807		
1971							
Imports, total world	171,283	267,341	901,155	303,920	752,639	1,915,278	4,311,616
From ANCOM, total	5,020	58,087	51,136	40,627	60,930	15,729	231,529
Bolivia		3,898	320	5	5,105	46	
Chile	2,075		14,539	4,920	10,256	3,589	
Colombia	512	17,774		22,847	29,302	6,032	

*U.S. Department of Commerce, OBR73-49.

Technology transfer and foreign investment in the Andean Pact is regulated by the Standard Regime for Treatment of Foreign Capitals and for Treatment of Marks, Patents, Licenses and Royalties, which is Decision No. 24, amended by Decisions 37 and 37a of the Commission of the Cartagena Agreement.

The Standard Regime for Treatment of Foreign Capitals and for Treatment of Marks, Patents, Licenses and Royalties - (Decision #24). (20)

The Standard Regime for Treatment of Foreign Capitals and for Treatment of Marks, Patents, Licenses and Royalties, also known as Decision #24, o4 as the Andean Foreign Investment Code (AFIC), was approved by the Commission of the Cartagena Agreement #24, on December 1970 and went into effect on July 31, 1971. The AFIC is one of several joint policies used by the Andean Pact to advance economic integration.

The AFIC objective is to promote an integrated development, avoiding costly intra-regional competition to attract investments to certain member countries through tax and tariff advantages. It was inspired by a different principle from the traditional notion of attracting capital by giving great advantages and priviliges. In this case, the incentive for drawing foreign capital is the potential integrated market (18). The Code states that "one of the fundamental objectives of the common regime must be the strengthening of national companies, in order to enable them to participate actively in the subregional market." From another point

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of view, this latter objective can be seen in the second of the Code's four principal purposes:

1) to exclude foreign investments from key sectors of the Market's economy;
2) to reduce foreign participation in local companies to a minority position;
3) to diminish reliance on foreign technology while stimulating the development of local technology; and
4) to avoid competition among the Members in offering incentives to foreign investors.

Let's now identify in the AFIC the control strategies which channel foreign technology.

The Andean Code caused a subregional industrial property bureau, which is to be a liaison agency to collect information and advise the national offices on all matters connected with application of common regulations on industrial property.

Every contract involving the importation of technology, patents and trade marks must be approved by the competent body of the respective member country.

Contracts concerning transfer of foreign technology or patents will not be authorized if they contain:

1) clauses which tie the licensee to purchase specific capital goods, intermediate products, raw materials, other technologies, or employing specific personnel - save if the price is competitive;

2) clauses that permit the licensor to set the price of the products manufactured under license;
3) clauses that have restrictions on the volume and nature of production;
4) clauses that prohibit the use of competitive technologies;
5) clauses that establish a full or partial purchase option in favor of the supplier of the technology;
6) clauses compelling to grantback improvements in the technology or related inventions resulting from its use;
7) clauses that require payments of royalties for patents not used by the licensee.

Similar prescriptions are found for licenses of trademarks.

Intangible technological contributions cannot be computed as capital contribution, i.e., such contributions cannot be capitalized. Rather, they shall have the right to the payment of royalties, after authorization is given by the competent national body. A foreign-owned affiliate is not permitted to make payment in any form to the parent company or another affiliate for intangible technical assistance, and no tax deduction of expenses will be permitted for this purpose.

The Committee of the Cartagena Agreement "shall promote and protect the production of subregional technology as well as the adaptation and assimilation of existing technologies". This program will be achieved by giving tributary and other special benefits to encourage production and use

of new technologies. Finally, the Committee is empowered to determine production processes, products or groups of products with respect to which no patent privileges may be granted.

As mentioned before, we must bear in mind the close relation existing between the transfer of technology and foreign investment controls, because it may be that the technology transfer controls will not prevent a foreign enterprise from doing business in a country, but the imposition of other types of control may do so.

Ownership Controls

These controls should be analyzed under different aspects:

A) reserved sectors of the economy

B) limits on foreign investment

C) divestment procedures

A) Reserved sectors of the economy.

In the sector of basic products (primary activities of exploration and exploitation of minerals of any kind; liquid and gaseous hydrocarbons; gas pipelines; oil pipelines and exploitation of forests) foreign companies will be given authorization to operate under the concession system, provided the duration of the contract does not exceed 20 years.

The Code excludes new foreign investments from the following sectors:

1) the domestic wholesale and retail trade;

2) the communication industry;

3) public utilities including domestic transportation;

4) insurance companies, banks and other financial institutions;

5) manufacturing of products reserved to Bolivia and Ecuador.

B) Limits on foreign investment.

The amount of foreign investment may range from a wholly-owned subsidiary (100%) or a majority joint-venture, provided the investment is not in a mandatory divestment sector or the company renounces the duty-free program of the Cartagena Agreement; to a minority joint-venture one in which at least 51% of the ownership is in the hands of national investors whether a private sector or government.

Reinvested profits are considered as new investment and require approval of the authorities, except that 5% of the company's capital can be re-invested each year without approval.

C) Divestment Procedures.

The areas of mandatory divestment in which foreign firms will have to reduce their equity and management participation to less than 20% within three years from the effective date (July 31, 1971) are limited to:

1) the domestic wholesale and retail trade;

2) the communications industry; and

3) domestic transportation (19)

Decision 24 stipulates that for existing foreign investment to enjoy the advantages of the duty-free program it must divest in a gradual and progressive way becoming a "mixed company" within a period of 15 years (20 in the case of Bolivia and Ecuador), meaning that no more than 49% can

be owned by the foreign company. The same applies to new foreign investment, with the difference that for the latter the divestment is mandatory. Also there is a difference in the timing of the divestment. For existing foreign investment, participation of nationals must be at least 15% at the end of three years from the effective date and 45% upon completion of two-thirds of the time agreed upon for the transformation. For new investment, participation of national investors must be 15% (10% for Bolivia and Ecuador) at the time "production begins," no less than 30% (10% for Bolivia and Ecuador) upon completion of one/third of the period agreed upon and no less that 45% (35% for Bolivia and Ecuador) upon completion of two/thirds of the same period.

Financial Control

a) Repatriation of earnings - remittances of profits each year may not exceed 14% of direct foreign investment.

b) Repatriation of capital - upon sale of shares or participation rights, foreign investors may re-export their capital (foreign investment plus re-investment minus net losses) plus capital gains after payment of taxes.

c) Borrowing - foreign-owned companies are limited in their access to local capital sources to short-term credit only. Loans from the parent or other foreign sources require prior approval, and the interest permitted also will be fixed by the authorities, normally no more than 3% above the cost of borrowing in the parent company's country.

d) Transfer pricing - to guard against profits being shifted from one affiliate to another, the Code provides for majority local ownership, prohibition of forced purchases by licensees and in article 6c government control over intercompany pricing.

Management Control

Management control must be in proportion to the share of equity.

Institutions implementing the laws.

As all foreign investment and all contracts on importation of technology and on licenses for the exploitation of trademarks and patents of foreign origin must be authorized and registered, each Member Country of the Cartagena Agreement has an organization in charge of these functions.

Objectives of the Andean Pact Governments

The objectives of the Andean Pact governments in adopting Decision 24, particularly the key issues of control analyzed in the previous section, can be classified in four broad groups. Decision 24 clearly is a government policy not based solely on world-wide efficiency considerations. Instead, it includes "national goals of efficiency (effective use of national resources to achieve economic growth), equity (acceptable sharing in the benefits of international [and national] economic progress), participation (a role for each country in deciding the structure of the world system and its place

within it), and autonomy (sufficient independence to permit desirable diversity)."[1]

Within the same line, the Andean Pact governments, through Decision 24, confirmed the observed trend of rising government intervention in the affairs of MNCs in the host countries. "Such intervention implies an increasing preservation of national markets and national economic potential, with respect to the rest of the world, to fulfill national or subregional development objectives rather than leaving them to the global policies and objectives of transnational enterprises. Furthermore in order to dilute political and economic risks, Latin American states formally", as the Andean Pact, "are collaborating to fulfill their national and subregional objectives with respect to access to and treatment of foreign factors inflows.[2]

It can be seen that the four principal purposes of Decision 24: 1) to exclude foreign investment from key sectors of the Market's economy, 2) to reduce foreign participation in local companies to a minority position, 3) to diminish reliance on foreign technology while stimulating the development of local technology, and 4) to avoid competition among the members in offering incentives to foreign investors; are in close consistency with the above considerations. The Code's purposes are expected to be achieved by the control mechanisms analyzed in the previous section, namely: the technology transfer; the ownership; the financial and the management controls.

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[1]Cited by Constantine V. Vaitsos, "The Changing policies of Latin American Governments toward Economic Development and Direct Foreign Investments", Junta del Acuerdo de Cartagena, March 1973, p. 10,

[2]Constantine V. Vaitsos, Ibid., p. 38.

Argentina:

Profile. Argentina, with an area of 1,072,068 square miles and a population of 24.3 million (1970) (22), is the second largest country in South America in both dimensions. Argentina is a $2 billion dollar market for exports and will probably continue to import at that level for several years. Its foreign trade in 1973 showed a large surplus: total imports were $1,900 million dollars and exports were $2,694 million dollars (23). Argentine GNP in 1969 was $22.8 billion (350 pesos ≑ U.S. $1.) with an annual growth rate of its Gross Domestic Product (GDP) of 4.3% in 1972. Per capita GNP stands at U.S. $770. (24)

One of Argentina's biggest assets is its labor force, the active work force in 1970 being estimated at 9.5 million. In comparison with other Latin American labor forces, Argentina is high in skills and adaptability, which makes it very attractive for high technology manufacturing foreign investment.

Technology transfer and foreign investment are regulated by Law No. 19.231 of September 1971 and the Foreign Investment Law No. 20.557 of December 1973, respectively.

Transfer of Technology Law No. 19.231 (25)

The transfer of technology law was promulgated on September 1971. The purpose of this law is to have an overall control over the conditions, mainly on restrictive clauses and payments, under which technology is imported.

All firms must register with the appropriate national body all agreements which are concerned with (1) the licensing of the use and exploitation of trademarks, or copyright, or industrial design and models, (2) the supply of technical know-how, (3) the supply of detail engineering for the erection of facilities and manufacturing, and (4) occasional, periodical or permanent technical assistance.

Contracts relating to the transfer of technology will not be authorized in cases where they involve:

1) the use of a foreign trademark not involving any innovation or technological contribution.
2) the import of technology probably available in the country.
3) the price or other considerations are not in corresponding relationships with the contracted license or technology transferred.
4) rights are granted permitting direct or indirect regulations or alterations of production, distribution, marketing, investment, research or development of local technology.
5) obligations are made for the acquisition of equipment or raw material from a determined source and outside the country.
6) the prohibition to export or to sell for purposes of export of local products, or subjecting rights of sale to foreign authorities or in any way limiting or regulating exports.
7) an obligation to grant back improvements in the technology or in respect to related inventions resulting from its use.

8) the imposition of prices upon national products or sale or resale.

9) assignment to a foreign court of jurisdiction over litigation related to an agreement.

The payment of royalties is regulated for certain sectors, activities, or goods. There will be a maximum percentage of payments or other consideration depending on which sector, activity or good is concerned. There is also prohibition on royalty payments between a parent company and a subsidiary.

The organization in charge of implementing this law is the National Registry of License and Technology Agreements within the Ministry of Industry, Commerce and Mining.

The Foreign Investment Law No. 20.557 (26)

The Foreign Investment Law No. 20.557, was approved by Congress on November 7, became a law on November 29 and was published in the <u>Boletin Oficial</u> on December 6, 1973. The purpose of this law is go "govern all matters concerning: a) direct foreign capital investments; b) loans; and c) contracts or agreements of any nature by virtue of which rights and obligations to transfer securities abroad arise or may arise" (transportation, insurance and use of technology agreements are excepted).

Ownership Controls

These controls fall into any one of the following categories:

A) Reserved Sectors of the Economy

B) Limits on Foreign Investment

C) Divestment procedures

A) Reserved Sectors of the Economy

No new foreign investment will be authorized where they are destined for:

1) National security and defense activities.
2) Public Services (sanitary, power, gas, transportation, telecommunication and postal services).
3) Insurance, commercial banking, save branches of foreign banks where there is both reciprocity and national policy interest, and financial activities.
4) Publicity, radio and television stations, newspapers, magazines and publishing houses.
5) Local marketing services, save those of own manufacturers.
6) Activities according to law, are reserved to Government entities or Argentina's capital companies.
7) Agricultural, stock breeding and forest activities, save those providing new technology.
8) Fishing, save if production could be sold in international closed markets.

B) Limits on Foreign Investment

No restrictions.

C) Divestment procedures

For new foreign investment in activities other than those mentioned under point (1) above, priority will be given for that contributed a national capital company (one in which local ownerships is more than 80%) within 10 years, with the additional obligation to pay in at least 20% within the first five years and the remainder at rates not less than 16% per annum.

Existing imvestment may either adhere to this Foreign Investment Law or continue operating under previously existing regulations. But, whether it adheres or not the investment must be registered, and the government may require fadeout or minority ownership. As will be seen later, taxes play an important role in the decision of the company.

Financial Control

a) Repatriation of earnings

Here we must distinguish between those companies adhering to the law and those no doing so. For those that do, the amount of profit allowed to be transferred may not exceed the rate of 12.5% or that rate which exceeds by 4 points the interest paid for local deposits of fixed terms of 180 days or less. The maximum shall be the highest rate resulting from either of the above suppositions. Profits which annually exceed the percentages above mentioned or those failing to properly apply for transfer will remain forever invested in the country and "under no circumstances can they be transferred abroad."

For those companies that decide not to adhere to the new law and remain under the original legislation by which they entered the country, remittances of profits are subject to a special tax levied against their repatriable capital with the right to transfer profits (i.e., the original foreign direct investment plus net reinvested earnings on that capital), according to the following scale:

Remittances as a percentage of Repatriable Capital	Tax on the remittances
Up to 6%	20%
6 to 9%	22%
9 to 12%	25%
12 to 15%	30%
over 15%	40%

In this case there is no ceiling in the remittance of profits.

b) Repatriation of Capital

Repatriable capital is defined as the initial investment plus reinvestment, less than the repatriated capital and net losses, computed in the original currency, at the rate of exchange prevailing at the time of their repatriation.

Repatriation of capital will be allowed provided that:

a) it will guarantte that continued operation of the company and the rendering of services under the stipulated conditions;

b) it does not exceed 20% of the repatriable capital; and

c) an initial period of not less than 5 years from the date of approval of the investment contract has passed.

In case of a critical balance of payment situation, as so judged by the Banco Central de la Republica Argentina, repatriation of capital and transfer of profits may be postponed, until such situation subsides, without affecting the right of remittance of such profits.

c) Borrowing

To every foreign investment contract a maximum limit of indebtedness is fixed. Said indebtedness is limited exclusively to short term internal credit. In the case of foreign loans, the effective interest rate may not exceed by more than two points that of first class securities prevailing in the financial market of the country of origin of the currency in which the operation has been registered.

Management Control

The employment of Argentinian managers is established as a requirement, but no fixed percentage is specified.

Institutions Implementing the Law.

A subagency of the Ministry of Economy and a Registry of Foreign Investment will be in charge of monitoring compliance by authorized investment. This institution will see that the contracts approved meet the following requirements:

1) that investments are carried in activities and geographical areas specified by Government priorities.
2) that they contribute to better use of Argentine human and natural resources.
3) that they improve local living conditions.
4) that they avoid or limit environmental pollution.

5) that they produce import substitutes and have a net benefit to the country in respect to foreign currency utilization.
6) that they incorporate technology necessary for the social and economic needs of the country.
7) that they employ Argentine managing, scientific, technical and administrative personnel.
8) that they do not reduce the actual or future market of local capital markets.
9) that they shall not require internal savings which shall surpass the limits established to guarantee an adequate financial structure to carry out the project.

Objectives of the Argentinian Government

Historically, the industrial development of Argentina has followed no specific plan. There was a liberal policy concerning the transfer of technology, although it was not free of "inconveniences"to Argentina. Such inconveniences were reflected in:

1) high import price of foreign technical knowledge;
2) failure to adapt technology to local conditions;
3) limited domestic effort to adopt foreign technology and develop local technology and;
4) lack of bargaining power of the domestic importer of technology.

To coreect these inconveniences "the intervention of the government was imposed following the example of Decision 24 of the Cartagena Agreement."

With this objective in mind the Argentinian government enacted a "technology transfer" law (law No. 19.231 of September 10, 1971) which had the following purposes:*

a) channel the importation of technology to those production activities where local technology does not exist or is not available in the country;

b) contribute to a better matching of the cost of the imported technology and its accompanying conditions with the interests of the country; and

c) prevent the interference of imported technology on the country's development and above all on the development of domestic technology.

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*These objectives wereoutlined in a speech given by Dr. Ernesto Arcama Zorraquin at a Briefing Conference on "Licensing of Industrial Property and Transfer of Techology in Latin America", sponsored by the Asociation Interamericana de la Propiedad Industrial (ASIPI)(Inter-American Association of Industrial Property), Chicago, Ill., U.S.A., May 13 and 14, 1974.

Brazil:

Profile. Brazil with its 3,286,000 square miles is the largest country in South America, being three times the size of Argentina and larger than the U.S. excluding Alaska. Brazil also accounts for the largest population in Latin America with 103.7 million, and its annual growth is 2.9%. Brazil's GNP in 1972 was $46.85 billion (27) (current prices at 6.32 per U.S.$) and its GDP grew by an estimated 10.4% in that same year (28). Its foreign trade showed a deficit in 1972: total imports (C.I.F.) were $4,783 million and exports (F.O.B.) 3,991 million.

With the take-off of the Brazilian economy a shortage of manpower of all degrees of skill has appeared, even though it has labor force of 30 million (1970) which represents 32% of total population.

Total estimated foreign investment is around $4.0 billion. Brazilian legislation on foreign investment is covered basically by two laws and one decree. These are: Brazil's New Industrial Property Code, Law 5772 and Law 4131 revised by Law 4390 and regulated by Decree 55.762.

Brazil's New Industrial Property Code, Law 5772 (29)

Brazil's new Industrial Property Code, was promulgated on December 21, 1971. It was designed to achieve the following principal goals:

1) to reduce the time required to process patents and trademarks;
2) to establish an information service to help firms select and obtain the best prices for technology needed for their development, and
3) to provide adequate industrial property protection to businessmen.

In contrast to the U.S., for example, the Brazilian code, as in most Latin American countries, is confused and very difficult to enforce due to the non-existance of product patent, and virtually no trademark, protection.

Some of the major constraints in the Code are:

a) the non-patentability of some products and processes (nuclear and atomic products and processes; food and drugs products and processes to obtain them; chemical and metal mixtures and alloys, but the processes may be patented).

b) the refusal to approve licensing agreements that place restrictions or controls on the licensee source of imports.

c) the validity of a patent is for a term of 15 years from the date of the filing of the application, and of 10 years for the industrial designs and models.

d) the non-recognition of the International Patent Convention. In order to be accorded priority rights for filing in Brazil, the Code requires a "complete translation" into Portuguese either accompanying, or following within 180 days, a patent application previously filed in a country with which Brazil has an international agreement.

e) the permission to register similar pharmaceutical and veterinary trademarks relating to similar therapeutic products unless there is a "flagrant" possibility of error, doubt, or confusion on the part of the consumer. The Code also requires that, in the case

of pharmaceutical or veterinary products, both the house mark and specific mark be shown with equal prominence.

f) in case of compulsory licensing, a patent may remain unworked for three years before it must be released for compulsory licensing to interested parties; and non-compulsory licensing may remain unworked for four or five years. (30).

g) depending on the type of production, royalties are limited to between 1% and 5% of gross sales when patents and know-how are involved.

h) royalties on trademarks are limited to 1% of gross sales, for only the first 10-year registry period, and thereafter no charges can be levied.

i) unlike remittances of royalties for the use of patents or trademarks, remittances in payments for technical assistance by local firms to foreign principals are not prohibited.

j) no royalty payments to a parent company are tax deductible, such payments being counted as dividend remittances.

k) fees for technical assistance must be paid each time assistance is obtained and not under long-term contractual arrangements with lump sum payments.

l) fees, other than royalties, may only be remitted by a Brazilian company to a foreign company (regardless of affiliation) for a period of not more than five years following the introduction of a new technology. Extension for an additional five years may be obtained.

Institutions Implementing the Law

The organization in charge of implementing this law, is the National Institute of Industrial Property (IMPI) depending on the Minister of Industry and Commerce. All contracts which involve the transfer of technology must be registered at the INPI.

Foreign Investment Legislation: Law 4131 revised by Law 4390 and by Decree 55.762. (31) (32)

Law No. 4131, of September 3, 1962, was amended by Law No. 4390 of August 29, 1964, Decree-Law No. 43 of November 18, 1966, and Decree-Law No. 94 of December 30, 1966; and it is regulated by Decree No. 55.762, of February 17, 1965.

The purpose of the Brazilian regulations on foreign investment has been to attract foreign capital, by assuring non discrimination against foreign capital. National and foreign investment enjoy the same protection, guarantees and incentives.

Ownership Controls

For consistency purposes we analyze these controls in the same way as in previous sections:

A) reserved sectors of the economy;

B) limits on foreign investment;

C) divestment procedures;

A) Reserved Sectors of the Economy

Brazil prohibits foreign investment in the exploration, development, extraction and refining of petroleum. Also, there is prohibition of foreign investment in public utilities, domestic transport, advertising,

commercial broadcasting, new commercial banking, television and newspapers. Petrochemicals are apparently reserved for joint government-private development.

B) Limits on Foreign Investment

There is no restriction on foreign participation in most industries, but the Brazilian government encourages the formation of joint ventures rather than 100% investment or absorption of existing firms. In some cases the government insists on Brazilian control, such as in mining or in investment banks and in some cases, as it was mentioned above, the government will not allow any foreign participation.

C) Divestment procedures

Not applicable.

Financial Control

a) Repatriation of earnings

There is no ceiling or limitation on the remittance of profits, except for luxury products where profits may be repatriated only up to a limit of 8% of the investment each year (5% in the event of balance of payments problem). (34)

The only restriction is a higher rate of taxation on the value of the remittances when, during three consecutive years, the average profit exceeds 12%. Normally such remittances are taxed at 25%. If the profit percentage exceeds a 12% average over three consecutive years, such transfers are subject to an additional tax, which is collected at the time of the first remittance following the three-year period, in accordance with the following scale: (35)

- profits between 12% and 15% of capital and reinvestments — 40%
- profits between 15% and 25% of capital and reinvestments — 60%
- profits above 25% of capital and reinvestments — 80%

In the event of balance of payment problems, profits remittances would be limited to 10% per annum in any case.

b) Repatriation of Capital

Provided that the capital has been registered, there is no difficultry in remitting funds as a reduction of capital. However, if the capital reduction takes place within five years of the tax free capitalization of earnings, the tax free status is lost and tax must be paid. Balance of payment problems could lead to a prohibition of remittances of repatriation of capital.

c) Borrowing

Only limited access to local financial sources is available to foreigners, and foreign majority owned companies cannot benefit from some special financial sources set up for new industry.

Management Control

There is no restriction on nationality of top management. The only applicable requirement is that 66% of the workers on payroll must be nationals.

Institutions Implementing the Law

All capital and loans entering Brazil must be registered. Registration is effected by the Garencia de Fiscalizacao e Registro de Capitail, Estrangeiros (FIRCE) of the Central Bank of Brazil.

Objectives of the Brazilian Government

The Brazilian legislation, in general, is aimed to attract foreign capital by assuring no discrimination against it.

The imposition of certain restrictions as well as the incentives given on the Industrial Property Code, Law 5772, was related to very clear and specific goals.

- The incentives given for the initiation of R&D facilities are based on the belief that the "capacity to create technology is what makes the real difference between a developed and an underdeveloped country."*

- The Brazilian government expects, by limiting the percentages from 1 to 5 percent on royalties payment in accordance with the priorities given to various industrial activities, to reduce the abuses made in avoiding taxes by transferring profits as royalties.

- The remittance of profits legislation is aimed to have better control on times of balance of payments distress.

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*Peter Dirk Siemsen, "Licensing of Industrial Property and Transfer of Technology in Brazil", paper presented at the Briefing Conference on Licensing of Industrial Property and Transfer of Technology in Latin America, sponsored by the Asociacion Interamericana de la Propiedad Industrial (ASIPI) (Inter-American Association of Industrial Property), Chicago, Ill., U.S.A., May 13 and 14, 1974.

- Brazilian policy considers trademark registration a much stronger means of monopoly than a patent itself. Considering the Brazilian economic expansion and development its dependence on the exports of industrialized products, the Brazilian government wants to avoid the trade mark as market control as much as possible. Further, it may happen that within the country, the licensee, for years has developed a good will around a trademark and them is terminated because the licensor thinks the market looks good. So the licensor decides to go in by himself and all the investment made by the licensee is lost.

For these reasons, the Brazilian government, encourages the local industrialist to develop their own trade marks, which become even more important when Brazilian products try to enter foreign markets.

- The non-patentability for pharmaceutical is due to the fact that Brazil is dependent over 90% on active pharmaceutical substances (even more than oil), and thus, the idea of the industrial development patent is to motivate the production of active pharmaceutical substance in Brazil.

Mexico:

Profile. Mexico's 761,600 square miles and a population of 52 million (36) puts it in third and second places, respectively, within Latin America. Mexico's 1972 GDP was $41.2 billion (37) , representing a 7.3% per annum growth in real terms. Mexico's foreign trade in 1972, did not do as well as its GDP, for a record trade deficit of $1.12 billion was reported: imports amounted $2.9 billion and exports were $1.8 billion. In 1970 Mexican labor force was 13 million.

It is estimated that Mexico had a total of more than $2 billion in direct foreign investment at the end of 1970. Mexico has passed two recent laws to govern foreign technology and foreign investment respectively. There are the Law on the Transfer of Technology, and the Use and Exploitation of Patents and Trademarks; and the Law to Promote Mexican Investment and to Regulate Foreign Investment.

Law on the Transfer of Technology and the Use and Exploitation of Patents and Trademarks. (38)

This law was passed on December 28, 1972. Its purposes matches the United Nation Conference on Trade and Development (UNCTAD) objectives on Transfer of Technology, namely "to establish institutions for the specific purpose of dealing with the whole range of complex questions connected with the transfer of technology". (39)

The Law requires the registration of all licenses covering patents, technology and trademarks. Under the terms of the law, the Secretary of Industry and Commerce shall not register the actions, agreements and contracts covering patents, technology and trademarks, in the following situations:

1) when the technology is freely available in the country;
2) when the price paid for the technology is excessive;
3) when managerial control is given to the licensor;
4) when there is obligation to return improvements or inventions free of charge, to the licensor;
5) when there is an imposition of limitation on R&D undertaken by the licensee;
6) when there is an obligation to purchase equipment and raw materials from the licensor;
7) when there is a prohibition or restriction in respect to exports contrary to the national interest;
8) when the use of complementary technology is prohibited;
9) when the licensee is obliged to sell exclusively to the licensor;
10) when permanent employment of personnel is imposed;
11) when the volume of production or price of sale or resale is determined by the licensor;
12) when there is an obligation for exclusive sales or representation contracts covering the national territory;
13) when the duration of the contract is excessive in no case exceeding 10 years;
14) when conflict over interpretation of an agreement is to be submitted to the jurisdiction of a foreign court.

There is flexibility in treating points 2, 3, 6, 8, 9, 10, 11, and 12 when it is in the Mexican national interest. The other points are not negotiable in any case. One of the major constraints is the royalty fee th Government is favoring a 3% limit on gross sales, even through there are no regulations in respect to rates.

The institution in charge of implementing this Law, is the National Registry of the Transfer of Technology, under the auspices of the Secretary of Industry and Commerce.

The Law to Promote Mexican Investment and to Regulate Foreign Investment (40).

This Law was published in the Diario Oficial of March 9, 1973 and became effective 60 days thereafter. The purpose of the law "is to promote Mexican investment and to regulate foreign investment in order to stimulate a just and balanced development and consolidate the country's economic independence" (article 1)

Ownership Controls

A) Reserved Sectors of the Economy

Mexico prohibits foreign investment in the exploration, development, extraction and refining of petroleum. The following activities are reserved exclusively for the State: petroleum, petrochemicals, radioactive minerals and the generation of nuclear energy, mining, electricity, railroads, communications and others established by law. Areas reserved exclusively for Mexicans are: radio and television, transport, forestry, gas distribution and other established in specific laws.

B) Limits on Foreign Investment

All new foreign investment or expansion into new product lines by existing firms is required to occupy a minority ownership position. The percentage limit varies according to the activity:

49% in the exploitation and processing of minerals;

34% in the case of special concessions for the exploitation of national mining reserves;

40% for secondary petrochemicals;

49% in all other sectors, if not otherwise specified by law or regulation.

C) Divestment procedures

No regulations. It is directed only that foreign investment shall comply with the percentages and conditions specified by the laws or regulations.

Financial Control

a) Repatriation of earnings and capital

Mexico has no exchange control and, therefore, foreign investors are permitted freedom in foreign exchange operations. Capital, profits and dividends may be transferred readily to and from Mexico. (41)

b) Borrowing

No restrictions.

Management Control

The participation of the foreign investor in the administration of the business enterprise may not exceed his participation in the capital.

Institutions Implementing the Law

The institution in charge of implementing this law is the National Commission on Foreign Investment. Applications for foreign investment must be submitted for approval to the Commission, which will use the criteria outlined in Article No. 13 of the Law, to determine the appropriateness of authorizing the investment. One of the principal criteria used for foreign investment, "its positive effects on the Balance of Payments and, especially on the increase of Mexican export" (Article 13, III).

Finally, all foreign investment has to register with the National Registry of Foreign Investment, who operated under the auspices of the Secretary of Industry and Commerce.

Objectives of the Mexican Government

The Mexican government through the criteria established in Article 7 of the Transfer of Technology Law expects to prevent situations as the ones stated on the Bill for this same law:

> From the examination made of the contracts of agreements through which the domestic industry acquires technology, it has been concluded that by means of same, the transmission of technology, useful and important for the industrial development of the country has been made possible; but that also oftentimes the technology acquired is obsolete, inadequate or already available in the country and that, besides, in such contracts are included stipulations by means of which the enterprises supplying technology unduly increase the cost of the production of the receiving enterprises: compell them to acquire discontinued goods or items at an excessive price; prohibit or curtail their export operations; hinder their possibilities

for expansion or of the creation of their own technology; interfere with the management or with its manufacturing processes, distribution of marketing and submit to foreign courts the knowledge of the conflicts that may arise as a consequence of the interpretation or fulfilment of the contracts. Such stipulations and others of a similar nature, far from encouraging are detrimental to the domestic economy, hinder the health development of the industry; increase the cost of the industrial production that has been outlined by the Federal Government; represent an improper burden on the balance of payments and subordinate the domestic industry to the supplies of technology.

As a consequence, the establishment of standards which govern the transfer of technology is essential, as well as the adoption of a policy that will allow the obtention of greater benefits from the technology acquired; to reduce the adverse effects of its importation from the balance of payments; to strengthen the business transaction power of the domestic buyers and to permit the industrial sector access to a better technology available in the domestic and foreign markets at maximum conditions of opportunity, quality and price."*

*Cited by Bernardo Gomez Vega, "Legislation of Mexico", paper presented at the Briefing Conference on Licensing of Industrial Property and Transfer of Technology in Latin America, sponsored by the Asociacion Interamericana de las Propiedad Industrial (ASIPI) (Inter-American Association of Industrial Property), Chicago, Ill., U.S.A., May 13 and 14, 1974.

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CHAPTER III

This chapter analyzes how the multinational corporation (MNC) responds to controls on the transfer of technology and investment. This will be done in two stages: the first stage consists of a theoretical analysis of how MNCs perceive and react to the controls imposed by the transfer of technology and investment legislation of the Andean Pact, Argentina, Brazil and Mexico. The second stage is to observe in reality the perception by businesmen of the controls on technology and investment imposed by the countries and region mentioned above, and how they felt they could best operate and expand their operations. The second stage is done through two case studies of a qualitative nature developed primarily through discussion with lawyers and businessmen responsible for the international operations of their respective companies.

The Theoretical Approach

This theoretical analysis attempts to provide, through a framework of analysis, the most likely responses by MNCs given their goals, the environment where they operate, the choice of technology available to them and the method of transferring technology. Thus, the following elements compose this analysis:

1) the multinational corporations (MNCs), given that their goals are profits and control;
2) the environment, represented by the Andean Region, Argentina, Brazil, and Mexico, given the technology, ownership, financial and management control, analyzed in Chapter II;

3) the type of technology, distinguishing four classes:

    a) new and static technology;

    b) new and dynamic technology;

    c) old and static technology;

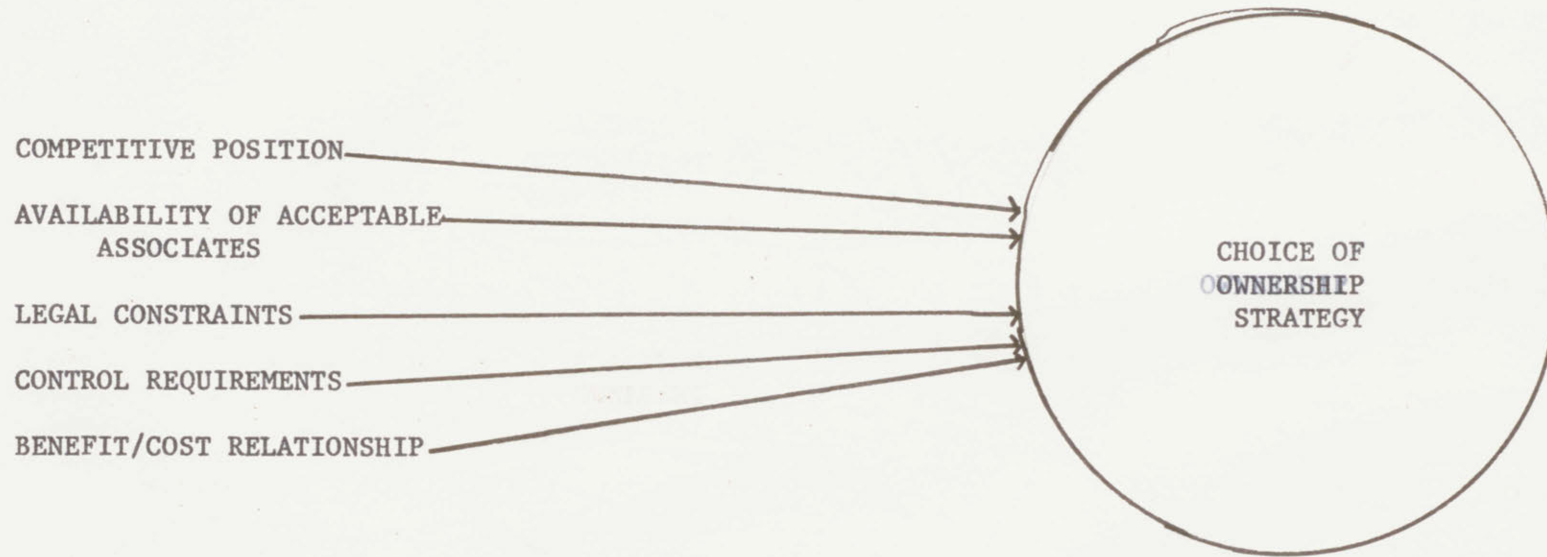
    d) old and dynamic technology;

4) the methods of transferring technology, which were seen on Chapter I. As we mentioned, in Chapter I, only licensing and direct foreign investment, are relevant and the ones which will be considered.

5) a framework of analysis.

In deciding what framework for analysis to use, it was thought that one related to the ownership strategy was the most appropriate, This is because ownership determine the management control (the Andean and the Mexican legislation stipulates that management control should correspond to the equity participation), and in turn, management control will have important implications on the financial controls (profit and capital remittances; borrowing; transfer pricing). Further more, the ownership requirements is the Andean and Mexican cases, the large number of joint-ventures taking place in both Brazil and Argentina and the joint-ventures with government as partners for certain reserved sectors of the respective economies, all serve to increase the importance of the ownership dimension and therefore make it the most appropriate framework of analysis.

FIGURE 6



THEORETICAL DETERMINATION OF
OWNERSHIP STRATEGY

The framework of analysis chosen is R. Robinson's "Analytical System for Determining Optimum Ownership Strategy". (42)

Description of the Framework

A brief description of the system is given. For a full and detailed description of it, refer to Robinson's "International Business Management - A Guide to Decision Making" (Holt, Rinehart and Winston, Inc., 1973), Chapter 5.

In deciding upon the choice of ownership, five factors should be considered: 1) competitive position, 2) availability of acceptable associates (or consumers), 3) legal constraints, 4) control requirements, and 5) benefit/cost relationship (fig. 6).

Of all the factors mentioned, the last three are the most relevant in this study.

Within the legal factors bearing directly on selecting ownership strategy, we will mention, those which are the most relevant in the countries or regions under study:

1) foreign tax credit - in order to credit foreign income and wealth taxes paid by associated foreign firms against U.S. tax liability, the U.S. firm must own at least 10 percent of the equity of the first-tier foreign subsidiary, which in turn must own at least 10% of the second.
2) tax liability - U.S. firms owning 50% of a foreign corporation may find that part of all of its income is taxable currently in the U.S. even if not repatriated.

3) reduction of witholding tax - this tax may be reduced if the foreign firm is partly owned by locals.

4) tax exemption and ownership - low tax or no tax on dividends if a minimum ownership is met.

5) investment guarantees - in order to qualify for a guarantee issued by the Overseas Private Investment Corporation (OPIC), a U.S. firm must be over 50% owned by U.S. citizens.

6) export controls - a foreign firm at least 35% owned by a U.S. firm is subject to U.S. export controls.

7) U.S. controls over direct foreign investment used to be applied to foreign corporations at least 10% owned by U.S. citizens.

8) treaty rights - to take advantage of them some ownership requirements are imposed.

9) selling rights - also some ownership requirements are needed to qualify

10) consolidation of financial statements to alter performance ratios.

11) restrictions on ownership by the host government - e.g. the Andean Pact and Mexico.

12) legally required ownership-sharing (with employees) - for example, the Industrial Community law in Peru.

13) restricted access to local resources - as seen in chapter II, all the countries under study, restrict the access to local borrowing it is foreign majority owned.

14) the right to increase investment - also seen in chapter two.

15) time limit on ownership - divestment procedures (see Chapter II).

16) protection of intangible property - (see chapter II).

17) expropriation - in the U.S., the so-called Hickenlooper Amendment, applies only to company owned at least 50% by U.S. citizens.

18) payment of royalties and fees - refer to Chapter II.

The control requirements are necessary to anticipate potential conflict of interest between the joint-venture partners. Possible conflict areas in a joint-venture are:

1) ownership - the sale of transfer of equity to third parties;
2) dividend policy - distribution versus reinvestment;
3) borrowing - acceptable debt/equity ratios;
4) plant expansion - what and where
5) research and development - level, purpose, location;
6) production process - degree of integration, degree of capital-labor intensity;
7) source of supply - external or internal, transfer prices;
8) quality of standards - domestic or absolute, international standards;
9) product mix - diversification, competitive exports;
10) reinvestment - dilution of equity held by a minority;
11) terms of sales - credit, servicing, pricing;
12) market area - restricted or open;
13) market penetration - choice of channels, promotion effort;

14) labor-management relations - degree of paternalism, union recognition and negotiation, national vs. international, levels of renumeration, profit-sharing;

15) management selection and renumeration - nationality, skills required, number, salaries decision making style (degree of participation, calculation and formalization).

16) political - company - government relations, degree of sensitivity to political decisions (for example, regarding desired allocation of national resources),

17) image projected.

Having identified the possible conflict areas, the question now is what controls are needed to maintain a tolerable benefit/cost relationship for the firm. These controls could be exercised by the firm by means of:

a) ownership;
b) market access;
c) technology;
d) finance;
e) personnel;
f) political assistance;
g) supply;
h) physical assets (control over sites, specialized transport, power sources).

The last factor the cost/benefit analysis, is the critical factor in the decision process. sion to take. The cost of a foreign and a domestic firm, are given by the inputs of the respective firms in the joint enterprise*. (fig. 7). The benefits received by the firms involved in the joint enterprise are obtained through various means (fig. 8).

Given the cost incurred and benefits obtained, the next step is to analyze the perception of these costs and benefits, under the light of the firms' expectations. The appropriate ownership policy in a given situation is shown in figure 9, where A represents the domestic busines interest and B the foreign interest. The system does not quantify the relationships, but it does suggest an analytical structure.

For purposes of clarity, we quote Robinson's statement of the steps in the process:

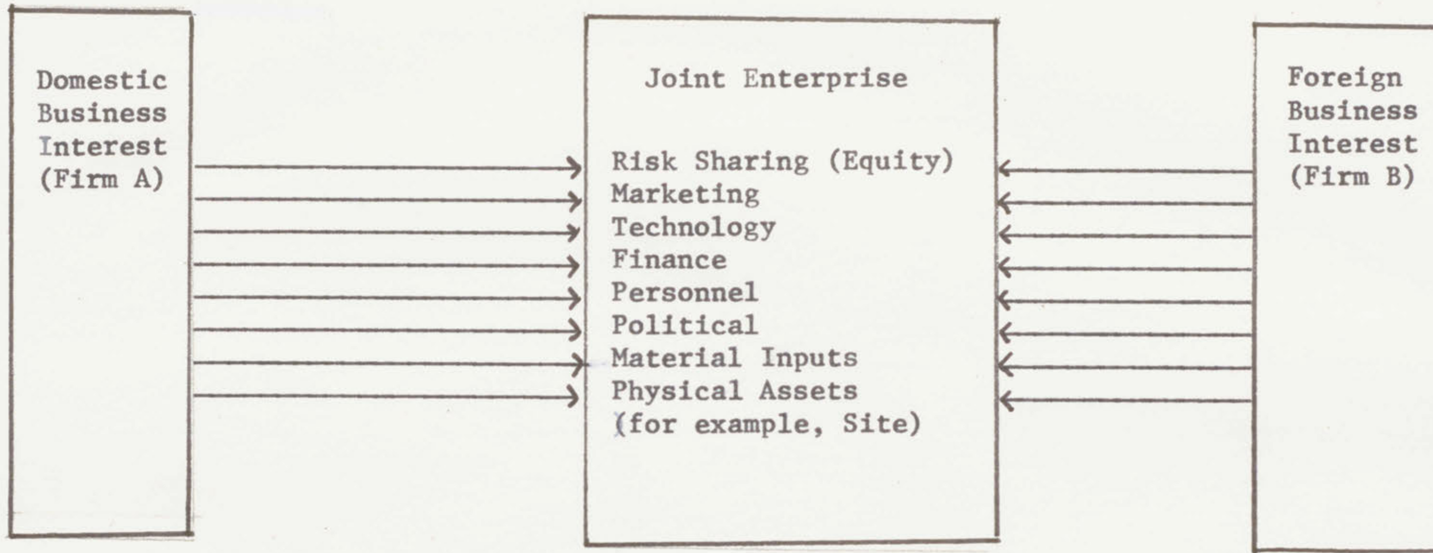
> The equations should be read in this fashion. The appropriate ownership policy for firm A at a particular time in reference to a given project overseas may be stated thus:

$$\text{(1)} \quad \text{ownership} = f\left(\overset{\text{[profit factor]}}{\frac{\text{self-perceived benefit to A}}{\text{self-perceived cost to A}}},\ \overset{\text{[risk factor]}}{\frac{\text{cost to A of possible restraints by B}}{\text{A's net benefits from needed controls}}} \right)$$

---

*R.Robinson uses the term "joint enterprise", meaning the sharing of common interests and responsibilities by the partners involved, and to avoid confusion with the equity-sharing concept inherent in the term "joint-venture".

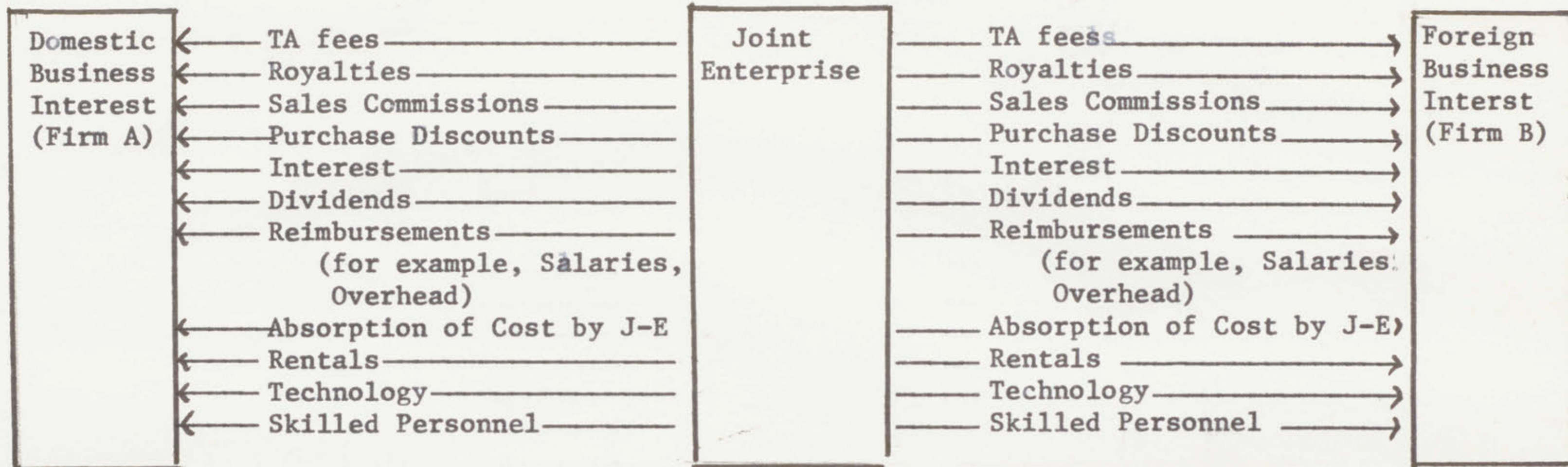
Figure 7*



Possible Contributions by Participating Firms to a Joint Enterprise

*R.Robinson, Ibid., p. 356.

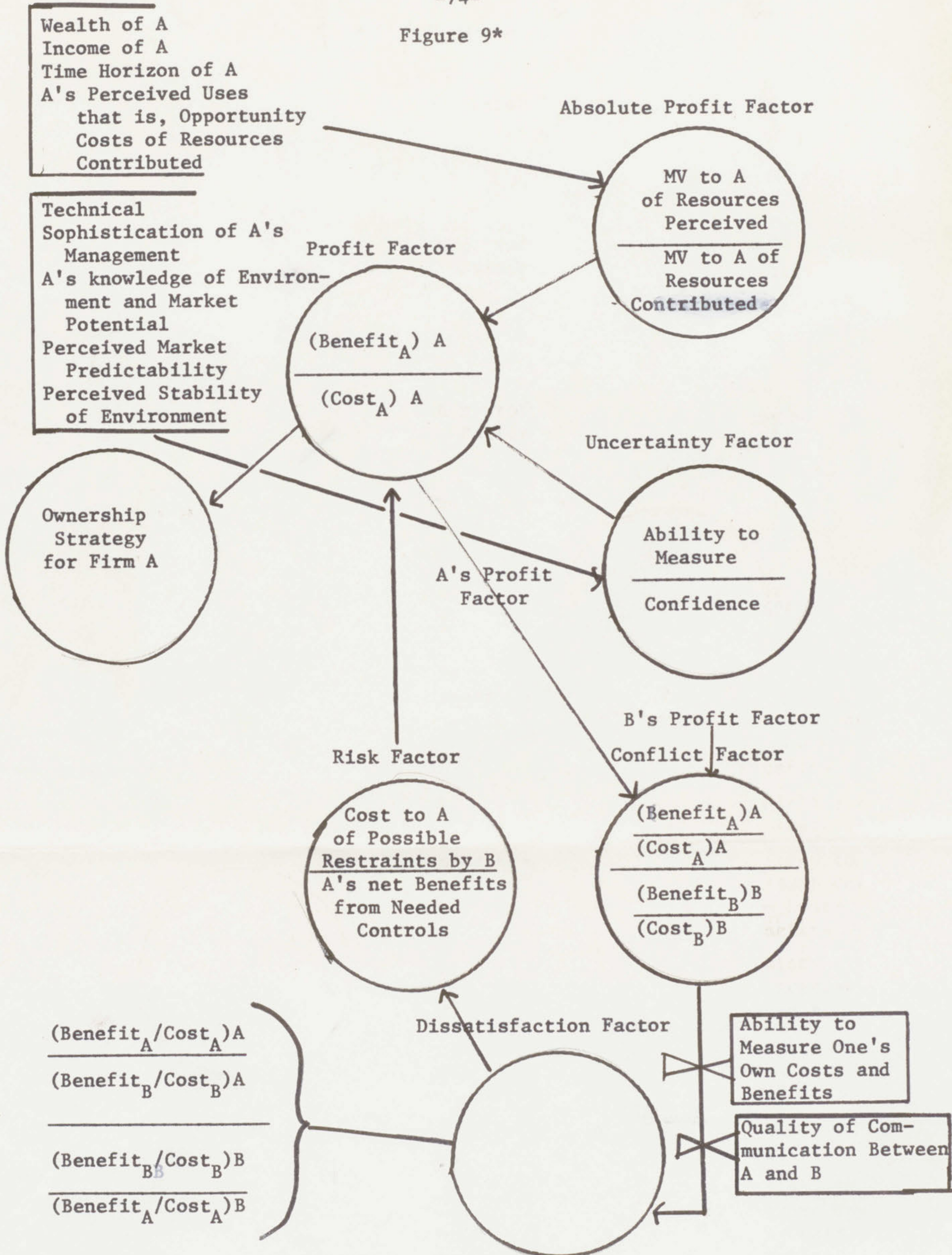
Figure 8*



Possible Benefits Flowing to Firms Associated in a Joint Enterprise

*R.Robinson, Ibid., p. 357.

Figure 9*



Analytical System for Determining Optimum Ownership Strategy

*R.Robinson, Ibid., p. 358.

The first expression* in equation (1) is really the self-perceived profit factor, and the second, the generalized risk factor. Examining the first more closely, we may analyze it in this manner:

(2)

$$\frac{\text{benefit}_A\ A}{\text{cost}_A\ A} = f\left(\overset{\text{[absolute profit factor]}}{\frac{MV_A \text{ of resources received,}}{MV_A \text{ of resources contributed}}} \quad \overset{\text{[uncertainty factor]}}{\frac{\text{ability to measure}}{\text{confidence}}} \right)$$

where MV_A (marginal value to A), ability to measure and confidence are functions of the variables shown in Figure 9.

In looking at the second expression in equation (1), cost to A of possible restraints by B as compared to A's net benefits from neede controls, we can see that the larger the term, the greater the risk. By definition, the ratio could not be less than one, for A's net benefits (benefits derived from control less the cost associated with that control) are limited to the incurred by A by reason of possilble restraints imposed by B. They could not be more. In a one-to-one situation, there is no risk. We can break down this risk factor thus:

(3)

$$\frac{\text{cost to A of possible restraints by B}}{\text{A's net benefit from needed controls}} = (\text{ conflict factor, dissatisfaction factor })$$

These expressions can be defined in this way:

(4)

$$\text{conflict} = f\left(\frac{\text{benefit}_A \text{ as perceived by A}}{\text{cost}_A \text{ as perceived by A}} \quad \frac{\text{benefit}_B \text{ as perceived by B}}{\text{cost}_B \text{ as perceived by B}} \right)$$

(5)

$$\text{dissatisfaction} = f\left(\frac{\text{benefit}_A/\text{cost}_A \text{ as perceived by A,}}{\text{benefit}_B/\text{cost}_B \text{ as perceived by A}} \quad \frac{\text{benefit}_B/\text{cost}_B \text{ as perceived by B}}{\text{benefit}_A/\text{cost}_A \text{ as perceived by B}} \right)$$

*Bear in mind that a cost to A or to B is a contribution, or input, to the joint enterprise and a benefit to A or to B is a cost, or output, for the joint enterprise.

In equation (4), the degree of potential conflict is measured by the extent to which

$$\left(\frac{(\text{benefit}_A)\ A}{(\text{cost}_A)\ A} \right) \text{ differs from } \left(\frac{(\text{benefit}_B)\ B}{(\text{cost}_B)\ B} \right).$$

That is, if the benefit/cost relationship for A differs substantially from that for B - as perceived by A and B, respectively - conflict of interst may emerge, depending upon the quality of communication between A and B and on the ability of each to measure his own costs and benefits. In equation (5), if either expression falls significantly below a value of one, dissatisfaction is likely to appear, for such a vlue would indicate that one or both parties expect less profit than they believe the other will realize. Bear in mind that in this latter case we are dealing with the relative value of benefits and costs for both firms as perceived by one of them. In each case, the other perceived ratios may be greater or lesser than the self-perceived.

All we have been saying is that the relevant ownership policy should be that designed to most nearly accomplish corporate objectives. We assume that these can be stated in terms of maximizing the self-perceived benefit/cost ratio, as discounted by a certain risk factor (that is, expressed as a cost-of-restraint/benefit-from-control ratio). These in turn are evaluated in terms of the marginal value of resources contributed and received as discounted (1) by one's ability to measure these resources flows as reduced by one's confidence in these measures, and (2) by degree of dissatisfaction as measured by the benefit/cost ratio of the firm and that ratio perceived for the associate. One may summarize this:

(6) $$\text{ownership strategy} = f\left(\frac{MV_A \text{ of resources received}}{MV_A \text{ of resources contributed}}, \frac{\text{ability to measure}}{\text{sure confidence}}, \frac{(\text{benefit}_A/\text{cost}_A)\ A}{(\text{benefit}_B/\text{cost}_B)\ A}\ \frac{(\text{benefit}_B/\text{Cost}_B)\ B}{(\text{benefit}_A/\text{cost}_A)\ B}\ \frac{(\text{benefit}_A)\ A}{(\text{cost}_A)\ A}, \frac{\text{benefit}_B)\ B}{\text{benefit}_B)\ B} \right)$$

That is,

(7) ownership strategy = f(absolute profit factor; uncertainty factor; dissatisfaction factor; conflict factor)

> The restraints anticipated by firm A and the countervailing controls needed by it rest on the degree of dissatisfaction generated. Collectively, these are used to discount the profit, which is already discounted by the perceived market risk, that is, the uncertainty factor as defined here. The restraints and controls are interrelated; both generate costs and curtail benefits. The optimum ownership policy is one that maximizes the appropriately discounted ratio. If, by altering ownership policy, the reduction in conflict and dissatisfaction factors decreases costs more than benefits, or increases benefits more than costs, rationality would demand such a change of policy.

Given the MNCs goals of profits and/or control; the environment for foreign investment offered by the technology and investment legislation; the choice of technology available to MNCs; and the method of transfer of technology, mainly licensing and direct foreign investment, when applied to the cost/benefit framework described above, the following responses by MNCs are likely to have occurred. These responses are shown in the matrix of figure 10.

In deciding the type of technology to be transferred, MNCs will be concerned with the degree of control that they will have over the technology and how profitable the exploitation of the technology will result.

For a new and dynamic technology, from the control point of view, the primary concern will be with the control over the usage of the technology. From the profit point of view, the remittances and fees obtained by its exploitation will have a high priority due to the rapid evolution of the technology, requiring a short pay-back period.

Figure 10

Multinational Corporations responses on Transferring Technology
by country and type of technology

Type of Technology / Country or region	New and Dynamic	New and Static	Old and Dynamic	Old and Static
ANDEAN PACT	Scenario I No transfer	Scenario I No transfer	Scenario II Transfer through licensing	Scenario II Transfer through licensing
ARGENTINA	Scenario II Transfer through Licensing	Scenario II Transfer through Licensing	Scenario III Transfer through joint venture	Scenario III Transfer through joint venture
BRAZIL	Scenario IV Transfer through wholly-owned	Scenario IV Transfer through wholly-owned	Scenario III Transfer through joint venture	Scenario III Transfer through joint venture
MEXICO	Scenario I No transfer	Scenario I No transfer	Scenario III Transfer through joint venture	Scenario III Transfer through joint venture

Notes: 1) The distinction between new and old technology resides whether the technology is in public domain and whether it is readily available or not.
2) The distinction between dynamic and static resides where the technology evolves over time or not.

For a new and static technology, control over losing the technology becomes the primary concern since if it comes to be known the company will lose its competitive advantage. Control over the use of the technology then moves to a second level of priority. The profit factor in this case is not as critical as with the new and dynamic technology, but it remains an important consideration.

For an old and dynamic technology, control over the use of technology is again of great importance, but perhaps not as much as in the case of a new technology due to the fact that since the basic technology is already in the public domain, the improvements made to it are more likely to be copied by the competitors. The loss of control over the technology is not critical. The profit factor comes to be somewhat more important than in the case of the new and static technology.

In the case of an old and static technology the control factor has no importance. But, on the other hand, the profit factor will be of a primary concern because the company will have no other comparative advantage, which would give value to the technology.

In the matrix in figure 10 we specify that four possible scenarios or responses by MNCs appear as the most likely:

Scenario I is the non-transfer of technology. THis scenario will take place where: the profit factor is constrained by either ceiling on profit remittances and/or ceilings and/or prohibitions on royalties remittances; and the risk factor is perceived as a high probability of losing control over the technology being transferred, due to the minority ownership constrain that should be represented on the management control.

Scenario II is the transfer of technology through licensing. This scenario will take place where the risk factor associated with critical or joint ownerships due to either a political situation or ownership requirement, is perceived as too high from the point of view of both the loss of control and profit remittances.

Scenario III is the transfer of technology through direct investment in a joint-venture relationship. This scenario will take place where the risk factor of losing control over technology is not perceived as critical and where it would be, fom the profit factor point of view, more profitable to enter into a joint-venture relationship due to the influence which some of the legal factors mentioned earlier may have (for example, political influences, access to local cost credit, lower taxes, etc.)

Scenario IV is the transfer of technology through direct investment with a wholly owned subsidiary. This scenario will take place where, the investing firm desires to have the closes control over the technology, there are no ownership constraints that could prevent the control of the company; and no ceiling on profit remittances are imposed which make the transfer of technology as profitable as the market will allow.

For each country/technology combination, the likely MNC response is predicted along the lines laid out in the previous paragraph.

For example, in the case of the Andean Pact, the MNC's control and profit requirements for transferring a new and dynamic type of technology

are to have the closest possible control over the use of the technology and to limit the risk of losing it and to obtain the highest profits in the shortest period of time. THese requirements conflict with the constraints imposed by the Andean Pact regulations on ownership and hence on management control, profit remittances and prohibition of royalties between parent and subsidiary. As a result of this a conflict response or Scenario I takes place.

The same scenario is seen with new and static technology in the Andean Pact, where the main concern of MNC is not to lose control of the technology, and the ownership requirement is the major constraint.

In the case of Mexico, also the ownership requirement (loss of management control) has such a weight thatprevents (scenario I) MNCs in transferring both kinds of new technologies.

MNCs' requirements to transfer old and dynamic technology is to have control over the use of the technology, but this is not as important as in the case of new and dynamic technology. As the control of the technology is not that critical, but the profit factor is somewhat more important when evaluating the constraints imposed by the Andean Pact in prohibiting royalties from subsidiaries to parent and not having maximum percentages on the royalties, transferring this kind of technology through licensing (scenario II) seems to be the most likely response of the MNCs.

The same reasons as above apply to scenario II in the case of the Andean Pact with old and static technology.

Scenario II appears in Argentina with both kinds of new technology is because of the uncertainty of the political situation. Otherwise scenario III should occur becuase the requirements of MNC for these types of technology, as mentioned above, with the constraints imposed by Argentina's legislation, no ownership requirements and ceilings on profit remittances would indicate a joint venture as the most appropriate strategy. This strategy would provide the necessary control and profit remittances against a smaller capital base, thus offering the company an attractive rate of return.

Scenario III applies to Argentina for both kinds of old technolgy because of the reasons given above. In the case of Brazil, scenario III would be the most appropriate because it is not very concerned about the control factor for the old technologies, the profit required is achieved better through the joint venture because of the incentives, which are mostly fiscal given for thsi kind of relationship by the Brazilian government. And, in the case of Mexico, the ownership constraints are not binding the transferred because control is not a key issue, and there are not any constraints on profit remittances, the MNC's profit requirement is satisfied.

Scenario IV, being the most appropriate to transfer both kinds of new technologies, it only appears in Brazil where there are not any ownership requirements constraining the control factor and there is no ceiling on profit remittance constraining the profit factor.

We have seen which would be the most likely responses by MNCs to the legislations on technology and investment, through a theoretical approach, let's move to the second stage, i.e., to observe in reality how MNCs react. THis is done through two casesstudies.

Case Studies.

Methodology

To develop such information, it was decided that the most fruitful approach was to interview the legal counselors for matters related to technology transfer and in charge of the Latin American operations of two multinational manufacturing companies.

A target of two companies was decided upon, both in manufacturing but one of which would be market oriented or in the consumer sector and the other in the extractive or processing sector. The choice of these sectors was based on the fact that they are treated differently under the technology and investment legislation.

It was also decided that the case studies should be limited to companies with existing investment in at least two of the countries or regions under study. The limitation of time made it impossible to cover more companies fitting these descriptions or other companies whose experience might also throw light on the perception of control over the international flow of technology and investment. For example, since no company was included without current foreign investment, there was no probing for perceptions of those companies which may consider going abroad during this period (1962-1973) but had decided against it. Similarly, there is no examination of those companies which might have had manufacturing operations in Latin America in the early part of the 1962-1973 period (1962 was the year that the first of the legislation in this study was passed) but withdrew them subsequently.

The procedure in selecting companies was to draw up a list of those companies in the sectors mentioned above which had important operations in Latin America. A larger number of companies were selected than the target of two which were sought. This was done to allow for the loss of companies unwilling to participate as case studies for one reason or another. The typical operating procedure was to send a letter to the selected company describing the thesis project and the manner in which it was to be conducted. This letter was followed by a telephone call in which a date for an interview was sought. The summary of the companies from whom interviews were sought and the resulting experience is shown below:

Number of companies selected with whom contact was made	9
Completed interviews	2

For interviewing, an outline was prepared through a theoretical approach based on a literature survey, seminars and talks with academics, and through a practical approach based on interviews with MNC staff specialists. The main headings of the outline were:

- Company Description
- Operating Problems
- Present Solutions
- Future Plans
- Competition

Under each of the main headings, a series of questions were developed which were to be used as a guide by the interviewer. The purpose was not to seek detailed answers and tallies to specific qeustions, but to guide the discussion to ensure adequate coverage of the subjects under consideration. The usual procedure employed by the interviewer was to open up the subject matter in broad terms and normally to let the interviewee respond as he saw fit. If the subjects were completely covered by volunteered comments, there was no need to probe any further. If not, the detailed topics under each broad heading could be used to elicit further comments.

The interviews were carried out during the month of April 1974. The average time of the interviews was about three hours.

In addition to the interview data, information from annual reports of the companies and Moody's Industrial Manual were reviewed.

Case A

1. Company Description

A. Type - Worldwide producer and distributor of cosmetic products.

B. Size - Net sales over $1 billion

- over a third of sales come from international operations, including Latin America.

C. Organization - Major decisions are made at corporate headquarters. There is a tendency to centralize different functions. License agreements, for example, are decided at headquarters and they are as consistent and standard as possible for all the subsidiaries except when government regulations requires something different. This standardization is for the company's own purposes.

Also the company is setting-up a Marketing Center for Latin America, as a devise for concentrating expertise. This center will develop programs for individual countries in Latin America. It would also provide marketing services. This would be outside the provision of know-how under current license agreements. For day-to-day operational problems subsidiaries are given a substantial degree of autonomy.

In respect to the selection of managers, the head of the subsidiary is appointed by corporate headquarters, and personnel for the other levels of management are hired by the head of the subsidiary. Most of the Latin American subsidiary general managers are Latin American nationals.

D. Investment Philosophy - The company prefers, whenever possible, wholly-owned subsidiaries. However, it is willing to go along with joint-venture requirements, either in a majority or a minority position. It has had only one experience with a joint-venture, one in which the company owns 75% of the equity, but not in Latin America. In choosing a partner, they would prefer the private sector. Perferably, it would be done by equity participation through public subscription. It would prefer not to take the government as a partner due to the lack of continuity in government positions.

As seen, although the company is not opposed to joint ventures operations with local private partners, it foresees problems in dealing with them. Problems would arise in the areas of divident policies vis-a-vis retention of earnings, marketing expenses and expansion programs (new markets and products).

E. Latin America Operations

E-1 Andean Pact (Venezuela)

History - The company established a subsidiary in 1954. The subsidiary initially was an assembly operation highly dependent on its U.S. parent. It is now almost entirely in a self-sustaining basis.

Market - Sales were made primarily for the local market. The subsidiary was not engaged in exports. It is one of the leading companies in the field.

E-2 Argentina

History - A company subsidiary was established in 1970. Its main purpose was to act as a distributor. The company had manufacturing contracts with third parties. New physical facilities have been acquired to meet the needs of the company.

Market - The subsidiary sells locally only and the market is expanding. It does not export. The parent is not one of the major companies in the country.

E-3 Brazil

History - A subsidiary was established in 1959. It has operated without serious problems, except in relation to inflationary trends. New facilities have been built to be able to respond to the foreseeable future sales potential.

Market - Company sales are only in the local market, but it is considering export to other Latin American countries to take advantage of the export inceintives. It is also one of the major companies in the market.

E-5 Mexico

History - A subsidiary was established in 1956, but actual operations did not start until 1958. Until now it has operated without major problems.

Market - It is one of the leading companies in its market, exporting to Central America, including Panama and Costa Rica.

F. Company Role

The company views its main role as that of a provider of technical assistance and know-how in manufacturing and marketing. In manufacturing it provides technical assistance for the production process, lay-out of the factory and specification relating to machinery and equipment. In marketing it provides the use of its trade-mark and the beggest asset of the company, its unique marketing know-how.

2. Operating Problems and Present Solutions

In Venezuela, operations were slightly disrupted with the imposition of the common external tarriff. As the Venezuelan subsidiary relied heavily for certain supples from the U.S., the tarriff has made costs prohibitive. As a solution to this problem, the parent firm is financing local suppliers, so these local companies would be able to satisfy their needs.

The royalty paid by the Venezuelan subsidiary to the parent company was established by agreement as a percentage of net sales, which was deductible for income tax purposes. As there is now a prohibition of technical assistant royalty payments to parent companies, it is still studying ways of getting the royalty payment out. It had a similar problem before in another country concerning certain patent rights and the solution was to have the subsidiary pay in directly to a third party licensor which was (i.e. the parent company had a patent license from another company, which it sublicensed to the subsidiary. Payment was thus made

directly to the original licensor, instead of going through the parent company). Of course, this device does not solve the problem when the original licensor is the parent company.

In Venezuela and Mexico the firm has the problem that, not being a high technology company providing a recognized technology, it may not be eligible to make royalty payments for technical assistance. Executives believe that the firm's marketing know-how is so strong that it should receive payment for that service.

It also has a serious problem in that the subsidiary is not a capital intensive company,which gives it a very small capital base on which to base the 14% maximum profit remittance under the Andean regulations. And having large revenues, the blocked amount is considerable.

The setup of a centralized Marketing Center for Latin America has made the company incurr substantial expenses for which it thinks it should be allowed to charge subsidiaries using its services. In the early stages this would mean higher marketing costs for the subsidiary but in the long run it would reduce them.

The company chose not to come under the new Foreign Investment Law in Argentian, due to the potential threat of having to fade out and being bound by the 12.5% profit remittance ceiling. As a consequence tax payments will be increased substantially.

The fade out requirements, leaving the company in a minority position within the Andean Pact, and the 49% maximum ownership for foreigners in new businesses and new product lines in Mexico, could take control of the respective subsidiaires out of the hands of the arent company because management control must represent the proportion of equity. It would not care about losing control provided it would be able to control the marketing function.

The company has been amending its license agreements to fulfill the requirements (e.g. eliminating any prohibition of exports) imposed by the Technology transfer laws. It is not felt that these requirements are major constraints that will interfere with doing business.

The company is very concerned about the permission of registration of similar trademarks in pharmaceutical products in Brazil. Since the company has established a well known and prestigious trademark, a similar trademark may mislead or confuse the consumer with the consequences easy to imagine (e.g. lack of sales, products, of different quality, etc.)

3. Future Plans

The company headqurters have approved expansion plans of the American subsidiary which will enable it to enter into the production of new product lines and to expand existing product lines. The subsidiary has decided to expand only the latter. The 49% ownership requirement for new product lines prevented the subsidiary from expanding the former.

The ownership requirements are even more discouraging when one considers that the company sees in the Andean Pact only individual markets represented by each member country and not as an integrated market.

4. Foreign Competition

The company has been able to put itself in leading positions in the different markets in which it has been interested, competing with both foreign and national companies.

Case B

1. Company Description

A. Type - Manufacturer of chemical, pharmaceutical, agricultural and consumer products.

B. Size - 1973 net sales were almost $1.5 billion.

- About one third of sales came from international operations.
- Around 7% from Latin American operations.

C. Organization - It is a very centralized company where very little authority* is delegated to the subsidiaries. The general manager of the subsidiaries is appointed by company's headquarters, and the second man in the subsidiary is selected by the general manager but with the approval of headquarters.

There are only a few Americans as heads of the company's subsidiaries. Nearly all managers are nationals.

D. Investment Philosophy - Historically, the company had as a strategy to enter a new market: 1) exporting, 2) then setting up a wholly-owned subsidiary when exports were no longer feasible. However, they are now flexible in their approach. Depending on the opportunities and incentives offered they would consider a joint-venture strategy, although historically they have shown a preference in keeping a majority position. They have experience in joint ventures and as minority partners in other ventures. Factors that are very relevant in deciding whether to be in a minority or majority position would be the size of the investment, kind

* for capital expenditures or investment commitments

of product and technology with which they would enter in partnership, and the need to conform to government guidelines or regulations. If the product is not a new one or the know-how involved is well known, they would not have major problems in taking a minority position. On the other hand if it is a new product, with new highly sophisticated technology and further has good export potential, they would probably prefer a majority position or require management control in the initial years. The reasons for this approach is that they are concerned that the project get off to a good start and they wish to exert some control on fiscal policies, dividend policies, export policies, quality control and use of trademarks. The influence of export policy relates to their reluctance to be forced into exporting to countries where they have other commitments or investments that might be wholly-owned.

In relation to the kind of partner to be associated with, they would prefer somebody in the private sector vis-a-vis the government because government as a partner often makes decisions for non-business reasons, but they would go along if that would be the only way. In many developing countries and in Latin America in particular the company has difficulty in finding private partners willing to accept the small returns on investment traditional in North American and Europe or to agree to pay all applicable local taxes. In their words, they have a "pragmatic approach" in the policies.

Investment is done primarily looking to the <u>local</u> market potential. While they would prefer worldwide programming with a view to reducing costs,

by taking advantage of cheap labor, tax incentives, etc., the real business world and nationalistic restrictions limit this possibility. They do try to go along with the export aspirations of developing countries by arranging complementary manufacturing and sourcing.

E. Latin American Operations

E-1 Andean Pact.

History - The company has sales offices or manufacturing facilities in all the member countries except Bolivia and Chile.

- In Ecuador the company has a sales office and is considering to establish manufacturing facilities. If joint-venture would be required they would look for both management and transfer of technology contracts.

- In Colombia they own two factories that produce both pharmaceutical, agricultural and chemical products, and are constructing a new factory for products for the construction industry.

- In Venezuela the company also has two plants, but here products for the construction industry and pharmaceuticals are the primary products produced.

- In Peru they have a sales organization and a third party manufacturing contract for pharmaceutical and agricultural chemicals.

- In Chile they do not have investment and the company only operates under license agreement with local laboratories to produce both their pharmaceutical and agricultural product lines.

- In Bolivia there is just a market for exports coming from Argentina.

Market - The company's market share would vary within their different product lines and within different countries. As a whole the Andean Pact would represent around 10% of their Latin American sales.

E-2 Argentina

History - The company, which is wholy-owned, started doing business in Argentian in the late 40's and built its first plant in the early 50's. Now this subsidiary has two production plants. Its diversified chemical manufacturing facility is the largest the company has in Latin America.

Market - Besides selling in the local market, their subsidiary is a major exporter. It exports certain agricultural and pharmaceutical products to Latin America, Japan, Europe and the U.S. Again, their local market share varies according to their line of product. As a whole, Argentina represents around 20% of their Latin American Sales.

E-3 Brazil

History - The Brazilian subsidiary, which is the largest the company has, is involved in all the company's product lines. It owns three plants, has a large and a very well structured sales organization. Brazil also is the location of one of the company's important international research centers.

Market - They have a major share of the agricultural market, and less important market shares in their products for the pharmaceutical, chemical and construction industry. In overall, Brazil accounts for around 45% of the company's Latin American sales. Most of their sales are for the local market, but they are as export center for some of their pharmaceutical products.

E-4 Mexico

History - The company started doing business in Mexico in 1940. Their first investment was made in the late 40's. Currently they own two factories which produce all the company's product line. In their chemical business they entered in a joint-venture with a private sector partner and they retain a 40% share.

Market - The main sales are in pharmaceuticals. However, the agricultural products and products for the construction industry are also important. Their sales are channelled to both the local market and the international market. The subsidiary exports certain basic and finished pharmaceutical and chemical products to Latin America, Europe and the Far East. Mexico accountrs fro around 24% of their Latin American sales.

F. Company Role - The company believes its overseas subsidiaries make positive contributions to the host country in economic and social terms. It is a serious company providing products essential to health, agricultural and industry and has a heavy commitment to research. It offers technology, employment opportunities and extensive training programs.

The company is very conscious of its public image and tries to have a "good citizenship" behavior by following local laws, paying taxes, and having many social commitments. They have public medical programs, scholarship programs, etc. They feel that even though it is difficult to gain a good image, due to the criticism of multinational and/or pharmaceutical companies, they have been quite successful in this respect.

2. Operating Problems and Present Solutions

- The 49% ownership requirements in Mexico will not, "per se", prevent the company from expanding in five or six new projects, but if they will not be able to control the quality of the products and the use of its trademarks then they would be really concerned and could have second thoughts about their projects.

- The requirement in the technology transfer law that prevents restrictions of exports, could discourage the company in getting involved in specific business where they want that kind of business would be exclusively for Mexico.

- In Argentina the company will stay in the category of a foreign company and will pay the extra taxes levied in remittances that are higher that the 12.5%,

- Generally, the company wants to have control over the marketing functions, so they are able to sell and trade with whom they want and can establish a good distribution system.

- The fade-out requirements of the Andean Pact regulations have restricted new investment in the area. No changes are contemplated in their existing investment because their operations were designed for the different markets of the member countries, and the company does not perceive the Andean Pact as a regional market.

- The company has had difficulty in determining what is the capital base used for the application of the 14% profit remittance.

- The prohibition imposed by the Andean, Argentina and Brazil regulations prohibiting royalty patments from subsidiaries to parent, has caused the company to take a more flexible approach. They may sell the technology for a lump sum payment instead of receiving periodical payments.

- The clause in the technology transfer laws of the countries and region under study that states that no contract would be approved for technologies already available, has little operational meaning from the company's viewpoint. They say that there is no one time technology, they think that a particular technology is a dynamic process along a continuum of progress.

- The requirement of uniformity of prices for sales in Ancom markets could be a problem as the risks involved in doing business in the various countries are not uniform. Historically, there were often differences between selling prices to consumers for the same product in different countries, sometimes fairly large differences. These resulted in part from local factors such as special duties or taxes, freight, labor costs, different methods of distribution, commissions, fees, etc., and in part from the company's pricing policy vis-a-vis its subsidiaries which were related to the commercial risks involved (such as devaluations, lack of patent protection so that "pirates" would move in after significant sales were established, nationalization, revolutions, etc.). Nowadays, most of

their subsidiaries are more heavily involved in manufacturing and their concept of "complementary sourcing" has been implemented. As a result, pricing of transactions between parent and subsidiary, subsidiary and parent, and subsidiary and subsidiary, tends to be fairly uniform. If certain standards of profitability on a product could not be met because of government control of pricing, the company would naturally withold that product from the market in question.

- The clause preventing the obligation of purchase from a certain source is not a serious problem. They have often encouraged subsidiaries to buy from non-company sources when the price was better and the quality was equal.

(Comments on the company's patent policy are being forwarded today by Mr. Whittenburg.) (see below*)

*Patent protection represents a separate problem. Since public use of an invention either by manufacture or sale of the product made by the process acts as a statutory bar to the grant of a valid patent in most countries, it is necessary that the company file patent applications in a country before there is any public use. In view of this requirement of the patent laws, the company cannot have a trial period to test the market through exports when it develops a new product or process until after it has filed its patent applications.

Even when the company has filed and has obtained patents in most of the Latin American countries, it is still faced with problems, particularly in the pharmaceutical area. Importation of pharmaceutical products from Italy is the major source of difficulties. This is because Italy does not grant patents for pharmaceuticals and certain Italian companies that have not incurred any R and D problems can produce the products at less cost and sell the products at a lower price. A particular case in point in Argentina where the Argentine Supreme Court has ruled that a process patent granted in Argentina covers only processes carried out in Argentina and does not cover processes carried out outside of Argentina.

The company has taken alternative courses of action with regard to products and processes which it has developed. They are: (1) not to file any patent applications, or (2) to do business as if the patent would be of no legal value. While the company does attempt to legally utilize its patents in the courts to protect its inventions, the company also operates from an economical point of view being as efficient as possible in order to have a marketing advantage over their competitors in cost and price.

One basic shortcoming of patents in the Latin American countries is that product protection is not granted. The patents which are obtainable only cover a process for preparing a particular product. Since in most countries the burden of proving infringement of the process patent is on the patentee, enforcement of the patent in court is difficult.

3. Future Plans

- They have six projects in their different products line for Mexico.

- In Argentina they are forced to invest in a new plant for their consumer products because of the new legislation that prohibits third party manufacturing contracts.

- A major expansion in one of their principal products is going to take place in Brazil and they have more than thirty new proposed projects for this booming economy.

4. Foreign Competition

They have very strong local and foreign competition in all their product lines.

They have heavy commitments in R&D and they think that they would be able to cope with both national and foreign competition and be able to improve their market share in all of their line of products.

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CHAPTER IV

Conclusions

This chapter outlines the principal factors and trends affecting the setting in which the multinational corporations and LDCs interact.

- The perception by MNC executives of the transfer of technology and foreign investment legislation, looked as a whole, is that it is not a serious constraint. This view is caused by the existence of "escape clauses," that could work both ways, in that they could affect the MNC in the future if conditions were to change or as a way of giving the LDC's government an opportunity to offer better conditions to select investment. The former tends to make the MNCs perceive the country in which they are considering investment as highly unstable and risky. The latter makies it possible for the host country to analyze foreign investment on a case-by case basis. In a case-by-case policy, bargaining seems to be more realistic as an instrument of policy in the field of foreign investment than the employment of overall public policy instruments. This bargaining policy is howing a higher degree of sophistication on the side of the LDC negotiators as time goes on, and at the same time is requiring "negotiating" skills on the side of MNCs's managers.
- Not mentioned in any kind of the legislation, but an important factor underlying the LDCs-MNCs relations is the political factor. The perception by MNCs of the stability of the political system in a country plays a

critical roles in its decision to enter or not to enter. Some degree of predictability of the rules of the game is essential for foreign investors. This factor is more important than many very attractive economic incentives, due to the fact that a change in government can cause the incentives to disappear. Unfortunately, the world and Latin America in particular, offer many discouraging examples.

This political factor will lead MNCs, under equally restrictive legislation, such as the requirements imposed in the technology transfer law, of say Brazil and the Andean Pact, (e.g. no royalty remittances from subsidiaries to parent; no patentability for some processes, etc.) to invest in the country perceived as stable politically. Also, changes of government, with different ideology or positions towards foreign investment, makes the government seem as a less attractive partner in joint-venture ytpes of operations.

The perception, reflected in one of the companies studied, of the instability of different countries from both a political and legislative point of view, made it assign different risks to similar investments depending in different countries. This perception of riskiness on investments, made it require higher return in the more risky, but due to the ceiling imposed on profit remittances, the company had to find other routes to channel its money out. The way that was found was through transfer pricing. The prices were different depending on the perceived risk of a country. The transfer pricing went both ways: overpricing the goods sold to the subsidiaries and underpricing of exports of the subsidiary to the parent.

- The key variables in attracting or discouraging MNCs are management control and remittance control.

Management control over some functions seem indispensible for some companies. As observed in the two companies studied, the marketing function was critical for one of them, and the quality control function for the other. Also, management control requirements prevent companies from'introducing new products and new technologies. It was mentioned by one of the company executives interviewed that his firm would not mind going in on a joint-venture (even in a minority position, where it would not have control) if the joint enterprise were to produce old products which did not require new technology.

The imposition of ceilings on profit remittances based on a percentage of the capital base of the companies, is also, an important constraint. This constraint is especially important to those companies able to generate a high level of profit without being very capital intensive. For those companies that would be capital intensive, the problem rests on the definition of the capital base.

That the ceilings on profit remittances are important can be seen by the fact that the two companies studied decided, at the expenses of higher costs due to taxes, to avoid a profit remittance ceiling of 12.5% imposed by the new foreign investment law in Argentina. The other fact that shows the importance of this constraint is the inflow of foreign

investment to those countries covered in this study which do not have ceiling on the repatriation of profits, namely Brazil and Mexico.

- Brazil has been receiving large inflows of foreign investment and it looks like as though it were going to continue to receive more new foreign investment than the other countries or regions in Latin America because, aside from its apparent political stability and largest individual market size, the constraints imposed on foreign investment are less critical vis-a-vis Mexico's 49% maximum ownership which prevents the control over the investment; Argentina's highly unstable political climate; and the Andean Region's 14% ceiling on profit remittances and fade-out program leading to a minority position with the loss of management control.
- The prohibition of placing export controls clauses in license agreements is another somewhat important restrictive constraint seen by at least one of the companies studied. This is seen as important due to the resulting duplication of investments which make less efficient its world-wide operations.
- The imposition of investments on R&D facilities, also, is seen by MNCs as requiring duplication of activities.
- The patent system in the countries studied, where there is no patentability of goods, is seen as a very undesireable practice, because it makes almost impossible to prove if a certain product was produced with the process patented by the company. This practice prevented, one of the companies studied, form introducing new products that embodied technologies.

- The Andean Pact is not perceived as a regional market. Both companies interviewed dealt with the Andean Pact in a country-by-country basis. Markets are considered individually on their future investment profits.
- Investments in Argentina, Mexico or Brazil allow a firm to avoid the constraints imposed on foreign investment by Decision #24 of the Cartagena Agreement, and still take advantage of the Latin American Free Trade Association (LAFTA). LAFTA incentives are not as good as those provided by the Andean Pact, but they still provide favorable access to the Andean market.
- MNCs are more socially conscious now than in the past and they are accepting conditions and investment requirements that would have been far more acceptable in the past. This was particularly observed in the company that was doing busines in those sectors that are more sensitive for the host country (pharmaceutical: health of population; chemical and agricultural:main sources of host country's income).
- There is an underlying difference in the direction of objectives between MNCs and LDCs. MNCs try to integrate different factors and skills so as to have the most efficient and rational planning coordination, which would allow them to be competitive. This integration of "know-how" of doing business is given in a package to the LDCs. But, LDCs are going in the opposite direction, they are trying to break down this package, and get only those skills and factors they feel they need. This breakdown of the package, could, in some occasions make the factor obtained

less efficient or valuable than within the "whole package". On the other hand, it might increase competition and reduce costs. If not handled with care, this may become a major area of conflict.

- The decision on transferring technology and the method chosen to do it showed a close consistency between the theoretical approach used and the two cases studied. Obviously no generalization can be made due to such small numbers and type of companies studied. But, it is relevant that, even in such a small sample, the consistency between what it would be expected and actually happened is so close. It would be interesting in further research, to try to obtain some generalizations and trends.
- Brazil has proven that in order to attract foreign capital, corporations should be "induced" and not forced into actions deemed desireably in the government, and at least not as perceivable as the owners of the capital , i.e. the MNCs.
- Finally, we believe that to reduce this conflict of interest an understanding from both sides, LDCs and MNCs is essential. The study shows that constraints are perceived differently. The constraints, as they are now, present major conflicts to MNCs with minor benefits to the LDCs.

What it should be aimed in this understanding between MNCs and LDCs is to have more effective and efficient constraints, i.e. that without imposing major constraints on MNCs would bring the most of the benefits to LDCs.

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