Intellectual Property Rights and Business Investment in Less Developed Countries

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Many authors have shown that, in developing countries, the definition and enforcement of clear intellectual property rules are essential steps for the feasibility of business development joined by investment projects, especially foreign direct investments, and the enhancement of technological innovation among newly privatized firms (Mansfield, 1994; and Abramovitz, 1989). The development and commercialization of applied knowledge is widely recognized as the main source of economic growth (Birdzell and Rosenberg, 1990). The ability to generate and use new ideas and technologies has always been the factor separating the winners from the losers, whether among firms or nations. But here the views of producers and governments in developing and technologically advanced nations are very different. Today, the former generally regard the protection of intellectual property as a cultural prejudice and/or an economic policy variable while the latter now see it as fundamental right comparable to rights to physical property. In Latin America, for example, intellectual property generally is not regarded as an asset to be held privately but rather as "the heritage of humanity." Alford (pp. 29, 17) notes that in China "true scholars wrote for edification and moral renewal rather than profit," adding "virtually all known examples of efforts by the state to provide protection for what we now term intellectual property in China prior to the twentieth century seem to have been directed overwhelmingly toward sustaining imperial power."
In contrast, developed countries enacted rules and design institutions to handle problems related to the assertion of private claims to tangible or intangible assets, gaps in ownership rights, swift registration of the rights, and easily accessible mechanisms to solve disputes. Today, the more developed the market economy is, particularly in information-intensive areas, the more important the intellectual property rights framework has to be in order to promote innovation and efficiency.

Misunderstandings between developing and developed economies in matters dealing with how to define intellectual property are still common. International accords are usually signed with the sole purpose of finding compatible definitions of intellectual property. For example, when announcing an intellectual property with China accord that took ten years to be reached in February 1995, the U.S. Government (United States Embassy 1995) defined intellectual property as including computer software, pharmaceuticals, agricultural and chemical products, audiovisual works, books and periodicals and trademarks. Alford (1996, p. 1) argue that "intellectually property is defined principally to encompass copyright, patent, and trademark."

But before continuing with our discussion of the campaign against violations of intellectual property by "pirates" in the developing world, it is necessary to make a couple of contextual comments. When the currently developed countries were

themselves underdeveloped, they were not nearly so concerned about intellectual property rights as now (Alford 1996). An illustrative example of the American violation of author's rights was the pirating of Gilbert and Sullivan's "H.M.S. Pinafore" in the late 1870s, which led the two British gentlemen to entitle their next operetta, "The Pirates of Penzance." Nowadays, piracy has changed its scope and scale. Estimated piracy rates for computer software alone in 1997 were substantially higher in most developing than developed countries – China (96 percent of applications pirated), Bulgaria (93), El Salvador and Russia (89). The estimated dollar loss because of Chinese piracy of software in 1997 is estimated at more than US$ 1.4 billion (BSA 1998). The U.S. International Trade Commission claims that foreign violations of U.S. intellectual property more broadly cost the U.S. up to US$61 billion in lost profits annually (Alford 1996). Yet, these kinds of figures can be very misleading because they assume that if very cheap pirated versions of the product had not been available to the Chinese, for example, those who have pirated applications would have bought the same product at the established price, which is patently untrue. Most of the lost "sales" never would have taken place. What is more, despite stricter laws in the developed world – more strict in some countries than others - many software users there also pirate what they use: United States (27 percent of software applications in use), Japan (32), Germany (33) and France (44). The dollar losses to software pirates in the United States in 1997 are estimated at nearly US$ 2.8 billion, twice the figure for China, and many of the U.S. "losses" were in fact lost sales. U.S. dollar losses to pirates in Japan are an estimated 750 million and in Germany more than 500 million. (BSA 1998).

Conflicts arise when individuals and firms make use of the intellectual property for financial gain without the permission of the innovator or owner. The table below shows that the United States loses an estimated $3.4 billion annually due to inadequate enforcement of intellectual property rights in information-intensive sectors - such as pharmaceuticals, entertainment software, and motion pictures - in Latin America alone.

Estimates of U.S. Losses to Infringement and Counterfeiting in Latin America

Total losses by sector in millions of dollars	
Pharmaceuticals	1686.0
Business software	1141.5
Entertainment (not business) software	259.1
Motion pictures	174.0
Music	115.5
Books	70.5
Total	3446.6

Sources: Jeb Blount, "Hands of Steal," Latin Trade, November 1996, p. 50, 52; Business Software Alliance, "1995 BSA/SPA Piracy Study Prepared by International Planning & Research (IPR)," 18 December 1996.

It has been shown that modern intellectual property rules are only partially applied or enforced by governments in developing countries even when the benefits of such rules are widely recognized by local business interests and by the countries generating the essential technologies needed for development. But the reasons for the recent emergence of intellectual property reform in developing countries, and the complications surrounding it, have not receive enough attention This oversight is explained by the failure to recognize how the costs and benefits of legal reform operate on those responsible for enacting the legal reform and how these mesh with differing institutions and cultures. More specifically, in many cases politicians in developing countries see legal reform as a short term liability damaging their relations with their local constituencies. The benefits of defining and enforcing

intellectual property rights, on the other hand, are seen as more distant and less tangible and thus are easily set aside by politicians with their minds on cultivating allies for the next election. This perspective is reinforced by the very practical fact that only one percent of royalties worldwide today are generated by residents of less developed countries (Primo Braga 1990). In fact, China and some other countries present examples of how some major "outside" influences – e.g. overseas Chinese – may not be "conducive to the elevation of legal consciousness

Legal reforms in emerging markets such as Argentina, Brazil, China, and Vietnam are the result of both domestic political conditions and foreign economic pressures and, as in China, foreign investment regimes are often "as much a product of incremental and ad hoc responses to challenges" as "an expression of coherent doctrine" (Buscaglia and Long, 1997). These two forces explain the recent international legal convergence in the principles sustaining intellectual property laws. The foreign economic pressures to reform intellectual property laws arise particularly because an increasing proportion of imports into developing countries consists of information-intensive goods and services such as software and products generated through bio-technologies (Buscaglia and Long, 1997). The intellectual property contained in these products is more subject to infringements than the simpler labor-intensive exports from developing countries. Understandably, firms generating these technologies in advanced countries have demanded that their governments penalize the unauthorized use of their intellectual property in less developed countries. This can be done through trade sanctions or threats to withdraw broader trade benefits. Developing countries that have stagnated for decades under import substitution economics, described earlier, now find themselves retarded in areas necessary for national development. As a result of the aforementioned foreign and domestic pressures, countries such as Argentina, Mexico, Brazil, China and South Korea were forced to reconsider many of their legal institutions, including their national intellectual property laws, and move toward legal frameworks prevailing in nations generating standard advanced technologies. For example, the privatization of state monopolies and the shift towards import competition that has taken place in emerging markets (e.g. Argentina, Hungary and Uganda) produced a vast increase in the demand for high technology products sold by the industrialized countries. There was a substantial increase in exports of telecommunication and information technology to developing countries between 1988 and 1993 from the United States (215 percent), Japan (187) and the European Union (97) (Buscaglia and Long 1997). This vast increase in the international transactions involving information-intensive goods and services (e.g. software) made it necessary to reformulate the legal foundation of intellectual property with twin objectives. These objectives were to define and enforce the rights of businesses generating high technology while at the same time assuring the diffusion of know-how to those countries with the capacity to absorb these technologies. It soon became clear that the international harmonization of intellectual property rules was a *sine qua non* for the transfer of complex technologies to the developing world. Buscaglia and Long (1997) apply this implicit

cost-benefit approach to legal transplants with respect to the recent adoption of intellectual property laws under the World Trade Organization (WTO) umbrella. In short, the reconsideration of the legal foundation of intellectual property rights was compelled by the increasing permeability of national frontiers and the demand for high tech products.

The Paris and Berne international conventions signed by most countries in the 19th century provided a legal framework for more than a hundred years. (Buscaglia and Long, 1997). The two main doctrines or legal principles of the conventions were: (1) "territoriality," which stated that property rights would be honored according to each state's rules, and (2) "independence," which established that the granting of property rights by one state did not require other states to grant the same rights. These two doctrines, however, have become irrelevant in the new order emerging after the Uruguay Round of talks of the General Agreement of Trade and Tariffs (GATT), the forerunner institution to the WTO. Under the supervision of the newly founded WTO, harmony or uniformity of laws has been sought as the ideal way to encourage the international flow of goods and services (BSA, 1998). This new framework has supported granting an innovator intellectual property rights, such as patents, and compensation by users for his product based on the business norms of the market place. That is, the innovator receives compensation from his investment and product so that society more broadly will be able to benefit from the use of innovation that otherwise would have been kept as a secret.

In fact, the international enforcement of intellectual property rights has evolved impressively during the past three decades. For more than a century, the international intellectual property regime of the Paris and Berne Conventions provided ample scope for cooperation but at the same time left to national legislation the responsibility to define the main aspects of intellectual property rights. After World War II, the balance between the rights of the inventor and the benefits of diffusing technology to less developed countries became a greater concern. For developing countries, the need for rapid industrialization and fast and vast improvements in technologies justified, for them, imposing limitations on the rights and benefits of innovators. In general, developing countries took this route under two circumstances. First, when a patent could only be granted if the intellectual property was worked and exploited within the national frontiers of a country (i.e. a working requirement). Second, the terms and royalties for licenses of intellectual property could be determined by the government in the absence of agreement by the innovator (i.e. compulsory licensing). Under these circumstances, developing governments abandoned the exchange of benefits between innovator and user and replaced it with an approach based on granting intellectual property rights in exchange for foreign direct investment.

But difficult problems remained. Legal systems in many developing countries are characterized by inconsistent coverage, uncertain terms of protection, arbitrary transferability, compulsory licensing regimes, and inadequate enforcement. This

treatment became increasingly intolerable by developed countries because businesses and governments could not afford to invest more and more in knowledge-intensive products and then effectively give their product away to other countries, however much they needed it. They did not, after all, give it away to people in their own countries who came to need it as well and had provided the conditions and directly or indirectly the financing which made the innovations possible. Thus, the need for legal reform was heightened in particular by the technological breakthroughs of the 1970s in the microelectronics, biological inventions, computer software, and other high technology knowledge-intensive sectors. The problem came to a head because international trade of knowledge-intensive products became a much greater proportion of each developed country's national production and exports than before.

As shown by Mansfield (1994) in his empirical work, intellectual property rights encourage innovators to make their product available to others in their own country or abroad, in exchange for some form of remuneration. These rights help to facilitate the transfer of technology from developed to developing countries (Mansfield, 1994). The most common means of legally transferring technology is through licensing, in which the holder of the intellectual property rights allows another person or entity to use those rights in exchange for payment of a royalty.

Because much intellectual property is produced only after considerable financial investment, the actual, perceived, and expected losses on the part of U.S. firms due to inadequate intellectual property protection influence the willingness of firms to transfer technology to developing countries. In the past, the value of most exports was based on its physical manifestations (e.g. steel), but in recent years and with increasing speed, the value of intellectual property derives from the information or intellectual property it contains. These products are the main source of export revenue for most industrialized countries, but the United States, as the world leader in producing information-intensive technologies, holds the most valuable portfolio in high technology and, therefore, stands to lose the most to "pirates."

The strength of intellectual property protection in developing countries has a direct influence on the amount and type of technology transferred to them by advanced economies. The more information-intensive the technology, the greater the reluctance to transfer the technology - pharmaceuticals, chemicals and electrical equipment - in the absence of adequate intellectual property enforcement. For example, software, biotechnology, and semi-conductor technologies all involve industries in which the value of the information contained in or stored by the technology exceeds by far the value of the physical or mechanical product containing the information.

A survey of developing countries developed by Buscaglia and Guerrero (1995) shows a direct association between the way a firm in the information-

intensive sector (i.e. a sector where R&D represents more than five percent of total production costs) views intellectual property enforcement and the commitment of foreign direct investment. Some 49% of American firms in the chemical and pharmaceutical industries in surveys stated that intellectual property protection in Argentina was too weak to permit transferring their best and latest technology to that country. For Colombia, that number was 55%; for Chile, 42%; for Mexico, 45%; and for Venezuela, 51%. Firms in some other industries - transportation equipment, metals, and food - are not as reluctant to invest in developing countries as in the information-intensive sectors. In surveys, no U.S. firm from the metals industry stated that intellectual property protection in Argentina, Brazil, Chile, Mexico, or Venezuela was too weak to permit their transferring their best and latest technology to one of those countries. In the food industry, the percentage of U.S. firms that felt intellectual property protection was too weak to permit transfer of their best and latest technology ranged from a high of 25% for Mexico to a low of 12% for Argentina, Chile, and Venezuela (Mansfield, 1994).

Thus advanced economies' information-intensive sectors find the strength of intellectual property protection abroad to be a fundamental factor in the decision to invest in a developing country. That is why U.S. lobbies more aggressively than any other country to raise standards intellectual property protection in developing countries. Why? Because as a leading scholar writes, "few other countries are willing to make a stink about piracy, even when they have lots to lose. . . . Potential allies, such as Japanese video-game makers, German and Swiss drug concerns and British and French filmmakers prefer to walk softly and let the United States carry the big stick." (Blount 1996, pp. 12-15). The others let the U.S. put pressure on developing countries for them, but since 67 percent of U.S. exports are considered information intensive - compared to 44 percent for Germany and 51 percent for Japan – these other countries also have less to lose (Blount 1996).

With so much at stake, it is no wonder that advanced economies, led by the U.S., have lobbied for protection of intellectual property rights in developing countries to be on a par with those in the developed world. But after all efforts have been made, the bottom line is that international treaties specifically devoted to intellectual property rights protection have been largely ineffective in dealing with piracy in developing countries.

Trade-Related Intellectual Property Rights (TRIPs): the Multilateral Framework

As stated above, legal reforms are the products of compromises brought on by domestic and foreign pressures. Today the United States, the European Union (EU), and Japan are increasingly dependent for their competitiveness on their ability to protect the value inherent in intellectual property. Most of the developing countries, on the other hand, are highly dependent upon exports to the advanced economies. Many of these exports benefit from the Generalized System of Preferences (GSP) which grants lower tariffs or preferences to designated exports

from some developing countries. This interdependence encourages advanced and developing countries to start negotiations to resolve outstanding conflicts, particularly the problem of intellectual property rights. The developed countries' "stick" in these negotiations was provided by the threat of loss of access to the United States and European markets through the cancellation of GSP and the elimination of zero tariffs applied by advanced economies to selected products from benefiting countries. But foreign pressure is not the only thing that brought legal reforms in developing countries. From the latter's domestic perspective, the WTO Treaty assured access to the latest technologies they needed for their exports in a world where international competition, instead of import substitution, is the only road to development.

For more than a century, the enforcement mechanisms provided by the Paris and Berne Conventions to protect international intellectual property rights were inadequate. They provided broad outlines but left important details to national legislation. Not surprisingly, the provisions for dealing with enforcement became an increasing source of tensions with the countries generating information-intensive goods and services.
Since 1995, under the World Trade Organization (WTO) supervision, many developing countries have adopted trade-related intellectual property rights (TRIPs) that are more compatible with the American and European minimum standards of protection. Some commentators might even classify these legal reforms as "transplants." As part of the GATT framework, the WTO agreement specifies that developing countries must (1) enforce a set of internationally recognized standards for incorporating the protection of intellectual property rights into national laws; (b) develop a consultation and dispute settlement mechanism for overseeing the implementation of the international norms and, (c) resolve any government to government disputes regarding the interpretation of such norms. This new agreement was a product of many diplomatic initiatives that since the 1980s have sought to alter the international intellectual property system while creating a linkage with trade-related issues. The visible aim of the advanced economies' actions was also to establish uniform standards of protection for intellectual property rights at a global level while paying attention to the need for improved enforcement mechanisms.

The preservation and observance of the TRIPs contained in the 1994 WTO agreement signed by all countries are essential for sustaining the growth of international trade, investment, economic development and, as some countries have noted, the beneficial distribution of technology. From the institutional standpoint, it is interesting to note that certain industrialized countries chose the WTO as the mechanism for furthering this legal harmonization in intellectual property rules. An important reason is that WTO offers better guarantees for international dispute settlements in intellectual property issues. First, the WTO has a more fluid mechanism for adopting new measures; the members of WTO have not formed voting blocs, largely because of their varying economic interests in the many

aspects of trade that are subject to the WTO negotiations. Second, WTO dispute settlement procedures, while viewed as needing considerable improvement, are generally considered better than those in the Paris and Berne conventions. Moreover, the WTO stipulates that authorized dispute settlement procedures enable treaty members to impose trade sanctions on countries infringing their intellectual property rights. Third, the World Trade Organization (WTO) is the most appropriate forum for the discussion of issues considered essential by developing countries. For example, the WTO is a good place for working out compromises, such as lowering American and European agricultural subsidies (an important issue for many developing countries) and strengthening intellectual property protection (an important issue for developed countries). This led to the realization that "there would be no chance of liberalizing trade in services and providing better protection for intellectual property unless developing countries won genuine advantages in the Uruguay Round." (Buscaglia and Long 1997, pp. 13-17).

To sum up, as a result of the foreign and domestic pressures explained above, developing countries have been forced to reconsider many of their legal institutions, including their national intellectual property laws. Thus the international economic and political environment described here has produced a convergence of developing country laws toward the intellectual property legal requirement of nations generating these technologies. This constitutes an example of how laws and regulations can evolve in a way that enhances business transactions and economic efficiency.

The US Intellectual Property Foreign Policy

The U.S. research-intensive firms constitute the most successful competitive industries in the world and provide the foundation of their economic growth (see Buscaglia and Long, 1997, pp.2-5). Research and Development is the basis of this growth and therefore intellectual property protection is a *sine qua non* for the industries' survival. As in the computer software and audio/video recording sectors, the largest chunks of the sectors productions costs are faced in the development stage, making the the infringement of IP rights easy and profitable. The General Agreement on Tariffs and Trade (GATT) Uruguay Round has established high standards for the protection in these research intensive industries. The North American Free Trade Agreement (NAFTA) has established even higher standards. Unfortunately, some countries are still delaying implementation of these standards. These delays damage the profitability of the industry worldwide and the growth prospects of those poor countries where coherent norms coupled with efficient and predictable enforcement of patents, authors' rights, and trademarks would attract investment and stimulate research and development.

The most basic feature of research-based industries, such as the biotech or the pharmaceutical sectors, is its need to develop innovative, but expensive, R&D investment. A constrained monopoly provided by patent laws is necessary for the

built up of research and development. Abraham Lincoln's words stating that "the patent system added the fuel of interest to the fire of genius" attest to the conventional wisdom of this position (lincoln, 1859). Yet, the United State's high standards of intellectual property and patent protection legalized in Article 1, Section 8 of the U.S. Constitution are not universally shared. A large number of foreign countries specifically discriminate against intellectual property by not providing meaningful patent and trade secret protection. In so doing, they hamper the funds that can be devoted to the invention and development of new goods and services. According to the U.S. International Trade Commission (ITC), R&D investment drops between $720 million and $900 million annually as a result of global patent piracy of pharmaceuticals.

Trade agreements have already recognized the urgent need to address intellectual property protection in order to preserve and even enhance the tflows of commerce among nations. More specifically, the North American Free Trade Agreement (NAFTA) and the intellectual property chapter of the Uruguay Round agreement, called the "Trade-Related Aspects of Intellectual Property Rights" (TRIPs) established that all countries must eventually provide full Intellectual property protection for all industries, without discrimination. Unfortunately, several developing countries led by India introduced a motion that was finally accepted by the WTO where the TRIPs agreement would contain a 10-year delay for the institution of patent protection for pharmaceuticals and agricultural chemicals. However, research-based industries in the US, Europe and Japan have all fostered accelerated implementation of TRIPs in key emerging markets as well as extension of NAFTA's high standards for intellectual property protection throughout the Western Hemisphere.

NAFTA was concluded by the United States, Canada, and Mexico two years before the Uruguay Round. NAFTA's intellectual property provisions (Chapter 17) generally track those of TRIPs, with two notable exceptions: NAFTA had no delayed implementation period and provides pipeline protection (World Trade Organization, 1994). As the U.S. government negotiates with other governments in the Western Hemisphere on the extension of NAFTA, NAFTAS's standards (rather than those of TRIPs), will likely be the model on which a hemisphere-wide free-trade area is based.

In fact, such is the stated policy of the United States, as described in the Uruguay Round Agreements Act: "It is the objective of the United States

- to accelerate the implementation of the Agreement of Trade-Related Aspects of Intellectual Property Rights . . .
- to seek enactment and effective implementation by foreign countries to protect and enforce intellectual property rights that supplement and strengthen the standards of the Agreement on Trade-Related Aspects of Intellectual Property Rights and the North American Free Trade Agreement in particular . . ." (World Trade Organization, 1994, pp. 24-26).

The R&D Investment is a good measure of the commitment to investment in information-intensive sectors. For example, US companies that belong to the Pharmaceutical Research and Manufacturers of America spent almost $19 billion for R&D in 1997 (Pharmaceutical Research and Manufacturers of America. "1997). To get a sense of the size of this investment, compare it to the investment in the railroad tunnel under the English Channel, perhaps the largest private-sector civil engineering project ever, that took years to be built and amounted to $15 billion. The pharmaceutical industry's R&D investment has increased 100 percent every five years since 1970; and in 1997 the industry will invest more than 21% of sales revenue in R&D, more than four times the average for high-technology manufacturing industries (Pharmaceutical Research and Manufacturers of America. "1997).

Why do research intensive companies spend so much on R&D? Quite simply, the process of drug invention and development is lengthy, risky, and expensive. An Office of Technology Assessment study estimated that pharmaceutical companies spend an average of $359 million (in 1990 dollars) to bring one new pharmaceutical product through the U.S. Food and Drug Administration (FDA) approval process and into the marketplace The average time from drug discovery to approval by the FDA is 10-12 years; industry hopes that the various FDA reform proposals currently being considered by Congress will speed up the process.

The high-risk nature of the inventive process also raises the expense of pharmaceutical discovery and development.

The benefits of ongoing research that leads to new are obvious, as is the need to protect the investment with appropriate intellectual propoerty protection. Yet, can we identify the costs and benefits to the economies, industries, and patients in the developing countries that will be the most affected by TRIPS'` standards? All forms of intellectual property protection enhance the conditions for investment in the affected industry, both inward and foreign; improve the quality of goods circulating in the market; and stimulate indigenous innovation, creating better jobs and opportunities for local inventors.

One of the strongest prejudices in dealing with intellectual property protection is that they lead to higher prices of those protected products or services. That is simply not true. We observe that in those countries where patent protection was introduced, more specifically in Brazil (1996), Mexico (1991), Korea (1988), Italy (1978), and Japan (1976), average prices for a sample of products being protected decreased in a significant fashion (Jori, 1993).

Now the most important question is: what made Brazil, Mexico, and oter developing countries draft intellectual property laws with effective enforcement mechanisms and converge to levels of protection adopted in advanced economies? What economic factors are behind the developing countries' drive to improve their intellectual property standards? Research conducted by Buscaglia and Long (1997) shows that part of the answer lies on the impact of international trade of information-

intensive goods and services on legal convergence of legal standards, among them, intellectual property standards.

Trade and Legal Convergence

Reformers and the public generally tend to believe that legal reforms are just rooted in the traditions, customs and values of individual nations. But, international legal transplants are a main source of legal changes in developing countries. The parochialism of many reformers and the public clouds understanding of legal change and leads people to disregard international legal doctrines, that is the "outside" laws that can help solve a social or economic problem. Mattei (1993) observes that many legal changes are only in appearance derived from domestic roots. In most cases, and especially within the commercial domain, the norms of interaction transcend political frontiers and therefore, as the size of the market expands internationally, laws that address economic transactions in one country are transplanted to or from another country. In a sense, the adoption of a law is the product of a process in which many laws compete to be the prevailing one. For example, the legal rules governing trespass of private property in many countries provide different solutions to the same problem. The German, French, Italian and American legal doctrines all provide different solutions and different compensations. The economic impact of these alternative legal rules on efficiency can be assessed by applying statistics combined with the economic analysis of the law (i.e. jurimetrics).

Most developing countries have chosen an export-led approach to economic growth and they are eager to attract foreign direct investment (FDI). In order to enhance trade openness abroad, and at the same time attract foreign investment to their domestic markets, they must provide a more stable environment in which to do business. Therefore, competitive pressures force developing countries to harmonize their legal systems with those of countries exporting capital by incorporating foreign legal frameworks that advanced-economy firms think will enhance their productive efficiency.

In this context, a central topic to be addressed in law and economics of development must be the main economic factors explaining the process of legal transplants and legal integrations that tend to enhance productive efficiency. As stated in Ulen (1996, p. 9): "Law and Economics has been one of the most important and productive innovations in legal scholarship of the twentieth century. Yet its contributions to the issues of constitutional law, including federalism, are relatively modest." From this perspective, we could also add that the attention paid by the law and economics of development to the analysis of legal and economic integration has also been insufficient.

The origin of the law can be traced to many sources. On the one hand, one could import a legal doctrine from a different legal system, what constitutes a legal

transplant. On the other hand, a law can also be traced to the norms of behavior that govern interactions in a society. The mechanisms through which parliaments and the judiciary in civil law countries would isolate and translate these norms into law would require an identification of those practices that have become standard in business communities. The efficiency aspects of these practices must be analyzed with the aid of the theoretical and empirical tools used by economists. For example, the use of statistics in the analysis of the law can determine the impact of alternative doctrines on economic behavior. In this way, a legal doctrine, captured through an international transplant, could be economically assessed and compared to the economic impact of a doctrine that reflects the domestic norms of behavior of the locality. Relatively few empirical studies of this sort have been advanced in law and economics and even fewer within the economic analysis of development. Yet studies by Long and Buscaglia (1997) and Buscaglia and Guerrero (1995) have clearly shown the great advantages of applying statistical techniques to the economic impact of the law in developing countries. The potential to empirically assess the economic impact of the law is key to public policymaking and represents a clear improvement in the analysis of the economic impact of differing legal reforms proposed in all developing countries.

Many may argue that civil law systems would tend to reject the economic analysis of their laws. Yet, quoting Cooter (1996, p.145), "Judges allegedly make law in civil systems by interpreting codes, not finding social norms. Compared to common law countries, the codifiers in civil systems apparently have more influence and the judges allegedly have less influence. Interpreting some codes, however, looks a lot like finding social norms. Comparative lawyers, consequently, debate whether the apparent differences in the two systems are real or illusory." From this perspective, we say, civil law systems have the capacity to react to efficiency forces as much as common law systems do. Moreover, it may come as a surprise to many sponsoring a centralized legal system that the civil law originally evolved as a common law system.

Let us not forget that, before the 19th century, the European *ius commune*, or common law, was based on the judge's interpretation of Roman law within the local norms and practices. Starting with the French Revolution, the centralization of law-making through legislatures aimed at replacing laws based on social norms with rules that were designed and rationally engineered to bring a better way of life for society. Under this new system, the judge was not supposed to find norms but only to interpret and apply laws generated by legislatures. It is true that this post-French Revolution framework took away power from the judicial branch and made it more dependent upon the legislative power of parliament. Still this new interpretation and application of laws was also subject to an implicit and subtle application of social norms, however, as inputs in the opinions of judges. Thus in the civil law system judges and parliaments possess a joint capacity to make laws, parliament in a formal and open way and judges in a more hidden fashion – regaining some of the power they had exercised before the revolution - especially at

times when they address legal gaps or interpret vague statutes enacted by parliament.

2. Legal Integration and Economic Development

Legal integration can be understood as the adoption by two or more legal systems of the same set of rules of interaction within a well-specified social domain. Therefore, legal integration is another source of legal change that has a potential impact on efficiency in many developing countries. Of central interest in our analysis is why governments choose one strategy over another in pursuing legal/economic integration. Buscaglia and Long (1997) propose that a successful legal/economic integration is a function of the convergence of three broad conditions: (1) the compatibility of political systems; (2) the public sector's expectation of gains from liberalizing international trade; and (3) the private sector's expectation of gains from regionalizing production, transferring capital and technology, and harmonizing trade-related rules. Some or all of these factors are key driving forces behind the main trade agreements within which intellectual property laws (patent, copyright, and trademark laws) have been harmonized in the Western Hemisphere, Europe and Asia.

The economic transformation in many developing countries has created a need for new and major legal developments. What are the main economic forces pushing the drive to integrate economic and legal systems? A statistical and legal (i.e. jurimetric) analysis applied to Latin America by Buscaglia and Long (1997) shows that the growth in trade between the same economic sectors of two countries (i.e. international intra-sectoral trade) goes hand-in-hand with the private sector's growing demand for the harmonization of trade-related laws. Harmonization of laws occurs in many areas. A survey of the legal history of economic integration in many developing countries reveals that harmonization occurs in such specific areas as intellectual property, banking, insurance, securities, liberal professions, international securities exchange regulations, and transportation. In other words, harmonization of the rules occurs principally within commercial law. Therefore, we see that the future of hemispheric integration and trade processes necessarily entails the deepening and development of these legal areas. However, economic history has been littered with the hulls of shipwrecked trade agreements seeking legal integration.
That is why the compatibility of two or more legal systems has to be introduced as a factor in the legal integration of countries. An empirical analysis of patterns of trade in Buscaglia and Long (1997) shows that legal compatibility is driven by similarities in economic structures.

Legal and Economic Integration

During the 1980s, increasing competition and volatility in world markets induced industrialized and developing countries to cluster together in regional economic blocs. This trend was spurred by three main factors: (1) technological innovations in transportation and communications which expanded the markets for an increasing number of goods and services; (2) the overall economic slowdown in world trade during the 1988-92 period, accelerated by the collapse of the Communist regimes and; (3) the near failure of the multilateral trade negotiations sponsored by GATT at the Uruguay Round (Buscaglia, 1993). In turn, the near-breakdown in multilateral trade negotiations served to create an environment compatible with bilateral and regional accords.

Recent literature on regional legal and economic integration has stressed the key role of emerging trading blocs in shaping the world economy of the 21st-century (Davey, Jackson, and Sykes 1995). Economic trends - such as rapid changes in applied research, technology, capital flows, and trade patterns - have all assumed an enhanced importance in fostering economic growth. The extent to which a country that is technologically behind a leader is able to catch up will depend in part on its capability to absorb advanced technologies. The main factors fostering the social capability for technological improvement include a strong research and development ("R&D") sector, institutions of higher education satisfying the demand for scientists and engineers and competitive environments acting as disciplinary factors for firms. However, none of the aforementioned works discusses in depth the legal changes needed to foster competitive environments and enhance capabilities to absorb technologies.

Developing nations are currently facing a unique growth opportunity created by global free trade, the continuous decline in transportation and communication costs, the unprecedented availability of generic applied knowledge, and the expanding flows of international financial investments. However, many of these countries lack the institutional capability to create or absorb applied knowledge. Legal and economic reforms are based on strategies giving the private sector a more important role in economic development and in some cases they are strengthening the foundations for economic growth. Part of these reforms consist in liberalizing trade and integrating markets.

Experiments in regional integration differ appreciably. For instance, the Andean Pact in Latin America is a free trade area in which the main goal is the eventual elimination of trade restrictions, while the ASEAN in Southeast Asia provides only for trade and economic cooperation on a limited and loose basis. In contrast, the Mercosur trade agreement in South America and the European Union encompass free trade areas plus more ambitious goals related to institutional harmonization of substantive bodies of laws and regulations. The MERCOSUR Trade Agreement, enacted in March 1991, is the most ambitious attempt yet toward regional integration, including fostering legal harmonization. Moreover, seven working groups involving all countries in Latin America (except for Cuba) - the

Andean Pact, MERCOSUR, NAFTA, and Caricom (Caribbean Community) - have started to negotiate the harmonization of intellectual property laws and also in other areas including health, the deterrence of organized crime, environmental protection, rules of foreign investment, dispute settlement, sanitation, smaller economies and subsidies, antidumping and countervailing duties, government procurement, services, and competition policy.

As explained above, domestic and international economic forces press for a high degree of convergence in the legal systems of developing countries within the commercial areas subject to international trade. One example is the international legal convergence between 1985-97 based on international transplants of intellectual property laws. These reflect the developing countries' recognition of the fact that an increasing proportion of their imports in the form of information-intensive goods and services originated in the industrialized countries (Buscaglia and Guerrero, 1995). As explained above, the Paris and Berne Conventions governed the international protection of intellectual property for more than a century. But the weak enforcement capacity of their administering organ, the World Intellectual Property Organization (WIPO), created the need for a new and more effective legal framework. While the WIPO had dithered, those countries generating most information-intensive products had started to apply unilateral pressures on developing countries from Egypt to Argentina. Advanced-country firms generating these technologies started to demand the use of trade sanctions or threats of withdrawal of trade benefits as a way to punish less-developed countries' unauthorized use of intellectual property. (Pearl 1996)

Developing countries, on the other hand, manifested their adherence to two fundamental principles to justify their legal environments: first, the principle of *territoriality*, based on the premise that property rights needed to be honored according to each state's domestic rules. In Latin America, this principle is applied to the international intellectual property arena through the *Calvo Doctrine.* This doctrine maintains that "aliens are only entitled to those legal rights and privileges enjoyed by nationals, and hence may seek redress for grievances only before local authorities and to the extent permitted by local law." (Alden 1976 p. 136). The second principle, known as *independence,* indicated that the definition of rights within one state does not force other states to grant the same rights. Clearly, these two principles are incompatible with the international harmonization of laws and economic integration promoted today by developed countries. Therefore, led by the United States, countries generating technologies started to rely heavily on the application of unilateral pressure in order to stop the infringement of their intellectual property rights. Suspension of preferential tariffs and trade sanctions were the most common policy tools for punishing developing countries. As an example, Section 301 of the 1988 US Trade Act authorizes the U.S. Government to reduce or eliminate Generalized System of Preferences (GSP) benefits (*i.e.*, preferential tariffs) and to impose import restrictions or even retaliatory measures. These legal tools were considered a very delicate issue in many developing countries, given the

importance of the North American and European markets as a source of demand for a large proportion of exports from developing countries. The North American market absorbed 41.1% of overall exports from Latin America and 62 percent of all exports from Africa between 1983 and 1988, with no fewer than eight countries of the region placing more than half their exports there. Mexico, for instance, sends almost 55% of its exports by volume in the U.S. market; Colombia, Peru and Venezuela send between 30% and 40%, Brazil about 30% and Argentina approximately 18% of total exports (see World Bank 1997, Statistical Abstract). These kinds of foreign pressures explain the legal convergence observed in areas covering trade-related competition rules, financial markets, and government procurement.

On the domestic policy-making front, developing countries' early attempts at integration were also conceived as an integral part of the import-substituting industrialization (ISI) explained above. This was an inward-looking strategy, conceived and understood as a "collective defense" for sheltering poor countries from adverse fluctuations in the world economy. Many developing countries have markets too small to achieve effective economies of scale. The strategy of import substitution, so strongly supported for several decades by the Economic Commission for Latin America (ECLA), a branch of the United Nations known in Latin America by its Spanish name, *Comision Economica para America Latina* or CEPAL), seemed to have a solution to the problem. For ECLA/CEPAL, regional integration offered a way to provide markets large enough to satisfy economies of scale that in turn presumably would strengthen the import-substitution process. Non-reciprocity and preferential treatment were to be granted in accordance with, or dependent upon, the level of economic development of individual countries. Tariff barriers against countries outside the region would serve to protect developing countries' products and enable them to compete more effectively against foreign imports. This form of trade seemed to offer the possibility of overcoming this problem of small size and market by providing larger regional markets that would mean a greater volume of trade and better opportunities to specialize.

At any time geographical proximity facilitates trade flows across borders, but today regional integration has assumed a new meaning. Whereas during the 1950s and 1960s, the prescription for regional integration was defensive and tended to promote an inward-looking economic model, the emphasis today is on an offensive export-led growth where regional integration is understood as an element of the overall outward-oriented strategy. The new strategy forced many countries, including Argentina, Brazil, and Uganda, to reconsider many of their institutions and begin to adopt legal frameworks that are converging toward the bodies of laws prevailing in countries exporting information-intensive goods and services. When trade-driven institutional harmonization became the new development strategy throughout the developing world (Buscaglia, 1993), international trade-related legal frameworks constituted the first wave of legal changes in poor countries. Laws covering trade under GATT's Uruguay Round (now WTO)- intellectual property, foreign investment

regulations, competition rules, government procurement, and trade sanctions related to business transactions - were all later subject to domestic legal revisions or enactments in developing countries.

The new international economic and political environments described above have started to force low-income countries' legal standards to converge towards the legal frameworks of the nations generating standard technologies. For example, with the privatization of state monopolies and the shift towards import competition came a vast increase in the demand for high technology products sold. As stated above, the great increase in international transactions in information-intensive goods and services (e.g. biotech products) made it necessary to reformulate the legal foundation of intellectual property in order: (1) to define and enforce the rights of those businesses generating high-technology and (2) to facilitate the diffusion of know-how to those countries with the capacity to absorb the technologies. It soon became clear that the international harmonization of intellectual property rules was a *sine qua non* for the smooth transfer of complex technologies to the developing world.

However, many low and medium-income countries' experiments aimed at legal harmonization may have failed to produce substantive results or at least anywhere near the results developed countries sought (Long and Buscaglia, 1997). This failure was due to many factors ranging from the broad cultural impediments noted earlier to a lack of private sector lobbying pushing for compatible legal solutions addressing trade issues. Addressing the latter, countries with similar economic structures (i.e. where he relative weight of their economic sectors is similar) that trade with each other (such as Canadian and American automobile industries) will also have private sectors demanding compatible legal frameworks within the areas affecting their products. The same economic sectors (e.g. chemical industry) sponsoring similar legal rules may also explain the drive towards the harmonization of intellectual property and competition legal rules among Argentina, Brazil, and Chile in Latin America to Hong-Kong, Taiwan and Singapore in Asia. Imagine two types of countries hoping to harmonize their commercial laws. On the one hand, there are countries such as Bolivia and Uruguay, where private commercial laws have developed little over time and there are no industrial or service sectors producing information-intensive products. Then there are countries like Argentina, Brazil and Chile, which have relatively complex commercial legal systems and a much higher proportion of their trade concentrated on industrial and service-related sectors. The data analyzed by Long and Buscaglia (1997) suggest that legal harmonization would be more difficult between these two groups of countries than among countries within each of the groups.. In the former case, the private sectors within each group demand different kinds of commercial legal frameworks making legal integration through either harmonization or transplants more difficult to achieve. Consider private sector firms in Bolivia that are importing Brazilian computer software and hardware, compact disks, or movies. The Bolivians do not have an incentive to lobby at home for the enactment of intellectual

property, government procurement or competition laws compatible with the needs and interests of the Brazilian firms. For example, Buscaglia and Long (1997) show that the main drive to harmonize intellectual property trade-related laws was among countries with high levels of international trade between the same industrial and service-related sectors (i.e. intra-sectoral trade). Long and Buscaglia (1997) also shjow that Brazil and Argentina, with the highest levels of intra-sectoral trade, are also the countries with the highest levels of international trade-related legal agreements within their commercial domains, including commonly adopted intellectual property legal standards. That is, the industries with the highest levels of intra-sectoral trade within the region – among them automotive, energy, steel, pharmaceuticals, minerals and textiles - were also the main forces lobbying for legal harmonization of legal standards and regulations.

The practice has been for the relatively larger developing countries, with their larger trade flows, to seek harmonious relations with their main trade partners through legal agreements. The success of these efforts has varied considerably even among major trading countries, however, as is evident when one examines the cast of the largest trader of them all, China, where cultural and other often overlooked factors are paramount. (Alford 1996). The smaller developing countries more often look for a "free ride" by transplanting bodies of the law to their own environment. With these experiences in mind, we can better understand the history of failures in legal harmonization. For example, in 1961 the Kennedy Administration and Latin American countries launched the ambitious Latin American Free Trade Association (LAFTA). But despite good intentions - and in the midst of import-substitution industrialization (ISI) regional policies - its member states failed to agree on what the economic and legal integration process should encompass. This led to the demise of LAFTA before the end of the decade (Acevedo, 1987). All of the main opponents of this treaty were countries with more than 90 percent of their exports in primary products and with no interest or background in legal integration.

Legal and Economic Harmonization of Intellectual Property: The Case of Latin America

Most of the civil law countries in Latin America achieved their independence in the nineteenth century and, one after the other, adopted codified continental-style European law. Much of the codification observed in Latin American legal history until the early 20th century was the product of transplanting civil, commercial, and penal codes from Europe to the different countries in the region (Watson 1983). Between 1825 to 1890, substantive and procedural civil, commercial, and criminal codes were all transplanted from the French Codification with few adaptations to the South American scene (Watson, 1983). For example, Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Peru and Venezuela adopted the Napoleonic Code even though they had never been under French territorial control. The impact of the American Constitution on Latin American public law – in form if not in substance – is another example of a transplant. Therefore, we can say that most Latin American

legal systems started from the same evolutionary base as transplants from Europe and the United States.

Legal systems become more complex as they evolve. This complexity is seen in the breadth of social-economic interactions the legal system is capable of addressing. As an economic structure evolves from its agrarian origins to a more industrialized stage, the legal system that supports the economic interactions of the developing society tends to branch out from its original base as well in order to reduce the costs of interaction in new types of transactions under a more advanced economic structure. In fact, this explains why legal systems in countries including Bolivia, Somalia, Kenya and Peru have not changed much over time as opposed to the cases of the more dynamic legal systems of Argentina, Chile, and South Korea.

Examples of linked economic and legal change can be found in the evolution of commercial law in Latin America. Manufacturing and service sectors began to emerge while the Gold Standard ruled international trade and this inspired a widespread Latin American integration of its economic and legal institutions. (Merryman 1985). There is a rich historical background of Latin American countries addressing legal harmonization. A pattern of legal harmonization exists driven over a century and a half by international trade and economic change. Note from these and earlier examples that legal harmonization tends to occur among countries with similarities in their economic structures while legal transplants are usually the attempt of one country to adopt the legal doctrines of another country with a higher level of economic development (Buscaglia and Long, 1997)

The First Treaty of Lima, signed in 1848 by Argentina, Brazil, Chile, Colombia, and Peru, contains rules whereby contracts signed and documents executed in one of the signatory republics would be valid and enforced by judges and courts in the other countries as well. Argentina, Brazil, and Chile launched initiatives that led to the Congress of Jurists (1877-80) in Lima and a treaty establishing uniform rules of private international law (Acevedo 1987). At the Congress of Lima in 1864-65, Argentina, Brazil, Chile, and Peru adopted postal, trade and navigation treaties in which they committed themselves to providing all possible facilities and protection to trade "as one of the most effective means of promoting the development and growth of industry and wealth and making a future Confederation of states more secure and prosperous." (Acevedo, 1987). Further, the Trade and Navigation treaties of 1864 contain provisions that all natives or nationals of contracting Latin American states would be considered equals with regard to a wide range of matters. This principle went on to become the legal foundation of what was later known as the Latin American principle of equality of nationals and foreigners with respect to international liability of states when torts and/or property damage are experienced by foreign nationals.

The Second Congress of Jurists, held in 1888-89 in Montevideo, produced eight treaties and an additional protocol that were sponsored and drafted by

Argentine, Brazilian, and Chilean jurists. The treaties covered procedural law, literary and artistic property, patents for inventions, trademarks and brand names, international criminal law, and international civil law. The protocol contained general rules for applying the laws of any of the contracting states in the territories of the others. Finally, those South American countries whose international trade represented a growing portion of their economic activity (Argentina, Brazil, Chile, and Peru) proposed a major step in legal integration. Their intention in codifying international law was recognized in the Convention for the Formation of Codes on Public and Private International Law, signed in 1902, and in the Convention on International Law, signed at the Inter American Conference of Rio de Janeiro in 1906. Both treaties established methods and procedures to further the process of legal codification and cooperation at the Inter-American level. In all these cases, the countries pushing for legal harmonization were experiencing changes in their trade-related economic structures associated with domestic legal changes (Buscaglia, 1993).

The process of codification of private international law has thus been one of the ongoing legal activities of Latin American states since the closing decades of the nineteenth century. This work has taken on different institutional forms over time. The first approach was global in that it envisaged a single body of rules covering all aspects of private law; the other envisaged a more gradual and progressive process that involved drafting specific international instruments (Buscaglia 1993; Acevedo 1987). The approach of drafting a single code prevailed during the aforementioned 1877 Congress of Lima and culminated in the adoption of a single code of international law, the Bustamante Code, at the Sixth International Conference of American States in Havana in 1928. Beginning in the 1960's, within the framework of the Organization of American States (OAS), the Inter American Juridical Committee tried to codify all the different areas of private international law. To that end, and in light of the U.S. Restatement of the Law of the Conflicts of Laws, the Committee proposed to review the Bustamante Code to determine whether it was possible to merge its provisions with those of the Montevideo treaties of 1889 and 1939-40. As a result of this effort, the Inter American Juridical Committee prepared a draft code which was not, however, supported by all the member states of the OAS. Those countries supporting legal integration were in all cases the ones with the most dynamic economic sectors (Argentina, Brazil, and Chile), while reservations and opposition emerged among those who still had the more traditional-agricultural economies (i.e., Bolivia, Colombia, Paraguay, Peru, Venezuela). (Acevedo, 1987).

With this failure before them, clearly the result of the different levels of economic development in the more advanced and the less advanced countries, the OAS turned to scheduling intergovernmental meetings to deal with special technical matters and to develop special aspects of inter-American cooperation. That is to say, the failure of the global approach ushered in the second stage of negotiations, one in which sectoral codification was attempted. Today major efforts are being

carried out as a legal process through the Specialized Conferences on Private International Law (CIDIP) under the auspices of the United Nations. To date, five CIDIP have been held: Panama in 1975, Montevideo in 1979, La Paz in 1984, Montevideo in 1989, and Mexico in 1994.

As shown by Buscaglia and Long (1997), systems in countries including Argentina, Brazil, and Chile started to address new types of economic interactions and legal harmonization of standards as a result of higher levels of specialization and division of labor within their domestic markets. As the relative growth of their agricultural sectors diminished and manufacturing increased, commercial codes became subject to major re-drafting.

Economic integration and growth among developing countries have created a need for major new legal developments. In this scenario, the private sector has emerged as the main driving force behind legal initiatives related to the Free Trade Agreement for the Americas (FTA) and the European Union (EU). The FTA agreement, for example, aims at forming a customs union covering the entire Western Hemisphere by the year 2005. Meetings of trade ministers from 34 countries have been the focus of practical recommendations given by private sector leaders on subjects ranging from harmonization of investment regulations to environmental laws. In broader terms, however, the FTA has bogged down, as has the anticipated admission of Chile to NAFTA, in substantial part because of the failure of the U.S. government to follow up on its commitments for domestic political reasons.

In this context, the MERCOSUR (*Mercado Comun del Sur*; Common Market of the South) Trade Agreement, signed by Argentina, Brazil, Paraguay and Uruguay, constitutes what might be termed the "great leap forward" approach to economic and institutional integration. Because MERCOSUR is so dynamic, and because the FTA is so anemic, many other countries in Latin America have applied for associate membership - that is, membership without the common external tariff - in MERCOSUR. The dynamism of MERCOSUR is accounted for by how intelligent Argentinean and Brazilian leaders took advantage of this international situation. Contrary to conventional theory, which views economic integration as a gradual process achieved through a series of stages, the MERCOSUR countries have chosen to bypass several intermediate steps with the avowed aim of having a common market in place. This common market would consist of (1) a free trade zone, with zero trade tariffs and non-tariff barriers, (2) a common external tariff, and (3) integrated trade-related selected legal frameworks (e.g. intellectual property laws).

As stated above in this chapter, the import substitution policies followed in most developing countries during the 1960s and 1970s isolated their industrialized

sectors from international trade and private sectors did not bother to push for legal predictability outside of their local markets. Nor was legal/economic integration then on the private sectors' agenda. The demise of the import substitution model, however, created an environment all development-oriented parties considered more appropriate for trade and legal harmonization. For example, in 1986, Argentina and Brazil put aside their long-standing rivalry to enter into a cooperative relationship termed the Argentine-Brazilian Economic Integration Program (ABEIP), a formal program for economic, legal, and political cooperation. From a political standpoint, the ABEIP aimed to strengthen the infant democratic regimes that had emerged in each country after prolonged periods of military rule. In the economic realm, the goal of the ABEIP was to expand, and diversify bilateral trade between these two countries via protocols that emphasized, on a sector-by-sector basis, such domestic products as capital goods, agribusiness, and the automotive sector (Baldinelli 1990). The favorable economic situation which had prompted Argentina and Brazil to embark upon the ABEIP in 1986 soon turned sour, however, because of (1) a chaotic macroeconomic environment in both countries (i.e., hyperinflation and recession) and (2) external constraints imposed by their respective foreign debts. Despite few advances, most of the protocols were never executed. Presidents Raul Alfonsin of Argentina and Jose Sarney of Brazil nonetheless signed an integration treaty that in August 1989 was ratified by their respective congresses, announcing their intention to create a free trade area over a 10-year period. But by the end of the decade, Argentina and Brazil were in deep economic crises and the failure to coordinate their economic policies, in addition to the cumbersome protocols, complicated bilateral negotiations brought all progress toward economic integration to an end. (Chudnosvsky, 1992).

Misgivings about the future of the projected integration were quickly dispelled, however, when new presidents took office in the two countries: Carlos Menem in Argentina in mid-1989 and Fernando Collor de Mello in Brazil in early 1990. Both presidents dropped import substitution and faced their international debt crisis and their governments' lack of resources by adopting free-market economic policies that differed appreciably from those of their predecessors. Indeed, economic-legal integration was a key component of both their foreign policies. In July 1990, Menem and Collor de Mello signed the Buenos Aires Act, which called for establishing a common market by the end of 1994 and institutional integration by the year 2000. This Act introduced a new phase since it broadened the scope of the proposed integration and shortened its timetable. Equally important was the fact that both countries were now pursuing integration within the context of programs for unilateral trade liberalization and legal harmonization related to government procurement, foreign investment rules, intellectual property, and competition rules.

Conclusion

This paper has shown how domestic and international economic forces based on historical legal precedents has accelerated the improvement and harmonization of

intellectual property protection standards in developing countries. Case studies focusing on Latin America confirm this view.
The conditions under which countries are willing to protect and enforce intellectual property rights cannot be just explained by the use of foreign pressures applied to poor countries by the industrialized economies generating intellectual property. When developing countries make the policy decision to adopt an export-driven approach to economic growth, the urgent need to attract foreign high-tech capital coupled with the required flows of information-intensive capital imported goods will provide the incentive to improve intellectual property protection by making legal standards more compatible with the WTO and NAFTA's standards. This harmonization is even stronger in cases where developing countries form trade agreements with clauses aimed at harmonizing institutional frameworks (e.g. MERCOSUR).

The United States foreign policy needs to take these elements into account before embarking in an indiscriminate trade sanctions course. Empirical research suggests that, under the institutional conditions stated above, international market forces by themselves can create all the necessary incentives for national governments to compensate innovators if economic growth is to be accomplished.

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