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The Economic Factors Behind Legal Integration: A Jurimetric Analysis of the Latin American Experience

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**THE ECONOMIC FACTORS BEHIND LEGAL INTEGRATION:
A JURIMETRIC ANALYSIS OF THE LATIN AMERICAN EXPERIENCE**

by

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ABSTRACT

This paper shows that the international harmonization of commercial legal rules and commercial legal standards in Latin America have been the result of very specific legal and economic country-specific factors. The paper proposes that international legal harmonization within a regional bloc of countries is a function of the convergence of three broad conditions: (1) first, the *a priori* international country-to-country compatibility in the form and scope of their legal rules applied to domestic commercial transactions; (2) second, the emergence and growth of intra sectoral international markets supported by foreign direct investment; and (3) third, the emergence and growth of domestic trade-related industries seeking compatible legal rules in their exporting markets abroad. A jurimetric model is introduced in Part III showing that the drive to seek international legal harmonization has been explained by these specific economic and legal domestic factors.

I. INTRODUCTION

Recent literature on legal and economic regional integration has stressed the key role of emerging trading blocs in shaping the world economy of the 20th-century.¹ 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. According to Abramowitz (1989), the extent to which a country that is technologically behind a leader is able to catch up will depend in part on its social capability to absorb advanced technologies.² Nelson and Wright (1992) and Porter (1985) state that the main factors fostering the social capability for technological improvement include a strong research and development ("R&D") sector, higher educational institutions satisfying the demand for scientists and engineers emanating from emerging markets, and competitive environments acting as disciplinary factors for firms.³ None of these publications, however, discuss in depth the required legal changes needed to foster competitive environments and enhance the capabilities to absorb technologies.

Developing nations are currently facing a unique opportunity created by global free trade, the continuous decline in transportation and communication costs coupled with the unprecedented availability of generic applied knowledge, and the expanding flows of international financial investments. However, throughout their history, many of these countries have lacked the institutional capability to create or absorb the applied knowledge aforementioned.⁴

The main purpose of the analysis advanced in this paper is to explain how the limited international harmonization of commercial legal rules and commercial legal standards in Latin America has been the result of specific domestic legal and economic factors. This paper

¹See Davey, William, J. Jackson, and Alan Sykes (1995), *Legal Problems of International Economic Relations* (1995), Boston: Harvard University Press, pp. 23-121.

²Abramowitz, Moses (1989), *Thinking About Growth*. Cambridge: Cambridge University Press.

³See Porter, Michael (1985), *Competitive Advantage*, New York, The Free Press; Nelson, Richard and Gavin Wright (1992), "The Rise and Fall of American Technological Leadership: The Postwar Era in Historical Perspective," *The Journal of Economic Literature*; Rosenberg, Nathan (1985), "The Commercial Exploitation of Science by American Industry," in Clark, K., R. Hayes, and C. Lorenz, *The Uneasy Alliance: Managing the Productivity Technology Dilemma*. Boston: Harvard Business School Press; and Schumpeter, J.A. (1950), *Capitalism, Socialism, and Democracy*. New York: Harper.

⁴Buscaglia, Edgardo, 1993. "Law, Technological Progress, and Economic Development." Working Paper.# 391, Palo Alto, Calif.: Hoover Institution, International Studies Program.

shows that the international legal harmonization is a function of the convergence of three broad conditions: (1) first, the *a priori* international country-to-country compatibility in the form and scope of their legal rules applied to domestic commercial transactions; (2) second, the emergence and growth of intra sectoral international markets supported by foreign direct investment; and (3) third, the emergence and growth of domestic trade-related industries seeking compatible legal rules in their exporting markets abroad. Specifically, the compatibility in the evolutionary natures of two or more economic and legal systems will be introduced as a factor that will affect the desirability and feasibility of international legal integrations. Moreover, a jurimetric model is introduced in Part III proving that the drive to seek international legal harmonization in Latin America is explained by well-specified economic and legal factors

In the next section, this paper will describe the main drives toward legal integration within South America during the 19th and 20th centuries. A jurimetric analysis follows in Part III revealing the connections between legal integration and economic structures. Part IV offers a conclusion of our analysis.

II. DESCRIPTIVE ACCOUNT OF THE LEGAL INTEGRATION EXPERIENCE IN 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 law within the Roman and Germanic tradition. 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.⁵ During the period from 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.⁶ 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 is another example of a transplant.⁷ As a result, most Latin American legal systems started from the same evolutionary base.⁸

The complexity of a legal system is the product of its evolution. This complexity is defined in terms of the breadth of socio-economic interactions that a legal system is capable of addressing. As an economic structure evolves from its agrarian origin to a more

⁵See Alan Watson (1983), *The Civil Law*, Cambridge University Press, pp. 24-78.

⁶See John Henry Merryman (1985), *The Civil Law Tradition*, 2nd Edition, Stanford University Press, pp. 26-89.

⁷*Id.* at 39.

⁸Specifically, the compatibility in the evolutionary natures of two or more legal systems will be introduced as a factor that will affect the need and feasibility of legal integrations.

diversified economic structure, the legal system would tend to branch out from its evolutionary base in order to address the higher diversity of economic interactions. In this respect, if a legal system were not subject to substantive changes in its private law, a possible explanation is that its economic structure may not have experienced much change compared to its agrarian beginnings (*i.e.*, new economic sectors or changes in the relative importance of these sectors).⁹ In fact, this economic evolution provides an explanation of why those legal systems in which only mild changes in the sectoral structure of their GDP have occurred and where the agricultural sector still prevails (such as Bolivia, Ecuador, and Peru) address substantive and procedural problems of commercial law in strikingly similar ways and without showing much evolution relative to their initial legal structures.¹⁰ In fact, within countries such as Bolivia and Paraguay one can observe that present economic structures are not too different from the ones observed at the time when the early 19th century transplants occurred. In short, the complexity in the evolution of private law is also explained by the complexity in the development of its economic structure. In this context, one can claim that the economic structures (*i.e.*, composition and relative importance of productive sectors) provide the direction followed by the legal evolution in domestic commercial rules (*i.e.* amendments to the commercial code addressing new specific commands regulating economics interactions) and also provide the direction followed by the legal evolution in domestic commercial standards (*i.e.* amendments to the commercial code addressing new general norms pertaining to economic interactions).¹¹

⁹One can observe that, within the volatile political history of the region, agrarian economies' public laws (*e.g.*, constitutional or labor law frameworks) were subject to drastic changes regardless of the stage of development. One can also observe that private law, however, in the form of civil and commercial codes, have experienced only minor changes since their inception. See Clagett, H. (1952), *La Administracion de Justicia en Latinoamerica*, NY: Oceana Publications.

¹⁰Karst points at these similarities found among the legal systems of Bolivia, Ecuador, and Peru without addressing its possible causes. Karst, Kenneth (1966), *Latin American Legal Institutions: Problems for Comparative Study*, Los Angeles: Latin American Ceneter; and de Robertis, Manuel (1988), "Un Analisis Legal Comparado de los Sistemas Latinoamericanos," Unpublished Manuscript, Conferencia de Analisis Juridico Hemisferico: Universidad Nacional de Busnos Aires.

¹¹ Forces related to the determination of comparative advantages in production and that the composition of a country's trade reflects the relative abundance of factors in that country's endowment, also determine the composition and relative strength of productive sectors. These economic forces, however, are always enhanced or hampered by the political weight of organized constituencies. For an understanding of the economic factors' impact on the determination of the productive structure, see Wright, Gavin (1990), "The Origins of American Industrial Success," *American Economic Review*, 107, pp. 651-668; Olson, Mancur (1984) *The Rise and Decline of Nations: Economic Groweth, Inflation, and Social Rigidities*; and North, Douglass (1982) *Institutions, Institutional Change, and Economic Performance*, Cambridge University Press.

Testing this general theory within the Latin American historical context, one can find out that a bottom-up approach to law-making in the commercial area provided the framework for international legal and economic convergence during the period within which the Gold Standard ruled international trade.¹² This period was characterized by the emergence of manufacturing capital-intensive industries in Latin America that were aiming at reaching economies of scale by expanding sales to foreign markets.¹³ In this context, Latin American new industries attempted to sponsor international economic integration schemes since the early stages of their history. As a result, governments reacted before these powerful industrial groups by seeking international legal and economic regional agreements.

There is a rich historical background addressing legal interrelations within the region. Starting with the Congress of Panama in 1826 and the Congress of Lima in 1864-65 where Argentina, Brazil, Chile, and Peru took the first steps toward greater legal harmony by adopting a postal treaty and a trade and navigation treaty.¹⁴ In these treaties, all the contracting parties expressed their resolve to provide their reciprocal trade with all possible facilities and protection, "as one of the most effective means of promoting the development and growth of their industry and wealth and making a future Confederation of states more secure and prosperous."¹⁵ Both in the Trade and Navigation 1864 Treaties, there is an express provision for natives or nationals of all contracting Latin American states to be considered as equals with regard to a wide range of objectives and areas. This principle went on to become the direct legal foundation of what would later be known as the Latin American principle of equality of nationals and foreigners regarding the international liability of states when foreign nationals are subject to torts and/or property damage. Moreover, the First Treaty of Lima signed by Argentina, Brazil, Chile, Colombia, and Peru in 1848 contains a rule whereby the contracts signed and documents executed in one of the signatory republics would have the same force and validity in the others, and the authorities, judges, and courts would be required to enforce them.¹⁶ New initiatives presented by the governments of Argentina, Brazil, and Chile led to the Congress of Jurists held in Lima between 1877 and 1880 establishing uniform rules in the design of private international law.¹⁷

¹² A partial account of international legal treaties during the 19th century is taken from Velez Muniz (1951), *El Acercamiento de los Sistemas Legales en Latinoamerica*, Buenos Aires: Editorial UBA, pp. 123-256.

¹³ *Id.* at 23-34

¹⁴ *Id.*

¹⁵ Segundo Congreso de Lima, Articles 23. In Acevedo, Carlos (1987), *La Historia de la Integración*. Editorial El Planeta, Buenos Aires.

¹⁶ Ministerio de Relaciones Exteriores y Culto (Argentina), "Documento de Negociación No 1214/A" Biblioteca Histórica de Relaciones Exteriores, Buenos Aires, Argentina.

¹⁷ *Id.*

Subsequently, during the Second Congress of Jurists, held in Montevideo in 1888-89, eight treaties and an additional protocol were adopted. These treaties 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.¹⁸ The protocol contained general rules for applying the laws of any of the contracting states in the territories of the others. Later, Argentina, Brazil, Chile, and Peru proposed a major step in legal integration when their intention in codifying international law was recognized in the Convention for the Drafting of Codes on Public and Private International Law, signed in 1902, and during the International Law Convention, signed at the Inter American Conference of Rio de Janeiro in 1906.¹⁹ 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 international legal integration were at the same time experiencing changes in their trade-related economic structures that were addressed through amendments to their domestic commercial and/or civil codes. In other words, one can conclude that during the 19th century and early 20th century we can already observe a pattern of legal harmonization driven by international trade and economic change.

The process of codification of private international law in the Inter-American context has clearly been one of the ongoing legal activities of the American states since the closing decades of the last century. This work has taken on different institutional forms and is currently being carried out as a legal process through the Specialized Conferences on Private International Law (CIDIP) under the auspices of the United Nations. Since the start of the codification of private international law, two different approaches have been taken: one involved a global approach that envisaged a single body of rules covering all aspects of private law; the other approach envisaged a process that was more gradual and progressive, involving the drafting of specific international instruments. The approach of drafting a single code was the prevailing one 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 1928.²⁰

Beginning in the 1960's and as part of the Organization of American States (OAS) framework, the Inter American Juridical Committee made efforts 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 for private international law, 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. The First Specialized Conference in Private Law adopted conventions covering international trade and procedural

¹⁸This constitutes the Latin American legal response to the Paris and Berne Conventions in Europe. Latin American and other international historians have not paid due attention to this first step in the process of legal convergence within the intellectual property area. *Id.*

¹⁹*Id.*

²⁰*Id.*

law in 1975. These are the Inter American conventions on conflict of laws concerning bills of exchange, promissory notes, and invoices; on conflict of laws concerning checks; on international commercial arbitration; on letters; on the taking of evidence abroad; and on the legal regime of powers of attorney to be used abroad. The 1979 Second Specialized Inter-American Conference also approved conventions on international trade law and international procedural law focusing on rules concerning checks and conflicts of laws involving commercial companies. With respect to international procedural law, these Inter-American conventions covered standards of proof and discovery material, enforcement of injunctions, and extraterritorial validity of foreign rulings and arbitral awards. Lastly, the Third, Fourth, and Fifth Specialized Conference approved the Inter American Convention on Law to be applied to international contracts where the first common ground for a hemispheric commercial code was established. As a result of this effort, the Inter American Juridical Committee prepared a draft code, but it was not supported by the member states of the OAS.²¹ This situation led to the abandonment of the global approach of codification of Inter-American codification, and the beginning of a second stage in which sectoral codification prevailed.²²

In fact, during the mid 20th century one can already observe that, under the OAS umbrella, those countries that were not undergoing profound economic changes in their private sector structure did not show and, in fact, did not support a legal integration sponsored by the relatively more complex legal and economic national systems of the region. Moreover, the countries supporting legal integration were in all cases the ones subject to more dynamic economic changes (Argentina, Brazil, and Chile), while reservations and opposition emerged from the mostly traditional-agrarian economies (i.e., Bolivia, Paraguay, Peru, and Uruguay).²³ In this context and within the OAS framework, intergovernmental meetings were scheduled to deal with special technical and limited matters or to develop special aspects of inter-American cooperation.²⁴

As result of all of the above agreements, the legal systems in countries such as Argentina, Brazil, and Chile started to address new types of economic interactions reflecting higher levels of specialization and division of labor within their domestic markets. As the relative growth of their agricultural sectors diminished and information intensive sectors of the economy grew, commercial codes became subject to major re-drafting. Table 1 below covers the period 1890-1980 and shows the number of amendments introduced to the commercial codes in each country. The amendments included in this table were all aimed at addressing new types of economic interactions as the direct result of the growth of the non-agricultural manufacturing and service sectors. These non-agricultural manufacturing and

²¹ refer to Muniz *supra* note 12 at pp. 116

²² refer to Muniz *supra* note 12 at pp. 121-139.

²³Refer to OAS/Doc. 1356-WP at Joint IMF-Bank Staff Library, Washington, D.C.

²⁴Garcia-Lopez, Jorge (1973), *Las Leyes y las Instituciones Internacionales*, Editorial ADEBA, pp. 13-56.

service sectors were composed of firms producing agro-manufacturing, chemicals, pharmaceuticals, steel, financial services, transportation, communications, and energy.²⁵

Finally, we also measure the number of international legal agreements addressing harmonization of commercial laws. Table 1 compares the dynamic economies of Argentina, Brazil, and Chile (where the average real annual growth in sales of the non-agricultural manufacturing and service industries during the period 1890-1980 exceeded 2 percent annually) to countries that experienced no significant changes in the number and relative strength of their non-agricultural manufacturing and service sectors such as Bolivia, Ecuador, Uruguay, and Venezuela.

²⁵Vazquez Presedo, Vicente (1981), *Historia Economica del Cono Sur*, Editorial EUDEBA, pp. 12-45.

TABLE 1²⁶**Legal Changes vs. Economic Structure During 1890-1980**

Country	# of High-Growth Trade Related	# of Amendments Non-Agricultural Industries Commercial	# of Internat. In Commercial Codes Agreements
Argentina	11	353	20
Bolivia	1	9	2
Brazil	12	402	24
Chile	6	278	15
Colombia	0	5	6
Ecuador	1	7	6
Peru	0	20	7
Uruguay	0	7	5
Venezuela	1	12	3

As shown in Table 1, there is a strong association among the three legal and economic variables. That is, the number of non-agricultural industries experiencing an average of more than 2 percent of real growth in their compounded annual sales (i.e. capturing the speed of economic changes in their national economic structure) is associated with a higher number of legal amendments to the commercial/civil codes addressing the new type of economic interactions taking place within the new industries. Moreover, these two patterns are also associated with a strong drive of a country to harmonize its commercial legal framework through international trade-related agreements. For example, we observe that Brazil and Argentina who possess the most dynamic economies during the period 1890-1980 (with 12 and 11 new non-agricultural trade-related industries respectively) are also the countries with the largest number of amendments to their commercial/civil codes (402 and

²⁶The information related to amendments is provided by Aragon, Ramiro (1978), *Codificación Civil en Latinoamérica*, Buenos Aires: Editorial EUDEBA; the quantitative data related to the growth in sales in the non-agricultural manufacturing and service industries is taken from Vazquez, Julio (1991), *La Historia Económica de América del Sur*, Rosario, Argentina: Editorial Atlantida, pp. 12-15; the number of international legal agreements per country is included in Carcano, Miguel Angel (1941), *Historia de la Diplomática Argentina*, Buenos Aires: Ed. Perfil, pp. 56-62; and Urrutia, Juan Jose (1992) *Los Acuerdos Comerciales Internacionales en el Continente Americano: Precedentes para la Región*. FCE Editorial: Mexico.

353 respectively) and with the largest number of trade-related legal treaties signed (i.e. 20 for Argentina and 24 for Brazil). As was claimed above, more complex economic systems (i.e. a larger number of high growth trade-related non-agricultural industries) reflect a higher complexity in their domestic legal systems measured through the introduction of amendments in their civil/commercial codes. At the same time, Table 1 also shows that the more dynamic economies are also more likely to harmonize their legal systems through international legal agreements. The international legal agreements measured here cover the harmonization of legal standards (e.g. health standards applied to merchandise crossing international borders), the harmonization of legal standards applied to commerce in general (e.g. codifying the principles of territoriality and independence), the harmonization of rules (e.g. duration and scope of patents), and the harmonization of legal doctrines (e.g. the doctrine of equivalence in the treatment of real property or the fair use doctrine in the use of copyrights).²⁷ For example, one can observe that starting in the mid 19th century, Latin American countries started to adhere to two fundamental legal standards addressing the enforcement of laws: first, the principle of *territoriality*, based on the premise that rights and obligations need to be honored according to each state's domestic rules. This principle is also known as 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."²⁸ The second principle of *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 examples of international harmonization of laws.

²⁷ All of these international agreements deal with measures related to strengthening foreign investment protection, simplifying technical standards, regulating professional services, standards to be applied to the interpretation of territoriality and independence, and the harmonization in the enforcement of tangible and intangible property rights (e.g. introducing the doctrine of equivalence, the doctrine of fair use in copyrights, rules dealing with duration and scope of patents, and standards to be applied to the interpretation of pipeline protection.)

²⁸The Calvo Doctrine, named after Argentine jurist Carlos Calvo (1824-1906) was adopted by most Latin American states in the 19th century. For an analysis of this doctrine, see Alden F. Abbott (1976), "Latin America and International Arbitration Conventions: The Quandary of Non-Ratification," 17 *Harvard International Law Journal* 131-137.

TABLE 2**Matrix Of Inter-Country Legal Agreements Covering Commercial Areas**

	Argentina Venezuela	Brazil	Bolivia	Chile	Colombia	Ecuador	Peru	Uruguay
Argentina	0 0	12	1	3	1	1	1	1
Brazil	12 0	0	1	4	3	2	0	2
Bolivia	1 0	1	0	0	0	0	0	0
Chile	3 1	4	0	0	2	1	3	1
Colombia	1 0	3	0	2	0	0	0	0
Ecuador	1 0	2	0	1	0	0	2	0
Peru	1 1	0	0	3	0	2	0	0
Uruguay	1 1	2	0	1	0	0	0	0
Venezuela	0 0	0	0	1	0	0	1	1
TOTAL	20 3	24	2	15	6	6	7	5

Table 2 above breaks down the pattern of international agreements for each country and shows a clear picture where the region's most dynamic economies are also the ones that are more likely to reach international legal commercial agreements involving harmonization of rules and standards.²⁹

One can also argue that as an increasing number of business exchanges occur in countries with overlapping growing trade-related sectors, their need for legal harmonization will tend to increase. This could explain why in Table 2 we observe that most attempts to harmonize legal frameworks have mainly involved countries such as Argentina, Brazil, and Chile. These countries all experienced growth in their most dynamic and capital-intensive

²⁹Note that an international legal agreement addressing the harmonization of standards is a much weaker form of harmonization than the international agreements involving the international convergence in commercial rules.

trade-related sectors (i.e., agro-manufacturing, chemicals and pharmaceuticals, steel, financial services, transportation, communications, and energy).³⁰

Asymmetries in market size are usually blamed for failures to reach economic and legal integration. If one aims at understanding the social forces behind these and other drives for legal convergence, the most promising approach is provided, not just by addressing the differences in market size. In contrast, international legal convergence must also be understood within the frameworks proposed by North (1982) and Olson (1984) and here applied to the international case studied here. In our case, foreign pressures coupled with the political weight and rent-seeking of the lobby groups associated with the main productive domestic sectors affected by integration (in our case, trade-related sectors) influences the political actors' perceptions of the costs and benefits of legal convergence. For example, Buscaglia (1994) shows that during the 19th century the domestic political processes throughout the region assigned greater political weight to landowners and merchants linked to the export sectors during a time when the Gold Standard ruled the world of international trade and financial flows.³¹ In this context, legal change and integration had little to do with social welfare maximization and much more to do with international political influence and domestic redistributive arguments, what Schwartz and Sykes (1996) denominate "political welfare-maximization."³² It can be then said that redistributive forces may slow down or speed up the process of institutional reform, but there is no doubt that political welfare-maximization related factors have had a powerful influence in shaping legal institutions throughout Latin American history. For example, one can observe that in Argentina, Brazil, and Chile, *ad hoc* advising congressional committees composed exclusively of landowners and merchants connected to the exports sector, joined by foreign pressure business groups, were asked to provide assessments of the civil, commercial, and criminal codes during the amendment procedures.³³ The advice provided by these committees was often quoted and followed during the debates in the Senate and

³⁰Vazquez Presedo, Vicente (1981), *Historia Economica del Cono Sur*, Editorial EUDEBA, pp. 12-45.

³¹Buscaglia, Edgardo (1994), "Legal and Economic Development in Latin America: The Missing Links," *Journal of Inter American Studies and World Affairs*, Vol. 18, No. 4, pp. 45-59.

³²The links between the political arm of lobbies and the business institutions associated with them often yields rents and higher profits for the firms involved. See Olson, Mancur (1982), *The Rise and Decline of Nations*, New Haven: Yale, pp.34-73. Also refer to Warren Schwartz and Sykes, Alan (1996), "Toward a Positive Theory of The Most Favored Nation Obligation and its Exceptions in the WTO/GATT System," *International Review of Law and Economics*, Vol. 16, No. 1, pp. 27-51.

³³See Perez Roldan (1963), *La Adopcion y Debates de los Codigos en los Senados del Continente*. Editorial Perfil, Buenos Aires.

Chambers of Deputies.³⁴ Moreover, the opinions issued by these committees were the foundation of key changes to the newly enacted codes. No other domestic groups were included in this political process. All this occurred during the period when the Gold Standard determined the terms of trade and trade patterns worldwide and during which all countries in Latin America were dependent upon foreign capital for their development.³⁵

One should also pay attention to other catalysts of legal change. For example, starting in the mid 20th century, developed economies generating technologies, led by the United States, started to rely heavily on the application of unilateral pressure and sanctions in order to stop the infringement of their multinationals' property rights. Suspension of preferential tariffs and trade sanctions were the most common policy tools for punishing developing countries.³⁶ As shown in a jurimetric study by Buscaglia and Guerrero (1995), these foreign pressures can explain the legal convergence observed in intellectual property laws. Foreign pressures notwithstanding, this study also shows that the trade-related legal convergence observed throughout Latin America is mainly explained by favorable incentives within the political and economic systems of the region.

Based on the historical experience explained above, one can also show that the most recent legal reforms introduced within the legal systems of Latin America's largest exporters during the 1990's are also following this same historical pattern of harmonizations. Following the same historical pattern described above, legal reforms in Latin American countries are still the product of the joint effect of local political conditions and foreign economic pressures.³⁷ For example, notwithstanding constitutional reforms in Argentina, Chile, Colombia, and Mexico, Buscaglia and Guerrero (1995) have shown that foreign economic pressures to reform commercial laws during the period 1950-90 arose particularly because an increasing proportion of imports to these countries consisted of information-intensive and capital-intensive goods and services.³⁸ For example, this study

³⁴*Id.* at 121-134.

³⁵For a description of how the Gold Standard affected international business transactions, see McKinnon, Ronald (1982), "The Order of Economic Liberalization: Lessons from Chile and Argentina." In *Economic Policy in a World of Change*, edited by K. Brunner and A. Metzler, pp. 159-86, Amsterdam: North Holland.

³⁶An example of unilateral measures aimed at inducing legal changes in Latin America is provided by the *Omnibus Trade and Competitiveness Act of 1988*, 19. 1301-1303 (amending Section 301 of the Trade Act of 1974 to include a "Special 301" to deal with intellectual property protection.). Section 301 authorizes the U.S. Government to reduce Generalized System of Preferences (GSP) benefits (*i.e.*, preferential tariffs) or their elimination, and the imposition of import restrictions -- or even retaliatory measures

³⁷Buscaglia, Edgardo Jr. (1994), "Legal and Economic Development: The Missing Links," *Journal of Inter-American Studies and World Affairs*, Vol. 35, No. 4, pp. 153-169.

³⁸See Buscaglia, Edgardo and Jose Luis Guerrero (1995), "A Quantitative Analysis of Counterfeiting Activities in Developing Countries During the Pre-GATT Period," *Jurimetric*

shows that in countries with a poor enforcement record and lack of international harmonization drive, intellectual property was subject to a constant pattern of infringements due to the lack of a domestic producer base with a stake in this modern sector.³⁹ As a result, advanced-country firms generating these technologies were then demanding their governments' use of trade sanctions or threats of loss of trade benefits as a way to punish less-developed countries' unauthorized use of intellectual property.⁴⁰

From a domestic policy perspective, Buscaglia (1994) also shows that a movement toward legal integration also covered the period within which an import substitution approach to development was implemented. As a product of the Great Depression, from the early 1930s until the 1980s, Latin America and almost all other developing countries encouraged domestic (import substitution) manufacturing investment, suppressed agricultural prices, and expanded the size of their public sector enterprises while attempting to stimulate savings and investment through taxation and credit allocated by the public sector. The prevailing view was that a shortage of domestic physical capital was the key impediment to development

In this context, Latin America's attempts at legal integration during the period 1930-1980 were also conceived as an integral part of this import-substituting industrialization (ISI), a strategy strongly advocated and supported by the Economic Commission for Latin America (ECLA), a branch of the United Nations (known more widely in Latin America by its Spanish nomenclature: *Comision Economica para America Latina* or CEPAL). For ECLA/CEPAL, regional integration offered a way to provide markets large enough to satisfy economies of scale and scope which would, in turn, strengthen the import-substitution process. Non-reciprocity and preferential treatment were to be granted through international legal agreements in accordance with, or dependent upon, the level of economic development of individual countries. Tariff barriers against countries outside the region

Journal, Vol. 23, No. 3, pp. 23-37; and *International Trade Reporter*, Washington: Bureau of National Affairs (3/91) pp. 234-256.

³⁹*Id.* at 34.

⁴⁰ The international harmonization of intellectual property rules and standards can also be understood from a historical perspective. The Paris and Berne Conventions, administered by the World Intellectual Property Organization (WIPO), governed the international protection of intellectual property during more than a century. The Paris Convention, Berne Convention, and others that are assigned to protect intellectual property, are administered by the World Intellectual Property Organization (WIPO), founded in 1967 as a specialized agency of the United Nations. The three most important international agreements under WIPO are: (1) the Paris Convention for the Protection of Industrial Property (103 nation members) established in 1883, (2) the Madrid Agreement concerning the International Registration of Marks (twenty nine states) adopted in 1891; (3) and the Berne Convention for the Protection of Literary and Artistic Works (ninety members) adopted in 1886. WIPO administers a total of nineteen unions and conventions. One of these treaties is the Patent Cooperation Treaty of 1970 (PCT) (51 members). PCT provides for the filing of international patent applications, thereby facilitating the examination of patent applications in the patent office of other member countries.

would serve to protect Latin American products and enable them to compete more effectively against foreign imports. In brief, the ECLA recipe for regional integration was an inward-looking strategy, conceived and understood as a "collective defense" for sheltering Latin America from adverse fluctuations in the world economy.⁴¹

Import substitution industries grew behind protective walls based on subsidies and tariffs in a milieu where many other determinants of the rate of economic growth, such as investment in human capital and the role of microeconomic incentives, were completely ignored by policymakers. Protection of import substitution industries allowed domestic prices and costs to far exceed international prices and created little incentive for efficiency. These protected industries produced substitutes for imports but usually depended on the import of raw materials and technology. Domestic demands for foreign exchange and the region's international debt grew rapidly over time as these firms and their governments imported capital goods to accelerate investment.⁴² In this context, the import substitution approach to development came to an end during the international debt crisis of the 1980s when developing countries' policymakers realized that internal markets and protection of infant industries were not enough to assure sustainable growth.⁴³

The failure of the ISI strategy combined with the second oil shock, debt crises, and recession in the developed world (which reduced the demand for developing-country exports) led to the 1980's Latin American economic crisis. As a result, international legal harmonizations acquired a new form. By the early 1980s most countries in the region started to adopt pro-business market-driven economic policies to address the problems posed by large foreign debts, high inflation, and huge fiscal deficits. The ultimate goal of this free-market economic prescription was to push through legislative bodies laws needed to deregulate and liberalize trade so that the market, rather than the state, would be the ultimate referee on how resources would be allocated.⁴⁴

⁴¹ Rosenthal, G. (1991), "Un Informe Critico a 30 anos de Integracion en America Latina," *Nueva Sociedad* 113 (Mayo-Junio) 60-65; also refer to Buscaglia, Edgardo and Thomas Ulen, Paper Presented at the *1996 Annual Meetings of the American Law and Economics Association* at Stanford University.

⁴² See Buscaglia, Edgardo and Thomas Ulen, Paper Presented at the *1996 Annual Meetings of the American Law and Economics Association* at Stanford University.

⁴³For a complete description of this process, see Buscaglia, Edgardo Jr. (1993), "Law, Technological Progress, and Economic Development," *Hoover Institution Policy Studies*, Stanford University.

⁴⁴ As part of this new strategy and in order to address the crises, some countries ammended their constitutions (e.g. Argentina, Colombia, and Mexico), while others pursued this new approach to policy-making on a legal piece meal basis (e.g. Ecuador, Peru, and Venezuela). For more details on the nature of the region's domestic legal reforms see Barragan, Julio (1994), *Como se Hacen las Leyes*. Buenos Aires: Editorial Planeta. For details on the macroeconomic aspects of reforms refer to Sebastian Edwards (1991), *Latin American Economic Reform*, Washington, D.C.: The World Bank, pp. 23-35.

III. A JURIMETRIC ANALYSIS OF THE ECONOMIC FACTORS AFFECTING LEGAL HARMONIZATION OF INTELLECTUAL PROPERTY RULES

The regional drive towards legal harmonization in Latin America has never been uniform. More specifically, one can observe that countries with overlapping dynamic trade-related sectors (i.e. experiencing a higher proportion of intra-sectoral international trade as a proportion of total trade) also have private sectors demanding compatible legal frameworks in their foreign markets within the areas affecting their products or foreign direct investment within their sector of the economy. We have already described how this has been true under both, the import substitution industrialization and the export-driven periods. In this context, imagine two types of countries hoping to harmonize their commercial laws: countries where private commercial laws are not far from their evolutionary agrarian base and with weak non-agricultural sectors producing information-intensive products exist (e.g., Bolivia, Paraguay), and, in contrast, countries with relatively evolved commercial legal systems (i.e. legal systems addressing a much wider range and higher complexity of economic interactions) and with a high proportion of their trade concentrated on dynamic sectors (such as Argentina, Brazil, and Chile). The quantitative evidence (Table 1 and 2) and the analysis advanced above would predict that legal harmonization involving agrarian countries, possessing legal systems that are not far from its evolutionary base, will have less motives to seek legal integration. For example, one can currently observe that private sector firms in Bolivia or Uruguay importing Brazilian computer software and hardware, compact disks, or movies, actually oppose the enactment of foreign investment protection or intellectual property laws compatible with the needs and interests of the Brazilian firms exporting these products to Bolivia.⁴⁵

⁴⁵Ministerio de Relaciones Exteriores (Argentina), Comunicado No 342-92; and *supra* note 45 at 67.

Let's now test the above hypotheses. We measure the following independent variables that are aimed at explaining a country's drive to harmonize its laws:

- The number of economic-related amendments to a country's civil/commercial codes (*# of Amendments*);
- The annual number of non-agricultural trade-related industries experiencing an average annual real growth of 2 percent or more in their compounded annual sales. This variable is designed to capture the economic dynamics and changes in economic structure (*# of Non-agricultural trade-related industries*);
- The average intra-sectoral international trade as a proportion of total trade (*Average intra-trade as a % of total trade*).
- The relative size of the national GDP as compared to the region's GDP (*National GDP as a % Of the Region's GDP*)
- The annual growth in trade between pairs of countries (*Growth Internat Trade*)

TABLE 3: MULTIPLE REGRESSION ANALYSIS ⁴⁶VARIABLE TO BE EXPLAINED: **Number of International Legal Agreements**⁴⁷

NUMBER OF OBSERVATIONS: 90

MULTIPLE R: 0.619

SQUARED MULTIPLE R: 0.514

STANDARD ERROR OF ESTIMATE: 1.92

VARIABLE	COEFFICIENT	ERROR	TOLERANCE	T	P
<i>Constant</i> 0.00	1.46	0.12		12.16	
<i># of Ammendments</i> 0.02	0.10	0.01	0.95	7.49	
<i># of Non-Agricultural trade-related Industries</i> 0.00	1.08	0.05	0.95	21.60	
<i>Average intra-trade as a % of total trade</i> 0.00	2.02	0.23	0.99	8.78	
<i>National GDP as a %</i>					

⁴⁶ An exponential link among the variables was tested and rejected for lack of fitness. The Sims' test was also applied in order to show the direction of causality. The data related to the number of international legal agreements per country (as our dependent variable) is contained in Carcano, Miguel Angel (1941), *Historia Diplomatica Argentina en sus Relaciones Comerciales con la Region Latinoamericana*, Buenos Aires: Ed. Perfil, pp. 56-62; from Urrutia, Juan Jose (1994) "Los Acuerdos Comerciales Internacionales en el Continente Americano: Precedentes para la Region." Informe Tecnico, GATT Doc. 2340-BTM 391: In dealing with the independent or explanatory variables the data was drawn from the following sources: (i) the annual number of amendments to the domestic civil codes dealing with commercial aspects is provided by Aragon, Ramiro (1978), *Estudio Cuantitativo de la Codificacion Civil y Comercial en Latinoamerica*. Buenos Aires: Editorial EUDEBA; (ii) the quantitative data related to the annual growth in sales of the non-agricultural manufacturing and service industries (i.e. # of Non-Agricultural trade-related Industries) is taken from Vazquez, Julio (1991), *La Historia Economica de America del Sur*. Rosario, Argentina: Editorial Atlantida, pp. 12-17.

(iii) Macroeconomic data related to national, regional GDP (i.e. National GDP as a % Of the Region's GDP), growth in international trade (i.e. Growth in Int. Trade) and intrasectoral trade (i.e. Average intra-trade as a % of total trade) is taken from Montenegro, Raul Jose (1980), *Historia Economica del Nuevo Mundo*: Editorial EUDEBA, pp. 56-119.

⁴⁷ The international legal agreements include data on the harmonization of legal standards (e.g. health standards applied to merchandise crossing international borders), the harmonization of legal standards applied to commerce in general (e.g. codifying the principles of territoriality and independence), the harmonization of rules (e.g. duration and scope of patents), and the harmonization of legal doctrines (e.g. the doctrine of equivalence in the treatment of real property or the fair use doctrine in the use of copyrights).

<i>Of the Region's GDP</i> 0.34	0.05	0.15	0.86	0.33
<i>Growth Internat. Trade</i> 0.45	0.07	0.33	0.93	0.21

By applying multiple least squares regression analysis, in Table 3 we can see that the first three explanatory variables are significant at the 5 percent level and all have the expected signs. That is, a country's larger number of international legal agreements aimed at harmonizing its commercial laws with the rest of the world will be explained by first, the higher number of amendments to its domestic civil code indicating the presence of a higher domestic legal complexity addressing new types of economic interactions; second, by a higher percentage growth in its international intra-sectoral trade with the region (i.e. showing the presence of domestic economic actors with a stake in harmonizing international rules in order to expand their markets abroad on a "one law-one market" basis), and, third, by a higher annual percentage growth in sales within the non-agricultural trade-related sectors (i.e. showing the presence of demand driven trade-related sectors aiming at expanding its markets).

Please note that the annual number of international legal accords used to measure our dependant discrete variable include all agreements involving the trade-related non agricultural industries defined above. On the other hand, the relative size of a country within the region (National GDP as a % of the Region's GDP) and the annual percentage growth in international trade between two countries (Growth in Trade) show no significance in the explanation of legal harmonizing agreements. In other words, relative size and movements in annual international trade, in general, do not explain a country's drive to harmonize international legal standards and legal rules. Finally, we see that 51.4 percent of the variability in our dependent variable is explained by the independent variables included here.

Therefore, the jurimetrics results here are consistent with the fact that a large proportion of international trade based on intra-sectoral exchanges between two countries creates an incentive for the private sectors in these countries to demand harmony in the rules of their international trade (i.e. a drive towards a "one market-one law" business conditions).⁴⁸ This simply means that a bottom-up legal framework would emerge if enough overlapping in economic structures exist. Table 4 below addresses this point by showing the proportion of total intra-sectoral bilateral trade for a sample of agrarian and "dynamic" economies. As stated above, one would expect that the larger the proportion of intra-sectoral trade, the more pronounced the propensity to seek legal harmonization.

⁴⁸ See Buscaglia, Edgardo and Clarisa Long (1997) at 21

TABLE 4⁴⁹**Growth in Intra-Sector. Bilateral Trade as a % of Total Bilateral Trade: 1960-98**

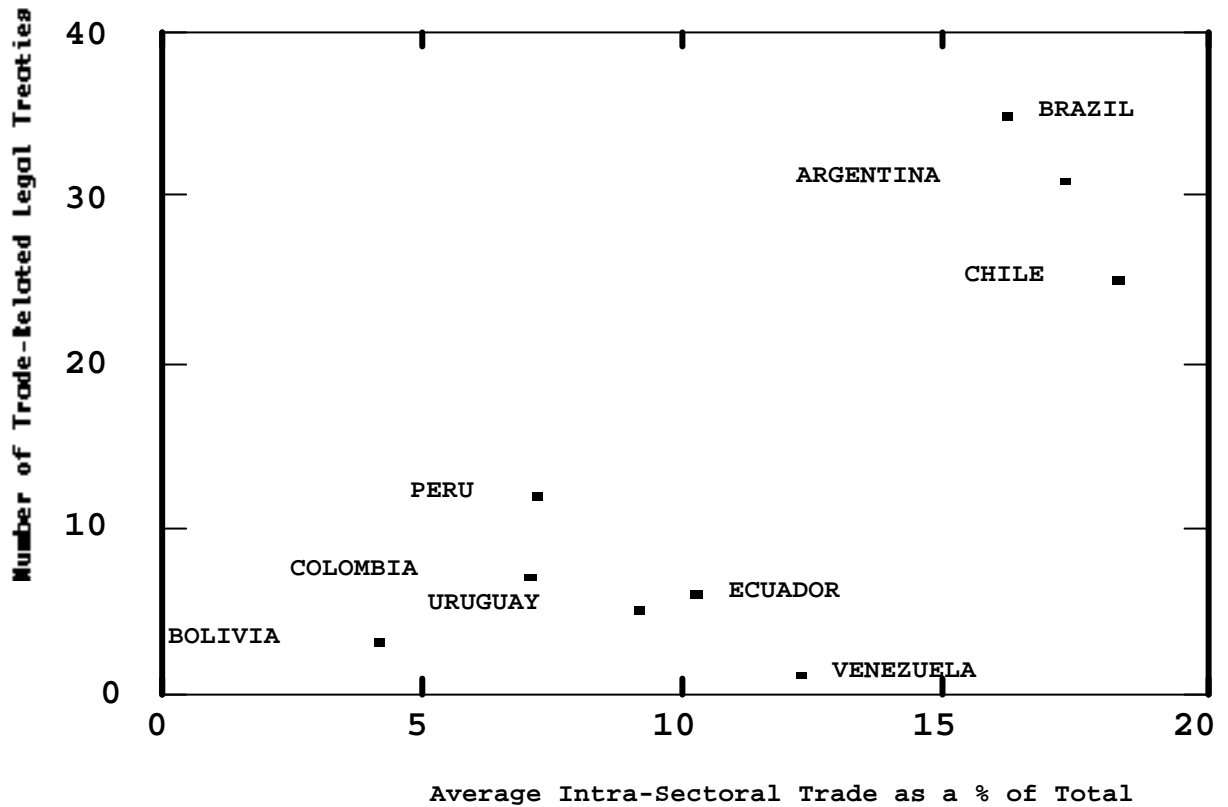
	Argentina	Brazil	Chile	Uruguay	Paraguay
Argentina		9.5	2.1	0.3	0.2
Brazil			3.9	0.8	0.6
Chile				1.0	0.1
Uruguay					0.0

Based on the evidence shown in Table 4, we expect that a larger proportion of export-driven dynamic economic sectors engaging in intra-sectoral trade, such as Argentina, Brazil, and Chile, would be actively supporting economic integration and the harmonization of commercial rules applied within their industries sectors. The Graph below shows the historical pattern relating high levels of intra-sectoral trade with a strong drive to seek legal integration. The number of trade-related international agreements is measured on the vertical axis while a country's proportion of total international trade classified as intra-sectoral trade is measured on the horizontal axis. One can observe a pattern already established in the correlation and regression analyses presented above. If one considers the period 1890-1990, the agrarian economies of South America have shown a poor record in seeking international legal harmonization while those economies with private sectors engaged in cross-border trade and investments tend to seek a "one-market-one-law" approach to international exchanges.⁵⁰

⁴⁹ Data related to the Average intra-trade as a % of total trade is taken from Montenegro, Raul Jose (1980), *Historia Economica del Nuevo Mundo*: Editorial EUDEBA, pp. 56-119

⁵⁰ The graph shows Venezuela as an outlier within the group. The linearized fit was tested and met. Moreover, the standard assumptions required by the regression analysis presented above have been met.

LEGAL TREATIES vs. AVERAGE INTRA SECTORAL TRADE: 1890-



Historical evidence shows that industries such as agro-manufacturing, computer-related material, food manufacturing, energy, and textiles actively support policies to harmonize international commercial laws by actively lobbying before the Argentine and Brazilian Congress.⁵¹ These industries have also pushed for the establishment of more effective and uniform procedures for dispute resolution mechanisms.⁵² For example, MERCOSUR's provision for binational corporations has led to the establishment of 11 Argentine-Brazilian joint ventures, particularly in communications, computer, and pharmaceutical industries that are designed to expand market operations.⁵³ In addition, at

⁵¹*Id.* at 56.

⁵²This is a clear trend in public opinion observed in Gallup polls throughout the region. For more details, see Edgardo Buscaglia and Maria Dakolias, (1995), "Judicial Crises: Court Delay and Backlogs in Latin America" Working Paper # 87, Georgetown University School of Business.

⁵²The results indicate that in samples of 60 to 100 firms per country, the majority of these enterprises consider the role of the judiciary to be "deficient." These businesses consider the lack of a reliable judiciary within MERCOSUR countries as one of the main reasons for seeking a predictable dispute resolution mechanism. *Id.* at pp. 25-31.

⁵³*Id.* at 34.

least a hundred agreements for cross-border cooperation have been signed between Argentine and Brazilian companies in industries as diverse as automotive, banking, steel, aluminum, and plastic.⁵⁴ MERCOSUR has also provided the legal framework for sector-by-sector agreements among private entrepreneurial associations that has contributed to the harmonization of rules aforementioned. For example, Argentine and Brazilian associations of steel producers have signed 34 and 30 accords regulating the treatment of patents, copyrights and trademarks.⁵⁵ In contrast, for the reasons shown above, the same degree of harmonization efforts is not observed among Uruguayan and Paraguayan firms and no legal integration initiatives have been advanced or accepted from the governments of Uruguay and Paraguay.⁵⁶

⁵⁴Argentine Secretariat of Economic Planning, Document 341-TA, pp. 12-13

⁵⁵*Id.* at 34.

⁵⁶Informe del Ministerio de Relaciones Exteriores (Ministry of Foreign Affairs Report) No 1345/HA34, May 29, 1994.

IV. CONCLUSION

Social scientists have usually viewed regional institutional integration as a series of multiple interactions among national governments that would lead to the creation of new supranational decision-making institutions -- to which the national governments would gradually cede their authority over domestic issues. In this mainstream view, the citizens of those states would eventually and passively come to redefine their loyalties and extend their identification to encompass the new entity.⁵⁷ In this context, during the 1960s and '70s, functional theorists viewed integration as a linear development and as a state-driven process in which such regional groupings would pass through successive stages of ever increasing institutionalization. It was assumed that initial state-by-state initiatives would lead to "spillover" effects in which, as the scope of integration deepened and broadened, closer cooperation in one area would engender -- in a positive way -- the movement toward integration in other related areas as well.

However, this mainstream account does not fit the historical evolution of legal and economic integration in developing countries in general and within Latin America specifically. Spillover effects failed to materialize.⁵⁸ After some promising beginnings, most regional integration efforts (in Africa, Asia, and Latin America) tended to lose steam and, after a period of time, collapse. It has been argued that this linear theory of how integration develops is not really applicable to Latin America because the "balance between the push of formal institution building and the pull of informal interactions tends to be unstable and fragile."⁵⁹ Nonetheless, conventional theory posits that regional integration must be accompanied by a process of formal and state-driven institution-building if it hopes to survive.⁶⁰

In contrast, our framework proposed here views legal harmonization of commercial rules of international trade as a result of a bottom-up process driven by related economic industries on different sides of international borders engaging in increasing intra-sectoral trade. This contrasts with the aforementioned top-down conventional approach used to understand past drives to legal and economic integration. In our framework, we showed that once a trade agreement has been organized, its future development and growth is much determined and driven by the private sector's perceptions -- whether real or apparent -- of

⁵⁷Dougherty, J. and L. Pfaltzgraff, Jr. (1990), *Contending Theories in International Relations* (3rd ed.). New York, NY: Harper & Row, p. 433.

⁵⁸ Refer to Buscaglia and Long (1997)

⁵⁹ See van Kleverer, *supra* note 65 at 24.

⁶⁰Mols, M. (1993), "The Integration Agenda: A Framework for Comparison" in Peter H. Smith (ed.) *The Challenge of Integration: Europe and the Americas*, Coral Gables, FL:University of Miami North-South Center, pp.12-17.

the issues and burdens they must face. In this context, history shows that the states that comprise a successful regional bloc must constantly deal and address the pros and cons of integration-related issues brought before them by a variety of private actors, domestic and international. How are integration-related benefits distributed among, and across, the member countries? In other words, who gains (and who loses) from integration? Do the payoffs justify the effort? Do some partners reap benefits at the expense of others? In the final analysis, these are crucial considerations that also determine the ultimate success or failure of regional cooperation/integration over the long run. Yet, scholars of the so-called "realist" school of international relations, which holds that states operate at the international level in a state of anarchy, must come to terms with the *invisible hand* behind the success or failure of their efforts. As shown above through the examination of our jurimetric evidence, international differences in the composition and nature of the economic structures of the countries involved will represent the real obstacle or promoter of legal/economic integration. Given this context, foreign pressures on developing countries coupled with the compatibility of economic structures trading across borders have all combined to create the incentives needed for the international harmonization of legal rules and standards.

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