

What History Teaches us about International Protection of Intellectual Property Rights: The Case of Least Developed Countries

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Introduction

The international intellectual property regime, by which I primarily mean the TRIPS Agreement, is largely designed to maximize profits for producers of intellectual property goods particularly those produced with advanced technology and those that have large commercial value. Patents in pharmaceuticals are an obvious example. By contrast, the international intellectual property regime underplays distributive and developmental goals. In addition, as written the TRIPS Agreement does not permit –though it certainly does not prohibit - the protection of traditional knowledge as an intellectual property right.¹ I believe that the international IP regime could in a variety of ways better address and pay attention to distributive and developmental issues not as marginal issues outside the boundaries of this regime but as integral to it and its legitimacy.

To do so, I will focus on the claim that in relation to least developed countries (LDC's) “strong intellectual property protection is clearly one of the determinants and foreign direct investment (FDI) and an indispensable link in the development chain that cannot

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¹ This bias against protecting non-western forms of knowledge incapable of commercialization under the TRIPS Agreement criteria of commercialization reveal what David Slater, “Contesting Occidental Visions of the Global: The Geo-Politics of Theory and North South Relations,” *Mass Alla del Derecho-Beyond Law, Stories of Law and Social Change from Latin American and Around the World*, Issue No. 10, at 97 to 118 says of contemporary knowledge where “Europe...is endowed with a certain ‘historical sovereignty of thought’ and the West that is given the capacity of ‘pure theory’, while societies without history are characterized as possessing cultures that are structurally invariable. Thus...the possibility of knowledge being communicated with other types of society, other forms of life, is restricted to a one-way flow –of West to non-West. The non-West is constituted as an empty space in the field of knowledge...” id.

be overlooked.” According to this claim, “[i]t is unassailable that if LDC’s are to diversify their economies by becoming less dependent on agriculture and extractive industries, then they must become attractive host countries for FDI”² In this presentation, I will explore the tenability of this claim that it is imperative for LDC’s to have strong IP protection. There are several reasons to explore the tenability of this claim.

First, because it questions the decision of the WTO to postpone until July 1, 2013 the entry into force of the TRIPS Agreement in least developed countries.³

Second and more importantly I want to interrogate the tenability of a causal link between strong IP protection, on the one hand, and strength in attracting FDI, on the other. So far, the literature making assertions of a positive link between strong IP protection and strength in attracting FDI make conclusory assertions with no empirical support.

I want to emphasize that the relationship between strong IP protection and strength in attracting FDI is a somewhat new emphasis in justifying the strengthening of patents. The traditional justification has been that there is there is a causal relationship between strong IP protection and innovation. In other words that strong IP protection incentivizes the creative impulse and therefore spurs technological innovation.⁴ This claim holds true

² Kevin Kennedy, “Is the Multilateral Trade System Fails the least – Developed Countries,” Occasional Paper in International Trade Law and Policy p. 6

³ Articles 65 and 66 of the TRIPS Agreement make it possible to extend compliance times for least developed countries.

⁴ Robert P. Terrill, Cartels and the International Exchange of Technology,” 36 American Economic Review, 757, 1946 argued: “The numerous patent jurisdictions of the world form an interrelated system

for middle income economies such as the East Asian ones.⁵ However, this claim does not hold up well for least developed countries since innovative capacity in those economies does not solely depend on strengthened IP protection. For least developed countries therefore, the claim increasing being made, (in addition to the claim of a strong link between FDI and strong IP regimes) is that ‘local innovation’ will be spurred by flows of technology once strong IP regimes are adopted. The tenability of this claim for least developed countries is not held up by the available evidence.⁶ Thus the assumption that adopting strong IP regimes as an absolute prerequisite for technological progress or industrialization, is one that needs interrogation. It may turn out for example that investing in food security and basic education among meeting other basic needs is more significant than the need for them to adopt rigorously proprietary IP regimes that may limit their ability to address their most pressing developmental challenges.

I proceed as follows: First, since this paper is primarily about least developed countries, I begin by providing a definition. I then proceed to examine claims that strong IP regimes exhibit strength in attracting FDI. Next, I examine some early history in relation to developing country contestation of the then emerging international patent regime in the context of development. The paper then traces the immediate reasons for the emergence of the TRIPS Agreement which are in part directly traceable to the shifting regimes from

whose reason for existence, from the standpoint of the world economy, is to promote invention and assist in the wide dissemination of technology and its prompt utilization in industrial improvements.” See also E.T. Penrose, *The Economics of the International Patent System*, 131 (1951)

⁵ See Keith Maskus, “Strengthening Intellectual Property Rights in Asia: Implications for Australia,” 37 *Australian Economic Papers* 346, 346-51, 354-57 (1998)

⁶ Keith Maskus, “Intellectual Property Rights and Economic Development,” 32 *Case Western Reserve Journal of International Law*, 534 (2000)

the WIPO where developing countries had began their efforts to revise the Paris Convention. The paper ends with a conclusion.

Defining Least Developed Countries

The World Trade Organization does not designate developing and least developed countries. Rather, each country announces whether it is developing or least developed. Least developed countries are the weakest and poorest economies in the world. The United Nations defines least developed countries as those with low gross national income, have weak human assets and are economically vulnerable.

In terms of income, a country is considered least developed if it has a per capita income of less than \$750 and is characterized by negative real per capita income growth and a population of less than 75million. In effect a majority of people living in least developed economies are living below the poverty level.

A country's stock of human assets is the second criteria. The following factors are taken into account: nutrition, measured by the average caloric consumption per capita as percentage of minimum dietary requirements. On this measure a majority of people in least developed economies receive less than the minimum dietary energy requirements; health as measured by under age 5 child mortality rate. On this measure there is high child mortality in least developed countries. Further, there are high incidents of diseases such as HIV/AIDS and malaria in these countries; education, measured by adult literacy rate in LDC's is low. There is also low enrollment in primary, secondary and high school.

The economic vulnerability of the country is the third criteria for establishing if a country is a least developed country. The measures here include merchandise export concentration; instability in export earnings; instability of agricultural production; an especially low share of manufacturing and modern services in the Gross Domestic Product; and often a significant percentage of the population displaced by natural disasters.

Based on the foregoing criteria, Africa has 34 least developed countries, the Asian Pacific region has 14 and Haiti & Yemen from their respective regions.

Examining Claims of Strong IP Protection With Strength in Attracting FDI

The claim that strong IP protection will attract FDI in least developed countries is not supported by any verifiable empirical or other evidence. The best evidence about the relationship between strong or improved patent protection and economic growth shows:

- Strong patent protection by itself without high threshold levels of secondary education attainment in a particular country was not correlated with a positive impact on growth.⁷
- High levels of technical expertise in making a strong IP regime work to assure against abuse (e.g. to check broad grants of patents, imposing stringent criteria on novelty and other criteria on patentability) are crucial to facilitate local learning

⁷ E. Borensztein et al, "How Does Foreign Direct Investment Affect Economic Growth," 45 Journal of International Economics 115, 127 (1998)

and innovation⁸ without which recipients of foreign technology become platforms for foreign exporters without added benefits to their technical progress. Unlike middle income countries, least developed countries do not have these high levels of expertise or even the kind of education attainment and human capital to capitalize effectively on adopting imported technologies for local uses as we say above.

- There are high costs to the implementation of strong IP regimes. World Bank research demonstrates that the implementation of mandates such as the TRIPS Agreement which impose expensive implementation costs that undermine poverty reduction and growth, especially in least developed countries.⁹ LDC's are unlikely to be committed to undertaking these kind of reforms without significant assistance or coercion. For these reasons, Jerome Reichman has noted that there are risks of sudden strengthening of patent rights among countries not yet able to harmonize their domestic regimes with international norms.¹⁰
- Further, the predictions of positive economic outcomes claimed to be correlated with strong IP protection demonstrate net welfare losses in the short term before

⁸ Keith Maskus, "Intellectual Property Rights and Economic Development," 32 *Case Western Reserve Journal of International Law*, 535 (2000)

9. See J. Michael Finger & Philip Schuler, *Implementation of Uruguay Round Commitments: The Development Challenge*, 24 *WORLD ECON.* 511 (2000), available at <http://www.worldbank.org/research/trade>.

¹⁰ Jerome Reichman, "The TRIPS Component of the GATT's Uruguay Round: Competitive Prospects for Intellectual Property Owners in an Integrated World Market," 4 *Fordham Intellectual Property Media and Entertainment Law Journal* 171, 255 (1993) arguing that the balance between "the interests of states at different stages of development, and the absorption of intellectual property will have to accommodate these norms and that balance...Premature efforts to accelerate the process of harmonization without due regard to these differences and to the social costs of overcoming them could boomerang against those countries pressing for rapid social change and could even widen the initial differences in the end."

the dynamic benefits are realized in the longer term.¹¹ Thus, for example, it was anticipated that in 1995, US resident firms earned \$ 20.9 billion in net royalty and license fees.¹² The access to medicines debate in relation to patents was premised precisely on imbalance between this net welfare gains in the North, on the one hand, and the sheer inability of the indigent populations of developing and least developed countries to afford life saving drugs, on the other.¹³

- Strong IP regimes are more beneficial for middle income and developed countries that have the appropriate conditions for maximizing on imported technologies. By contrast, the positive impact of strong IP regimes in least developed countries is at best likely to be small¹⁴ and such gains are likely to be overrun by the higher cost of implementing these commitments as seen above.
- There is evidence that developing countries that increased machinery and equipment imports from OECD countries ‘tended to raise total factor productivity’ by about 0.03% on average.¹⁵ If this is so, then it is plausible to make the claim that economic assistance to LDC’s to import machinery and equipment not only from OECD countries but to address from cheaper sources such as India and China –which now compete very well with machinery

¹¹ Keith Maskus, “Intellectual Property Rights and Economic Development,” 32 Case Western Reserve Journal of International Law, 527 (2000)

¹² Id. at 532

¹³ I have written extensively on this see for example: James Gathii, “The Structural Power of Strong Pharmaceutical Patent Protection in U.S. Foreign Policy,” 7 Iowa Journal of Gender, Race and Justice, 267 (2003); James Gathii, “The Legal Status of the Doha Declaration on TRIPS and Public Health Under the Vienna Convention of the Law of Treaties,” 15 Harvard Journal of Law and Technology 291 (2002); “Construing Intellectual Property Rights and Competition Policy Consistently With Facilitating Access to Affordable AIDS Drugs to Low-End Consumers,” 53 Florida Law Review 727 (2001)

¹⁴ Keith Maskus, “Intellectual Property Rights and Economic Development,” 32 Case Western Reserve Journal of International Law, 524-5 (2000)

¹⁵ Keith Maskus, “Intellectual Property Rights and Economic Development,” 32 Case Western Reserve Journal of International Law, 524-5 (2000) citing David J. Coe et al, North-South R&D Spillovers 107 Economic J. 134, 147 (1997)

manufacturers like John Deere –could help them not only improve their productivity, but problems such as food security that are directly related to low nutritional levels in these LDCs.

- Finally, there is evidence that licensing of IP goods was unrelated to the strength or weakness of IP regimes¹⁶ and further that FDI was highest among the mineral rich war torn LDC's in Africa completely undermining the correlation between strong IP regimes and strength in attracting FDI in these economies.¹⁷

In short, strong IP protection works best to raise growth in conjunction with trade openness, high levels of human capital accumulation, good infrastructure and a strong regulatory environment. Strengthening IP protection without simultaneously addressing the conditions correlated with higher growth and productivity in least developed countries will not yield the benefits that accompany strengthening of IP regimes in economies where the right conditions for positive benefits exist.¹⁸ In fact, the small market sizes, low gross national incomes, poor infrastructure, low educational attainments, high levels sovereign indebtedness, regulatory barriers not to mention political instability in some least developed countries makes flows of FDI even with strengthened IP protection a challenge. Further, assuming strong patent regimes are nevertheless adopted in LDC's, they would discourage the costs of local enterprises and innovators to imitate, copy and borrow from imported technologies in much the same

¹⁶ Id. at 523

¹⁷ UNCTAD, World Investment Report 2001: Promoting Linkages, 2001. This trend has continued because of the boom in natural resources in recent times, see UNCTAD, World Investment Report: FDI From Developing and Transition Economies – Implications for Development, 2006. However as a share of global FDI flows, least developed countries still receives a miniscule percentage.

¹⁸ Keith Maskus, "Intellectual Property Rights and Economic Development," 32 Case Western Reserve Journal of International Law, 534 (2000)

way most developed economies developed as well as the most recent late industrializers of South East Asia.¹⁹

What is more, historical evidence from developed economies undermines the claim that strong IP regimes are singularly accountable for technological progress in those economies. A study of periods during which Netherlands (1869-1912) and Switzerland (1850-1907) had no patent protection undermines the view that patents played an unambiguous role as an incentive for innovation and industrialization.²⁰ This study undermines this claim by showing that industrial growth in Netherlands in the non-patent period was relatively moderate and importantly not any much higher in the non-parent period.²¹

This strategy of looking at periods drive which developed countries briefly abandoned IP protection seems appropriate since today all industrialized countries have patent systems and therefore it is hard to find verifiable empirical evidence to support causal links between IP protection and industrialization. In fact, anything we could say about causality is simply “hypothetical and conjectural.”²² After all, “ the co-existence between industrial development and patent protection does not prove that protection was instrumental in creating industrial development or vice versa.”²³ This evidence from the

¹⁹ Alice Amsden, “Why Isn’t the Whole World Experimenting With the East Asian Model to Develop?” Review of the East Asian Miracle, 22 World Development 622 (1994)

²⁰ Eric Schiff, Industrialization without National Patents: Netherlands, 1869-1912, Switzerland, 1850-1907 (1971)

²¹ Id at 76

²² Id. at 8

²³ Id. at 14

Netherlands and Switzerland in their non-patent undermines claims that there is a causal connection between the existence of a patent system and the pace of industrialization.

If it is in fact true that lack of patents did not depress growth during Switzerland and Netherlands during the non-patent periods and that in fact growth instead accelerated (though there was decline in some sectors during the non patent period), how could we really justify extending strong IP regimes in LDC's today? The crucial question is whether it is plausible to argue that non-protection of patents in a least developed country will cause other people to invest less in countries where there is strong IP protection, especially if the share of sales of IP protected goods LDCs is miniscule as a share of global sales.²⁴

The foregoing evidence in my view makes it plausible to question the adoption or imposition of strong IP regimes in LDC's while still supporting strengthened IP protection in developed and middle income countries where there is evidence to show strong casual links with economic growth and increases in productivity.

Some Early International Patent History in Relation to Less Developed Economies

In his study of the economics of patents several decades ago, E. T. Penrose noted that:

Any country must lose if it grants monopoly privileges in the domestic market which neither improve nor cheapen the goods available, develop its own productive capacity nor obtain for its producers at least equivalent

²⁴ For example, we know that sales of pharmaceutical products in Africa as a percentage of global sales is less than 1%.

privileges in other markets. No amount of talk about the ‘economic unity of the world’ can hide the fact that some countries with little export trade in industrial goods and few, if any inventions for sale having nothing to gain from granting patents on inventions worked and patented abroad except the avoidance of unpleasant foreign retaliation in other directions.”²⁵

This economic truism was written in 1951. Today we have the TRIPS Agreement which makes the globalization of a strong regime of IP rights inevitable for all countries except LDCs – at least until 2013.

The policy of strong patent protection adopted in the TRIPS Agreement comes from a long history of U.S. support for the recognition of patents as private property. This foreign policy view on patents has been espoused since 1887 when the U.S. entered the Union for the Protection of Industrial Property (hereinafter union).²⁶

The original Article 5 of the Paris Convention provided that “The introduction by the patentee into the country where the patent has been granted of objects manufactured in any countries of the Union shall not entail forfeiture.”²⁷ A leading scholar of the Convention has argued that when this article was drafted in the 1880’s, it was directed against countries such as France whose legislation barred importation of products and processes into France through its national patent legislation.²⁸ For France as a relatively unindustrialized country at the time, it was in its interest to condition the marketing

²⁵ E.T.Penrose, *The Economics of the International Patent System*, 116 (1951)

²⁶ Heinrich Kronstein and Irene Till, “A Re-Evaluation of the International Patent Convention,” *12 Law and Contemporary Problems*, 765, 766 (1947). This view of patents as private property as opposed to conceptualizing them as instruments of public policy was finally consolidated in the TRIPS Agreement in 1994.

²⁷ Paris Convention on Industrial Property, *supra* note_

²⁸ See E.T. Penrose, *The Economics of the International Patent System*, 1975 at 160.

privilege contingent upon the patentee effectively working the patent to prevent the French market from being used as an export platform for products manufactured in other countries.²⁹ By conditioning granting of foreign patents on a working requirement, countries like France therefore sought to preempt a regime of international protection of patents that would frustrate the emergence of indigenous industries. As a French jurist argued:

“The right of inventors and of industrial creators is an equitable and useful creation of the civil law, which reconciles the rights of inventors and of society by the concession of a temporary monopoly.”³⁰

Thus the very claims being made by developing and more so least developed countries today were made by the developing countries of the period when the international IP regime was inaugurated. Those who argued against this French position posited that the recognition of patents in and of itself benefited society because it encouraged invention. By contrast, the French position was that the interests of society or consumers of intellectual property rights should be specifically recognized rather than stated in the general proposition that the recognition of patents in of itself would benefit society and consumers.

In 1925, the Paris Convention was amended to introduce compulsory licensing as a condition precedent for the forfeiture of patents.³¹ Prior to that Article 5(2) required the

²⁹ E.T. Penrose, *The Economics of the International Patent System*, id. at 75

³⁰ As cited in E.T. Penrose, *The Economics of the International Patent System*, id. at 50.

³¹ A. Jayagovind, “The International Patents System and the Developing Countries,” 20 *Indian Journal of International Law*, (1980) 52. Note, that compulsory licensing had been originally introduced in the

patentee “to exploit his/her patent in accordance with the laws of the country into which s/he was introducing the patented articles.”³² Hence, the original emphasis on failure to work as a form of abuse of rights that warranted forfeiture was watered down by the introduction of compulsory licensing in the place of forfeiture.³³ Simply put, while before 1925 a foreign patentee who was not working their patent was regarded as engaging in an abuse of the patent rights and therefore eligible to forfeit the patent, after 1925 forfeiture for failure to work was substituted for the much weaker remedy of compulsory licensing. Compulsory licensing is a much weaker remedy since unlike forfeiture, it is consistent with the principle of patent protection in the Paris Convention. Compulsory licensing is consistent with the principle of patent protection because it does not involve the patentee losing compensation for his/her invention.³⁴

In 1958 a new section 5A was added to the Paris Convention re-introducing remedies for failure to work.³⁵ However, the grant of compulsory licensing in cases of failure to work or insufficient working was not to be issued before the expiration of a certain period: four years from the date of filing of the patent application or three years from the date of grant of the patent whichever period expires last.³⁶ Other conditions for the grant of a license were also imposed. For example, a patent holder had to be given a right to defend the

Convention in 1873 but was defeated in 1878, see E.T. Penrose, *The Economics of the International Patent System*, id. at 79

³² Paris Convention on the Protection of Industrial Property, *supra* note_

³³ The right of forfeiture, (the outright revocation of a patent), had been recognized by Union members in the 1878 conference at which the principle of compulsory licensing for failure to work was rejected at a time paradoxically the Union members were strengthening patent protection as a private right. See E.T. Penrose, *The Economics of the International Patent Movement*, *supra* note_ at 50-51.

³⁴ Id. at 161

³⁵ A. Jayagovind, “The International Patents System and the Developing Countries,” 20 *Indian Journal of International Law*, (1980) 52-54

³⁶ Article 5A(4) provided that “An application for a compulsory license may not be made on the ground of failure to work or insufficient working before the expiration of a period of four years or three years from the date of the grant of the patent, whichever period expires last,” *supra* note_

failure to work before the license could issue. In addition, the license had to be non-exclusive and could not be transferred. A non-exclusive license does not transfer exclusive rights to a licensee in a developing country to perform the licensed patented act. As such others with superior technical knowledge and finances may very well do so. Hence, in a developing country lack of technical expertise might inhibit successful working of patent without the grant of an exclusive license since it would be risky for a developing country firm to start investing in the licensed technology only to have firms from developed country markets undertake the same initiative thereby frustrating the transfer of technology from developed to developing country firms.³⁷ Another condition for granting compulsory licensing gave the patentee a right to work the patent for a period of two years after a finding that the patent had not been worked before proceedings for granting the license could be commenced.³⁸ These conditions illustrate the weakening of the restraints on abuse of patents and the simultaneous strengthening of patents as private property rights encumbered with fewer and fewer restraints in the public interest particularly those aimed at curbing the potential abuse of the monopoly power through restrictive business practices injurious of the public interest that patents are supposed to serve.³⁹

³⁷ UNCTAD, "The International Patent System: The Revision of the Paris Convention for the Protection of Industrial Property," TD/B/C.6/AC.3/2, 28th June, 1977 at Para. 35. Here, it must of course be acknowledged that by granting non-exclusive licenses competition would be encouraged and there would be less of an attempt to monopolize or to engage in restrictive business practices, see Penrose, *The Economics of the International Patent System*, supra note_, at 103.

³⁸ Article 5(3) of the Paris Convention. See also, A. Jayagovind, "The International Patents System and the Developing Countries," 20 *Indian Journal of International Law*, at 53

³⁹ UNCTAD, "The International Patent System: The Revision of the Paris Convention for the Protection of Industrial Property," supra note_ at 39

The enhanced rights of patentees in the Paris Convention were further reinforced through a protectionist trade regime. Tariffs had the same effect as a forfeiture of a patent right since they precluded foreign goods from entering the protected economy.⁴⁰ As a result, patentees freely exploited markets of non-union countries where there were no restraints in competition or working requirements.⁴¹ For non-union countries and territories, the Convention's benefits of technology transfer were therefore unrealizable. Non-union member countries and territories therefore became the export enclaves of the producers of patented products who based all their manufacturing in the developed union member countries.⁴²

To further buttress the rights of patentees, they created cartel arrangements amongst domestic competitors within union member countries, thereby further protecting themselves from external competition through private agreements.⁴³ For example, in the dyestuff industry, Germany pooled its patents into major conglomerates which closed off the industry to new entrants and resulted in large sums of capital being available for further research and development to existing German corporations.⁴⁴

⁴⁰Heinrich Kronstein and Irene Till, "A Re-Evaluation of the International Patent Convention," 12 *Law and Contemporary Problems*, 765, 776 (1947)

⁴¹ *Id.* at 777

⁴² According to Stephen P. Ladas, *The International Protection of Industrial Property*, 182 (1930) "colonies, possessions, protectorates, dominions, and the like, are not deemed to be included in the Union by the mere fact of accession of the mother country. There must be a declaration to this effect by the latter, or a distinct act of accession for the dominion, colony, and so forth which is to be considered as forming part of the territory of the Union," *id.*

⁴³ Heinrich Kronstein and Irene Till, "A Re-Evaluation of the International Patent Convention," *supra* note_ at 777

⁴⁴ *Id.* at 777 to 778

When Switzerland refused to extend patents for chemical processes to German applicants, Germany teamed up with the U.S. in asking the union to take action against Switzerland for failing to extend patents to German applicants who were threatening to compete with the Swiss dye-stuff industry.⁴⁵ The claim against Switzerland was framed as one involving Swiss discrimination against German applicants that was inconsistent with the union's requirement of equal treatment for nationals and foreigners.⁴⁶ Suffice, to say therefore that even before the developing countries emerging from de-colonization after World War II, the international patent regime not only sanctified patents as private property rights but entrenched these rights through 'tightly coordinated' tariffs and restrictive business practices.⁴⁷

The Paris Convention, Non-Industrialized Members and the Development Question

As a result of the Paris Convention's insensitivity towards the interests of developing countries particularly in the post-colonial period, the relationship between this regime and their national development goals became a major concern. These countries, primarily those of Latin America, Asia and Africa, used their majorities in the United Nations General Assembly rather than through the mechanisms of the Union for the Protection of Industrial Property.⁴⁸ For example, in 1961 Brazil introduced a draft resolution into the General Assembly titled "The Role of Patents in the Transfer of Technology to

⁴⁵ Id. at 778-779

⁴⁶ Id.

⁴⁷ Id. at 780-781. For an evaluation of the costs of this system relative to its proclaimed benefits, see Penrose, *The Economics of the International Patent System*, supra note_, at 110-136.

⁴⁸ Susan Sell, *Power and Ideas: North South Politics of Intellectual Property and Antitrust*, 107-140 (1998). Besides the United Nations system, the World Intellectual Property Organization was another forum developing countries used to try and reform the international patent system, id.

Underdeveloped Countries.”⁴⁹ This resolution sought among other things to: spur revision of patent legislation in the respective countries to serve national economic development goals. It also called for a revision of the Paris Convention with a view to adding provisions that would enable developing countries to have access to technical knowledge. In particular it sought to remove barriers to access to technical knowledge from developed countries by revising Convention provisions that inhibited patents being taken out by foreigners without the intention of local exploitation; provisions that permitted license contracts with restrictive clauses; and addressing the manner in which royalty payments on foreign intellectual property rights had become a heavy burden on balance of payments. The resolution in addition proposed a conference to effect these and other changes.⁵⁰

Developed countries opposed the draft resolution claiming it would encroach on the exclusive mandate of the Paris Union. The final resolution of the United Nations⁵¹ did not address the question of holding a conference to resolve developing country concerns. Implicitly it therefore endorsed the Paris Convention. It was not until the 1977 UNCTAD proposal to revise the Paris Convention⁵² that developing country positions were endorsed – again outside the framework of the Paris Convention. This proposal

⁴⁹ Doc. A/C.2/L.565, 1961, as cited in Jayagovind, “The International Patent System and Developing Countries,” *supra* note_ at 57. This was a classic example of regime shifting.

⁵⁰ *Id.* at 58

⁵¹ The Role of Patents in the Transfer of Technology to Developing Countries, Doc E/3681/Rev.1, 1964

⁵² The International Patent System: The Revision of the Paris Convention for the Protection of Industrial Property, TD/B/C.6/AC.3/2 1977

sought to make compulsory licensing a positive instrument to promote industrialization rather than as a mere sanction of the failure to work a patent.⁵³

Hence developing countries in the 1960's and 1970's sought to transform the international patent system into an "effective medium for the transfer of technology from developed to developing countries. Just as the national patent system presupposes free competition among a large number of firms of similar size and capabilities, [these countries argued that the concepts of] equity and distributive justice [were] alien to the very scheme of the system."⁵⁴

It is noteworthy therefore that for developing countries, the international protection of patents ought to be predicated on the ability to work patents and prevent their abuse: France did that in 19th century and today the developing countries of Asia, Africa, Latin America and the Caribbean in the 1950's and 60's did that as they are doing today.⁵⁵ So while the debate was, unlike today, defined by the issue of access to essential medicines, it was no less present as evidenced by the debate surrounding compulsory licensing and forfeiture and the appropriate balance between protection of rights of intellectual property producing and consuming countries.

While the principle of balancing between the interests of producers and consumers of intellectual property rights seems to be a well established principle in domestic

⁵³ See generally, Constantine V. Vaitsos, "The Revision of the International Patent System: Legal Considerations for Third World Position," *World Development*, Vol. 4 No.4 1976 at 9

⁵⁴ A. Jayagovind, "The International Patent System and the Developing Countries," *supra* note_ at 56

⁵⁵ *Id.* 58

intellectual property regimes⁵⁶, it seems curiously absent in the international system especially as regards the balance between intellectual property producing and consuming countries. In the United States, the Constitution – it has been argued - strikes a balance between intellectual property and an intellectual commons and if the balance tilts too heavily in one direction, the public loses its constitutionally protected rights to a vigorous public domain.⁵⁷

From the Paris Convention to the TRIPS Agreement

The foregoing developments within the Paris Convention demonstrate the historically fractious nature of the place of public policy within the international patent protection system. Like the 1995 TRIPS Agreement which I discuss in this section, the Paris Convention has therefore been argued to reflect “an asymmetry between, on the one hand, the obligations for countries spelled out in considerable detail via the provisions which secure private rights, and, on the other, the minimal and feeble reference to possible methods of control in the public interest. This imbalance between the strong emphasis on private rights and the virtual elimination of both the concept of private obligation and the concept of public interest is a main feature of the Paris Convention.”⁵⁸

For these reasons developing countries sought to revise the Paris Convention throughout the 1960’s through to the early 1980’s. However, these revision efforts came to a deadlock since developed countries, led by the U.S., opposed these revision initiatives.⁵⁹

⁵⁶ See A. Jayagovind, “The International Patent System and the Developing Countries,” supra note_ at 60

⁵⁷ Lawrence Lessig,

⁵⁸ UNCTAD, The International Patent System: The System Revision of the Paris Convention for the Protection of Industrial Property, TD/B/c.6/AC.3/2, 1st August 1977.

⁵⁹ Susan Sell, Power and Ideas, supra note_ at 130

In the 1980's, the U.S. forged a new approach to negotiating international patent agreements. Rather than pursuing the deadlocked Paris Convention path, the U.S. began a policy of negotiating bilateral intellectual property agreements⁶⁰ thereby breaking up the solidarity among developing countries in the Paris Convention revision meetings.⁶¹ This policy of bilateral agreements was accompanied by a legal and policy shift in U.S. foreign trade policy towards enhanced protection of its intellectual property rights abroad. This is particularly reflected in the amendment of the Trade Act of 1974 in 1984 and 1988 adding § 301⁶² and super § 301 respectively. Super § 301 requires the United States Trade Representative to unilaterally, (without resorting to the WTO), impose retaliatory trade sanctions on any country in violation of U.S. intellectual property rights.⁶³

This new policy of enhanced international protection of U.S. intellectual property rights further sought to link trade to intellectual property rights. This would achieve two further U.S. aims. First, steer away from WIPO which was increasingly becoming a center of

⁶⁰ Susan Sell, *Power and Ideas*, id. at 132. Sell notes that by shifting to bilateral intellectual property agreements, negotiators from developing countries were trade officials who have 'more clout' than intellectual property officials who were mostly present in the negotiation of the Paris Convention. That way, the U.S. was able to leverage itself better since trade officials would be able to influence legislative and other changes once they reached agreement with the U.S., id.

⁶¹ Developing countries tended to vote as a block within a coalition labeled the Group of 77, see Susan Sell, *Power and Ideas*, id. at 119-129.

⁶² Trade Act of 1974, tit. III, ch. 1, § 301, 19 U.S.C. §2411(a)(1), *amended by* Omnibus Trade and Competitiveness Act of 1988, § 1303(b). Under this section, the United States Trade Representative ("USTR") is required within thirty days after the submission of the annual National Trade Estimates (foreign trade barriers) to report to Congress those foreign countries that (1) deny adequate and effective protection of U.S. intellectual property rights and (2) those countries under (1) that are determined by the USTR to be priority foreign countries. The USTR identifies as priorities only those countries that have the most onerous or egregious acts, policies, or practices that have the greatest adverse impact on the relevant United States products and that are not entering good faith negotiations or making significant progress in bilateral and multilateral negotiations to provide adequate and effective intellectual property rights protection. *Id.* In a challenge at the WTO, this notorious legal provision of U.S. law was sustained, see World Trade Organization Report of the Panel, *United States—Sections 301-310 of the Trade Act of 1974*, WT/DS152/R ¶ 7.22 (Dec. 22, 1999).

⁶³ Trade Act of 1974, tit. III, ch. 1, § 301, 19 U.S.C. §2411(a)(1), *amended by* Omnibus Trade and Competitiveness Act of 1988, § 1303(b).

gravity for the revision of the Paris Convention for developing countries. Second and most importantly, such a move would give the U.S. the international trading system as an additional mechanism through which to crank up support and observance of its intellectual property rights.⁶⁴

These policy shifts did not of course occur in a political vacuum. A group of high technology multinational corporations known as the Intellectual Property Committee,⁶⁵ (IPC), played in a critical role in influencing these policy shifts.⁶⁶ Links between the IPC and the U.S. federal government resulted in a powerful private/public sector collaboration. For example, Edmund Pratt, Jr., then chairman and CEO of Pfizer had been since 1979 a member of President Carter's Advisory Committee on Trade and Policy Negotiations, (ACTPN), which was created under the 1974 Trade Act.⁶⁷ The role of this private sector advisory group is/was to advise the United States Trade Representative's office, (USTR), on trade policy, as well as to review and report to

⁶⁴ The U.S. also linked its participation in the Generalized System of Payments, (GSP), to observance of its intellectual property rights, see Susan Sell, *Power and Ideas*, supra note_ at 134-135

⁶⁵ Its members included Pfizer, General Electric, Merck, IBM, Dupont, Warner Communications, Hewlett-Packard, Bristol-Myers, FMC Communications, General Motors, Johnson and Johnson, Monsanto and Rockwell International.

⁶⁶ Susan Sell, "TRIPS and the Access to Medicines Campaign," 20 *Wisconsin International Law Journal*, (2002) 481

⁶⁷ Under the 1974 Trade Act, as amended by the Trade Act of 2002, the ACTPN was established alongside other advisory committees to ensure that U.S. trade policy and trade negotiation objectives adequately reflect U.S. commercial and economic interests. Congress subsequently enhanced the role of this system by authorizing the advisory committees to provide advice on the priorities and direction of U.S. trade policy. The three-tiered committee structure established under the 1974 Trade Act contemplates that the ACTPN would have the most senior membership appointed by the President from diverse groups including the government, labor, industry, agriculture, small business, service industries, retailers, consumer interests, and the general public. The second tier is comprised of policy advisory committees representing overall sectors of the economy such as industry, agriculture, labor and services. Policy advisory committees advise the government of the impact of various trade measures on their respective sectors. The third tier is composed of industry sector advisory committees consisting of experts from various fields. Their role is to provide specific technical information and advice on trade issues involving their particular sector. Members of the second and third tier are appointed by the U.S.T.R. and the Secretary of the relevant Department or agency.

Congress on the work of the USTR.⁶⁸ Pratt and IBM chairman John Opel jointly chaired the intellectual property task force of the ACTPN.⁶⁹ This successful private/public collaboration is not surprising, in part because it was and still is, entrenched within the federal government's trade policy and negotiating apparatus as mandated by law.⁷⁰ Businesses also play a central role in shaping U.S. foreign trade policy, particularly because favoring the political process as the primary forum for resolving the interlocking concerns of trade through Congressional control over trade policy, provides these businesses with "continuous and unlimited opportunities for business lobbying."⁷¹ These private sector groups also had and continue to have a huge stake in the direction of U.S. trade policy and they therefore employ large numbers of lobbyists on their behalf. The pharmaceutical industry, which is by far one of the most profitable industries of all industries in the United States⁷², employs at least two lobbyists for every member of the United States Congress.⁷³

⁶⁸ Id.

⁶⁹ James Gathii, "Construing Intellectual Property Rights and Competition Policy Consistently With Facilitating Access to Affordable Aids Drugs to Low-End Consumers," supra note-, esp. at 754-757

⁷⁰ Id.

⁷¹ Jeffrey E. Garten, *Business and Foreign Policy*, 76 *Foreign Affairs* 67, 69 (1997).

⁷² In 2001 for example, the pharmaceutical industry topped all industries with a 18.5% rate of profitability (although shareholders lost 13% over the year, which considering the historically high returns to the industry and the losses in relation to other industries still puts the pharmaceutical industry ahead of all others with a 33.2% return on shareholders equity in 2001. Household and personal products came a distant second with 26.4%. The entire industry median on return to shareholder equity for Fortune 500 companies was 10.4%. The pharmaceutical industry also led with a 16.3% return on assets in 2001. Household and personal products as an industry was second to the pharmaceutical industry on return on assets with a distant 9.5%. See *Fortune Magazine*, "Fortune 500 Performance," page F24, April 15, 2002. See also *Fortune Magazine*, "The Fortune 500,"/How the Industries Stack Up: The Industries By Performance," April 16, 2001 reporting that "drug companies top our industry performance list for return on revenue. And they reduced shareholder anxiety too, with a soothing 39% total return."

⁷³ Oxfam, Pfizer: Preventing the Cure: Corporate Lobbying and Fair Access to Medicines/Formula for Fairness: Patient Rights Before Patent Rights, , Oxfam Briefing Paper No. 2 (2002). See also, Families USA, "Profiting From Pain: Where Prescription Drug Dollars Go," July 2002 claiming contrary to pharmaceutical company claims that an overwhelming amount of their return go to research and development, most of it goes to lucrative executive compensation packages, marketing, advertising and administration.

As a result of the efforts of the IPC and other related groups, the U.S. supported inclusion of intellectual property rights within the international trade agenda during the Uruguay Round of talks of the General Agreement on Tariffs and Trade particularly in the early 1990's.⁷⁴ As a result of the way in which this group lobbied for support both within the U.S. and among U.S. allies as well as through the pressure of unilateral trade sanctions under super § 301, the TRIPS Agreement was formulated largely consistently with U.S. interests.⁷⁵ For example, the right of a WTO member country to engage in compulsory licensing, with the exception of emergency situations or in cases of public non-commercial use, is subject to a multitude of exceptions, making it virtually impossible to 'break' patents.⁷⁶ Additionally, although the TRIPS Agreement refers to technology

⁷⁴ Id.

⁷⁵ James Gathii, "Construing Intellectual Property Rights and Competition Policy Consistently With Facilitating Access to Affordable Aids Drugs to Low-End Consumers," supra note-, esp. at 754-757

⁷⁶ Article 31 of the TRIPS Agreement for example provides the following rigid requirements for deviating from patent protection: "Where the law of a Member allows for other use of the subject matter of a patent without the authorization of the right holder, including use by the government or third parties authorized by the government, the following provisions shall be respected: (a) authorization of such use shall be considered on its individual merits; (b) such use may only be permitted if, prior to such use the proposed user has made efforts to obtain authorization from the right holder on reasonable commercial terms and conditions and that such efforts have not been successful within a reasonable period of time. This requirement may be waived by a Member in the case of a national emergency or other circumstances of extreme urgency or in cases of public non-commercial use. In situations of national emergency or other circumstances of extreme urgency, the right holder shall, nevertheless, be notified as soon as reasonably practicable. In the case of public non-commercial use, where the government or contractor, without making a patent search knows or has demonstrable grounds to know that a valid patent is or will be used by or for the government, the right holder shall be informed promptly; (c) the scope and duration of such use shall be limited to the purpose for which it was authorized, and in the case of semi-conductor technology shall only be for public non-commercial use or to remedy a practice determined after judicial or administrative process to be anti-competitive; (d) such use shall be non-exclusive; (e) such use shall be non-assignable, except with that part of the enterprise or goodwill which enjoys such use; (f) any such use shall be authorized predominantly for the supply of the domestic market of the Member authorizing such use; (g) authorization for such use shall be liable, subject to adequate protection of the legitimate interests of the persons so authorized, to be terminated if and when the circumstances which led to it cease to exist and are unlikely to recur. The competent authority shall have the authority to review, upon motivated request, the continued existence of those circumstances; (h) the right holder shall be paid adequate remuneration in the circumstances of each case, taking into account the economic value of the authorization; (i) the legal validity of any decision relating to the authorization of such use shall be subject to judicial review or other independent review by a distinct higher authority in that member; (j) any decision relating to the remuneration provided in respect of such use shall be subject to judicial review or other independent review by a higher authority in that Member; (k) Members are not obliged to apply the conditions set forth in subparagraphs (b) and (f) above where such use is permitted to remedy a practice determined after judicial

transfers, it does not place equally rigorous requirements on technology transfer as a precondition for receiving patent protection unlike in prior versions of the Paris Convention.⁷⁷ For process patents, the TRIPS Agreement puts the burden of proof in an infringement suit on the defendant.⁷⁸ In the developing country context, ill-financed defendants will potentially come face to face with ‘well-financed’ developed country accusers who could much more easily bear the burden of proving infringement.⁷⁹ Thus, the TRIPS Agreement contains a number of thoroughly watered down protections of the public interest. Rather, it affords a heightened level of protection of patents.⁸⁰

or administrative process to be anti-competitive. The need to correct anti-competitive practices may be taken into account in determining the amount of remuneration in such cases. Competent authorities shall have the authority to refuse termination of authorization if and when the conditions which led to such authorization are likely to recur; (l) where such use is authorized to permit the exploitation of a patent “the second patent”) which cannot be exploited without infringing another patent (“the first patent”), the following additional conditions shall apply: (i) the invention claimed in the second patent shall involve an important technical advance of considerable economic significance in relation to the invention claimed in the first patent; (ii) the owner of the first patent shall be entitled to a cross-licence on reasonable terms to use the invention claimed in the second patent; (iii) the use authorized in respect of the first patent shall be non-assignable except with the assignment of the first.”

⁷⁷There is only one direct reference to technology transfer in the TRIPS Agreement. Article 7, which is an Objectives Clause (and not therefore a substantive commitment) provides: “The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to the social and economic welfare, and to a balance of rights and obligations.”

⁷⁸ Article 34 of the TRIPS Agreement, *supra* note_

⁷⁹ Mark Ritchie, Kristin Dawkins and Mark Vallianatos, “Intellectual Property Rights and Bio-Diversity: The Industrialization of Natural Resources and Traditional Knowledge,” 11 *St. John’s Journal of Legal Commentary*, (1996) 431, at 438

⁸⁰ Article 7 of TRIPS notes that the “protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and transfer and dissemination of technology to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and responsibilities.” Article 8(2) provides that “Appropriate measures, provided that they are consistent with the provisions of this Agreement, may be need to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology. Technology transfer is further referred to under Article 66(2) with reference to least-developed countries and under Article 67 which encourages technical cooperation in technology transfer between developing and developed countries. Pursuant to these provisions Brazil enacted a working requirement in its patent law. The US filed but withdrew a WTO complaint against Brazil on the basis that the Brazilian working requirement was TRIPS illegal. See Peter Capella, “Brazil Wins HIV Drug Concession From US – Complaint to WTO on Patent Law Withdrawn,” *The Guardian*, Tuesday, June 26, 2001 at <http://www.guardian.co.uk/business/story/0,3604,512640,00.html>. See also, Paul Champ and Amir

The upshot of the foregoing part of this paper is as follows. The entry of the TRIPS Agreement on the stage transformed the system set in place by the Paris Convention. First, it did so by having the World Trade Organization, (WTO), an international institution backed by a dispute settlement system becoming a major international intellectual property law making and enforcing player.⁸¹ Second, the TRIPS Agreement departed from the norm of regulatory diversity underpinning the Paris Convention model under which patent rights were regarded as a national prerogative rather than having international scope. Hence, under the TRIPS Agreement, there is now a minimum international substantive regime of what intellectual property rights protections countries should adopt. Under the requirements of the TRIPS Agreement, countries have little choice regarding the scope and extent of the patent rights they can grant since the Agreement aims at deep integration rather than regulatory diversity as in the pre-TRIPS period.⁸² For example the flexibility to exclude from patent protection certain inventions such as pharmaceuticals in the public interest vanished. The TRIPS Agreement also puts in place judicial and administrative institutions, procedures, safeguards and remedies⁸³ that countries must put in place to further secure the rights protected under the treaty. With regard to patents, only those that are capable of industrial protection are protected.⁸⁴

Attaran, Patent Rights and Local Working Under the WTO TRIPS Agreement: An Analysis of the U.S.-Brazil Patent Dispute,” 27 *Yale Journal of International Law*, 365 (2002)

⁸¹ The World Intellectual Property Organization (WIPO) was thought of as ineffective and is now seen or regarded to have become re-energized since the emergence of the WTO in 1995, see Graeme B. Dinwoodie, “The Architecture of the International Intellectual Property System,” 77 *Chicago-Kent Law Review* 1005 (2002)

⁸² James Thuo Gathii, “Construing Intellectual Property Rights and Competition Policy Consistently With Facilitating Access to Affordable AIDS Drugs to Low-End Consumers,” 53 *Florida Law Review*, (2001) 761

⁸³ Articles 42 (fair and equitable procedures), 43 (evidence), 44 (injunctions), 45 (damages), 46 (other remedies), 47 (right of information), 48 (indemnification of the defendant) and 50 (provisional measures) all relate to judicial enforcement obligations members must have in place as obligations under the TRIPS Agreement.

⁸⁴ Article 27(1) of the TRIPS Agreement, *supra* note_

Further the TRIPS Agreement is non-derogable – countries cannot make reservations without the consent of all signatory state parties which would seem rather hard to attain.⁸⁵

Conclusions: In Lieu of Strong IP Protection?

In this paper, I have tried to demonstrate that the history of extending strong IP protection – with a particular focus on patents – on least developed economies is unlikely to yield the positive economic benefits of stronger FDI flows or higher growth. In part II, I showed that the history of extending strong international IP protection to developing countries particularly those with little to gain from such internationalization has been contested at every stage. This begs the question whether the internationalization of strong IP regimes particularly in LDC's is being sought because it is beneficial to do so for these countries or for foreign firms.

Clearly without the broad range of preconditions for increasing FDI flows, strong IP protection by itself is unlikely to attract stronger flows of FDI. FDI flows continue to be weakest in LDCs except those with rich mineral resources. The late industrializers of East Asia did not achieve rapid and sustained economic progress by adopting strong regimes of IP. Rather as Paul Krugman and others have already shown us, massive increases in inputs such as capital, technology and education were very more consequential in spurring sustained exponential growth rates –rather than improved efficiency in using these massive investments. One could surmise from this experience that strong protections of IP rights and other accompaniments of developed market economies are not absolute prerequisites to industrialization. In fact, the massive economic

⁸⁵ Article 72 of the TRIPS Agreement.

transformation in South East Asia were not simultaneously accompanied by strong IP protection --- but rather by a strategy of national economic transformation that economists like Alice Amsden⁸⁶ have found had little to do with free market governance prescriptions of the World Bank espoused in its Miracle of the Market report.⁸⁷ China's astonishing growth towards industrialization at the moment which has occurred largely in an era where the protection of IP rights has been less than satisfying to foreign investors seems to confirm Alice Amsden's thesis with regard to countries like South Korea. The fact that China is the leading destination of foreign direct investment and a leading source of anxiety for owners of IP rights undermines the positive correlation between strong IP protection and strength in attracting FDI. There are certainly many other determinants of strength in attracting FDI in China including the massive capital investments being made in infrastructure and developing a manufacturing capacity. Perhaps China's growth shows that strong IP protection is crucial for maintaining the competitive advantages of early industrializers but may not be a crucial determinant for the emergence of new ones.

If the question is to what extent a patent system stimulates the propensity or eagerness to innovate (p44), the evidence available so far does not strongly show causal links between strong IP and innovation outside the group of early industrializers. On the separate issue of a correlation or causal link between strong IP protection and strength in attracting FDI, the evidence is even weaker as we have seen with regard to China and LDCs. Further, evidence of flows of FDI in sub-Saharan Africa shows that FDI flows are higher in

⁸⁶ Alice Amsden, *South Korea: Asia's Next Giant and Late Industrialization*, 1989

⁸⁷ World Bank, *The East Asian Miracle: Economic Growth and Public Policy*, 1993. For a critical review see Alice Amsden, "Why Isn't the Whole World Experimenting With the East Asian Model to Develop?" *Review of the East Asian Miracle*, 22 *World Development* 622 (1994)

resource conflict countries like Angola and Mozambique, than in more stable economies that have relatively stronger IP protection.

Claims of strong causal links between strength in attracting FDI and strong IP regimes are not only overstated, but they also underemphasize the importance of and availability of public goods like access knowledge or education which became increasingly inaccessible & expensive with the adoption of strong IP regimes. Access to essential medicines in LDC is an example of how strong IP regimes might operate inconsistently with building the human capital necessary to address the developmental challenges of LDC's.

I also want to mention again in conclusion the especially high transaction costs of implementing IP regimes in LDC's. World Bank research shows that such costs outstrip any benefits these countries may get from adopting strong IP regimes.

Finally, remember my argument is not so much against extension of strong IP regimes in developing countries generally. I simply raise doubts about the tenability of adopting a strong regime of IP rights for LDC's. There are perhaps other ways in which authors and inventors may be protected outside of a strong IP regime. Prof. Reichman has proposed liability rules as a possible way and Prof. Ruth Okediji has suggested parallel licensing and exhaustion rights for copyright. These and other possibilities outside strong IP regimes could be explored.

