A DILEMMA OF INTELLECTUAL PROPERTY RIGHTS♦ FOR DEVELOPING COUNTRIES?[1]

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Abstract

The following paper summarizes the importance of intellectual property rights for the developed nations. The paper analyses the historical nature of the IPRs in the context of their implementation in the developing countries, covering the rationale for the dilemma of the developing countries for stronger IPR regime. The concern of the scientific communities is definite, obvious and particularly vulnerable to the limitations of the stronger intellectual property regimes in the developing nations. Different developing countries, with respect to their economic conditions have different concerns regarding the implementation of intellectual property rights. The paper will briefly examine the historical nature, through which the debate on the intellectual property rights implementation started, specifically in the United States, and its unilateral reinforcement of implementation. The paper would also discus the role of World Trade Organization (WTO) especially the TRIPS agreement, and its theoretical implications on the developing countries, the transition period offered by the agreement and its cost/benefit for developing countries.

1. INTRODUCTION

Developing countries have been for long time under demand by developed nations for the implementation of intellectual property rights. The main concern by the developed countries is to protect the innovations in the developing countries from the illegal imitation and copying. The debate among both the parties i.e., developing nations and developing nations is getting intense since the last two decades. The protection for the innovation has been extended from innovation to discovery, from mechanical devices to living organisms (Byström et al., 1999; Chakravathi,1999); from privately funded research and development to publicly funded scientific and technological results[2] ; from information technology to information about scientific information (David, 2000); from industrial products and technological processes to services and financial and administrative methods (Lerner, 2000) and from 'brick' to 'click' trademarks (Bubert and Büning, 2001), however the developing countries are divided over the debate on the base of their economic conditions, foreign direct investment and technological sophistication.

The concern for the developing countries is economic implications for the implementation of such intellectual property regimes in their respective countries. The case can be even more

♦ Intellectual Property Rights, in most of the time will refer to *Patents* only, as the copyrights and trademarks have different set of issues, and may require a separate debate. However, until mentioned, *Copyrights* may discus the software copyrights.

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[2] Bahy-Dole Act: Public Law 96-517, 6 (a), 94 Stat. 3015, 3019-3027 (1980) Adapted from Clemente Forero-Pineda (2006)

relentless for the Least Developed Countries (LDCs), where intellectual property rights are seen as the driver for the high technology cost, barriers for technology access to public, however on the other hand, higher technology transfer with foreign direct investment may somehow justify such regime. However such 'lucrative' offers in exchange for intellectual property rights in the developing countries, according to some developing countries, are in view of the developed nations benefits and they would not be able to raise the economic conditions in the developing countries from their present states. The social benefits reaped from certain economic systems, implemented in the developed countries may not affect the social systems of the developing countries as desired.

The debate for the implementation of 'proper' intellectual property rights in the developed countries is stimulated since the industrialized countries faced a threat to their innovative technological and non-technological inventions and their commercialization in the developing countries. So far, different measures, specifically led by United States have in deed forced the implementation for the intellectual property rights in the developing countries, specifically backed by the strong business communities in the United States.

2. HISTORICAL PERSPECTIVE

Intellectual Property Rights are one of the sensitive areas for developing countries whose proper implementation with appropriate timing could lift the socio-economical conditions of the developing countries. However the debates on the policies on the intellectual property rights in the developing country have followed a pendulum like movement (Forero-Pineda, 2006). United Nations took the responsibility to highlight the importance of technology in trade and development, cooperated by independent economists from developing countries. The main argument stressed was the situation of monopoly and oligopoly in the world technology markets prevents developing countries from having fair access to technology (Cruz, 1998) and its associated benefits. Penrose in 1951 also stressed that it is practically inevitable for the developing countries to get benefit from the strong intellectual property rights owned by the inventors in the developed countries. From the global welfare perspective, it was argued that having the weaker intellectual property in the developing countries does not necessarily means that inventors in the developed countries would lose, however the relative financial benefits associated with such inventions could be less.

During 1950s and middle of 1980s, developing countries were able to refrain from the implementation of intellectual property rights, maintaining a special status in the IPR system (David, 1993, p.19). Regional trading blocs like Latin American Free Trade Association (LAFTA), the Andean Pact, and other pacts among the developing countries pursued the common system of intellectual property rights. In 1970, India leads the way in developing countries by adopting a patent law with considerable restrictions on the patent holders

(SUNS/IPS, 1995)[3]. Raghavan in 2001 argued that the choice of process patents rather than product patents allowed local production of imported products whenever the use of different process was demonstrated. Such legislation in India had the largest impact on its pharmaceutical industry, making it one of most competitive in pharmaceutical research and development. Some of the practices were carried out in Brazil and Argentina by setting up their national offices, in charge of controlling technology transfer and contracting, however the practices and initiatives could not lead to a consolidated intellectual property and technology transfer offices, in lines to the European countries (Cruz, 1998, p.4).

In the mid 1980s, a shift in this scenario began to occur on the United States Government initiative. Responding to the concerns of the US based firms, and in context of the agreements with advanced countries, David in 1993 concluded that US followed 'a direct, unilateral course of action', instead of renegotiating the international intellectual property rights agreements i.e., Paris or Bern Conventions. Such type of intellectual property regulation was further enact in Uruguay round of 1990s negotiations, as part of conditions to join the World Trade Organization.

Within developing countries, the terms of the debate changed beyond what could be expected from simple US pressures. Local interests in favor of enforcing stronger intellectual property protection had emerged, in association with the commercialization of imported goods and to lesser extent, with the development of local technology. Products such as software, video films and music are easier to copy than traditional industrial products are to imitate. For this reason, copyrights have been focus of debate for less developed countries, whereas in newly industrialized countries, both in Asia and Latin America, patents and trademarks are issues.

[3] Susan K. Sell, Intellectual Property Protection and Antitrust in Developing Countries, International Organization, Vol.49, No.2 (spring, 1995), p. 321. Industry associations in service, investment, high technology, agriculture chemical, pharmaceutical, and entertainment sectors lobbied Congress for more effective intellectual property protection abroad. Among the most active groups were the Associations of: the Pharmaceutical Manufacturers, the Chemical Manufacturers, the Semi-conductor Industry, and the International Intellectual Property Alliance (an umbrella association of eight trade associations: American Publishers, Inc.; American Film Marketing; Data Processing and Service Organizations; Computer Software and Services Industry; Business Software Alliance; Computer and Business Equipment Manufacturers; National Music Publishers; the Recording Company of America; and Motion Pictures Association of America.

INTELLECTUAL PROPERTY PROTECTION: WAS IT COERCION?

In particular from developed countries, United States is pursuing the intellectual property as coercion for most of the developing countries, especially for the largest trade partners i.e., like China, India, Brazil, Argentina, with US companies. The efforts started in 1960s and 1970s in multilateral forums, including the World Intellectual Property Organization and UNCTAD, although the efforts turn to be worthless. Although in the early 1980s, US were able to succeed to achieve quick results in bilateral negotiations with Hungary, Singapore, South Korea and Taiwan[3]. With the promise to get implementation by developing countries, United States further followed the policy of tightening its linkages between trade and intellectual property rights by the amendments in Trade & Tariff Act 1984 and then in 1988 (Sell, 1995).

Table 1 Exports of goods and non-factor services as a percentage of GDP

Country	*1982*	*1983*	*1984*	*1985*	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*
Argentina	10.9	8.9	8.2	11.4	8.0	7.5	8.8	15.3	10.5	7.6	6.3
Brazil	7.9	12.0	14.5	12.4	9.0	9.5	10.9	8.4	7.2	8.5	—[a]
Chile	19.1	23.4	22.5	28.1	31.1	33.3	37.4	37.9	37.1	35.7	33.1
China (PRC)	10.5	9.7	11.0	11.8	13.0	15.6	14.5	13.7	19.0	21.9	—
India	6.5	6.4	6.6	6.1	5.8	5.9	6.1	7.2	—	—	—
Mexico	15.0	18.2	17.1	14.9	16.9	19.7	16.9	15.9	15.7	14.0	—
South Korea (ROK)	37.0	36.1	36.4	34.5	38.5	41.8	39.6	33.7	30.4	28.8	29.6
Thailand	24.0	20.6	22.6	24.4	26.7	30.1	34.3	36.6	36.5	—	—

The above table shows the exports of goods and services to US with respect to their gross domestic products. With the exception of China, US is the large importer of each of these countries goods, making these countries far more dependent on United States than the United States is on them (Sell, 1995). Using this leverage power, together with Section 301 of the Trade Act, which allows the United States to threaten trade retaliations for inadequate intellectual property protection, United States induced it as policy changing factor, especially in trade. Section 301 of the Trade Act of 1974 gives the President power to enforce U.S. rights under trade agreements or to eliminate policies and practices that discriminate or impose unjustifiable burdens on United States commerce. The act also permits industries, trade associations, and individual companies to petition the United States Trade Representative (USTR) to investigate

Source: Adapted from Susan K. Sell, 'Intellectual Property Protection & Antitrust in the Developing Countries' International Organization, Vol. 49, No. 2. (Spring, 1995), p.324

[a] Data Not Available

actions of foreign governments. If the USTR decides to investigate, the first step is consultation with the foreign government to try to resolve the problem. If these efforts fail, within a year (in all but subsidies cases, for which a shorter time period is mandated) the USTR recommends the appropriate action to the President. This appropriate action often consists of threat of retaliation via trade sanctions. After pressure from the private sector, the United States also linked the generalized system of preferences (GSP) benefits, which grant preferential market access for developing countries, to the effective protection of intellectual property.

Sykes[4], in his comprehensive analysis of United States record in Section 301 actions found that Section 301 is fairly successful in inducing foreign governments to modify their practices when they are accused of violating U.S. legal rights.

Table 2 U.S. experience with intellectual property cases under Section 301 of the Trade Act of 1974

Case no.	*Country*	*Area*	*Year filed*	*Year case terminated or suspended*	*GSP beneficiary*
301-49	Brazil	Informatics	1985	1989	Yes
301-52	South Korea	Intellectual property rights	1985	Open	Yes
301-61	Brazil	Pharmaceutical patents	1987	1989	Yes
301-68	Argentina	Pharmaceutical patents	1988	1989	Yes
301-82	Thailand	Copyright enforcement	1990	1991	Yes
301-84	Thailand	Patent protection	1991	Open	Yes
301-85	India	Intellectual property protection	1991	Open	Yes
301-86	China (PRC)	Intellectual property protection	1991	1992	No

Source: Adopted from Alan O. Sykes, "Constructive Unilateral threats in International Commercial Relations: The Limit Case for Section 301", Law & Policy in International Business, Vol.23, no. 2, 1992, p.263-330

Table 2 provides a summary of the Section 301 cases in which intellectual property issues were at stake. In all eight cases, the targeted governments agreed to improve intellectual property protection along the lines desired by the United States. Furthermore, the timing of the changes demonstrates strong link between this exercise of U.S. leverage and the changes in the targeted states. In short, both the substance and the timing can be explained as a product of coercion.

[4] Sykes, "Constructive Unilateral Threats in International Commercial Relations," p.313.

INTERNATIONAL ORGANIZATION'S RECENT STRATEGY

Passing from 1970s and 1980s, very recently the debate for implementation of intellectual property rights in different systems within different regions of developing countries have spurred. The main concern, as obvious was raised by the highly influential business lobbies and association in most the developed nations, led by United States. As discussed earlier, United States rebound to the similar kind of strategy by offering market access, technology transfers and foreign direct investments in the (developing) countries, which will successfully implement the intellectual property regimes. Somehow, this was and still a very lucrative incentive for the developing countries, which would definitely raise their present economical conditions, however the policy makers in these countries have different perspective.

The u-turn in the developed countries strategy is to position differently the impact of implementation of intellectual property protection in developing countries, as it was done in negotiations at Doha Round of the WTO on the Trade Related Aspects of Intellectual Property Rights (TRIPS). The Doha Round of discussion was meant to exclude the development related IPR issues as the cost of medicines, agricultural products, bio-diversity or genetic materials (Lall, 2003). Doha Declaration classified the countries based on their domestic technological imports, research and development and their innovation system.

BENEFIT OR DETRIMENT FOR DEVELOPING COUNTRIES?

According to World Bank Global Economic Perspective, there are certain specific reasons for developed countries, and interestingly for the developing countries to follow the TRIPS agreement, i.e., it may provide developing countries better access to agricultural and apparel markets in rich nations, an expectation that stronger IPRs would also encourage additional technology transfer and innovation. However according to WB, the promise for long-term benefits seems uncertain and costly to achieve in many nations, especially the Least Developed Countries (LDC's). In addition, the administrative costs and problems with higher prices for medicines and key technological inputs loom large in minds of policy makers in developing countries. Many are pushing for significant provisions in the agreement. Certain developing countries also applied for the provisions in implementation for the patent protection, particularly in pharmaceutical industry.

Table 3 Countries Using Extra Transition Period

Turkey∗	Uruguay
Argentina∗	Morocco∗
Brazil∗	Tunisia
Paraguay	Kuwait
Pakistan	Egypt
India	Cuba
United Arab Emirates	

∗ Countries recently introduced pharmaceutical patent protection

Source: WTO: TRIPS and pharmaceutical patents fact sheet (www.wto.org)

Certainly there are specific short-term costs associated with intellectual property rights for the developing countries, like higher prices for the technology and protected products. Given this, the case for stronger intellectual property rights in these countries must rest on long term benefits like larger technology or foreign direct investment inflows and stronger stimuli to local innovation. This would be an economic case only if the present value of these benefits (discounted at appropriate interest rate) is more than the present value of these costs. Given the mechanics of the compound interest, this means that the long-term benefits would have to be very large indeed, particularly if they accrue after some time.

Some countries have also agreed to support TRIPS in return for the concessions in other (non-technological) spheres of economic activity, such as larger aid, freer access to developed country markets for primary exports and so on. Whether they actually benefited in these ways remains an open question, since neither the costs nor the benefits of TRIPS related concessions have been properly measured.

However the discussion might be fruitful, if the implementation of intellectual property rights are associated with the state of economy of the country in which it is being implemented, for instance

in the case of developing countries. One main fact regarding the IPR is the certainness of the benefits to developed countries by implementing the intellectual property rights in developing countries. Nevertheless such implementation would also stimulate the local innovation in the developing countries, allowing them to import the foreign technologies and have hands-on-experience in learning and using the technologies. The state in which present developing countries is analogy of the state in which the developed countries were in the era of their industrialization, by having weak intellectual property rights, to promote, build and foster the development of local firms and industries[5]. Econometric cross-section evidence suggests that there is an inverted U-Shaped relationship between the strength of IPRs and income levels. The intensity of IPRs falls with rising incomes, as countries move to slack IPRs to build local capabilities by copying, then rises as they engage in more competitive effort. The turning point is US$ 77501[6] per capita in 1985 prices. Theory also suggests that the benefits of IPRs rise with income and that at very low levels the costs of strengthening IPRs may well outweigh the gains. Maskus (2000) notes three potential costs:

1. Higher prices for imported products and new technologies under IPR protection
2. Loss of economic activity, by the closure of imitative activities.
3. The possible abuse of protection by the patent holders, especially large foreign companies.

Maskus also argues that these costs are offset by the longer-term benefits of intellectual property rights, even in developing countries. These benefits are as follows:

1. IPRS provides 'an important foundation for sophisticated business structures' and indicate that private property rights in general are well enforced. There may certainly exist an important signaling function of IPRs, particularly in countries that previously had policy regimes inimical to private investments and property rights.
2. Other kind of technological activities in developing countries also benefit from strong IPRs, for instance from better copyrights and trademark protection (where strong protection may encourage quality improvement). However, this case cannot be made for patenting, where it is mainly the advanced newly industrializing countries that will need TRIPS to boost local Research and Development. Countries lower on technological ladder are unlikely to benefit in any technological sense. Several may lose: after all the rationale for the TRIPS is to allow innovators higher prices for their protected products, which will eventually lead to more costly technology products for poor countries.
3. Economies without advance technological capabilities may, by strengthening their IPRs, stimulate global innovation by adding to effective demand for new products. So far, leading innovators have undertaken very little R & D of specific interest to poor countries, that is simply not profitable enough (UNDP, 2001; World Bank, 2001)

[5] Chang (2001) and Rasiah (2001).
[6] Cited in Maskus, 2000 and World Bank, 2001

4. And lastly, stronger intellectual property rights in developing countries will stimulate high degree of technology transfer in developing countries from developed countries, hence increasing their foreign direct investment and licensing.

As far as FDI goes, most studies suggest that IPRs come fairly low on the list of factors affecting TNC location decision[7]. However general tightening of IPRs in recent years may itself have raised their signaling value to investors: countries with stronger property rights protection may, as a result, be regarded as more favorably inclined to business.

CONCLUDING REMARKS

The debate for intellectual property rights implementation in developing countries provides the base for the demarcation among developed, developing and poor or least developed countries (LDC). Every member group has their own reservations, depending on their local technological system, economic conditions and the level of their prosperity. On one side, developing countries views the TRIPS agreements, in association to intellectual property rights as an intimidation for their present economic systems, which might eventually increase the access to technological products by increasing their cost.

However such an implementation, with accessibility to developed countries markets, technology transfer and foreign direct investment, becomes unusual for a developing country with relatively lower exports and limited technology accessibility. Presently, there is a need to establish a framework on the base of TRIPS agreement which could allow the uniform implementation of strong or relatively better IPR regimes in the developing economies, excluding the LDCs.

An appropriate analysis for the cost and benefit for TRIPS agreement might give a solid rational for implementing it in the developing countries, justifying the higher costs of imported technology, pharmaceutical and health related products and the impact of imitation which is done in the developing countries. Furthermore, the analysis could also help the economists to yield the TRIPS benefits in terms of its value for the developing countries.

All these arguments for weaker IPRs from developing countries may not equally qualify or justify the importance of the stronger IPRs which is already exhibited from the industrialization, success and prosperity of the developed nations which had already implemented strong intellectual property rights for sufficient time period, and in spite of this, noticing higher growths in their economies as compared to developing countries.

[7] Braga et al. (1999), Luthria (1998), Chang (2001) and Rasiah (2001)

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