#### Intellectual Property Rights and Development

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# Proposal by Argentina and Brazil (2004)

• ...IP protection is a policy instrument the operation of which may, in actual practice, produce benefits as well as costs, which may vary in accordance with a country's level of development. Action is therefore needed to ensure, in all countries, that the costs do not outweigh the benefits of IP protection.

## **CIPR (2002)**

• But incentives...impose costs on consumers and other users of protected technologies. The balance of costs and benefits will vary according to how the rights are applied and according to the economic and social circumstances of the country where they are being applied. Standards of IP protection that may be suitable for developed countries may produce more costs than benefits when applied in developing countries, which rely in large part on knowledge generated elsewhere to satisfy their basic needs and foster development.

#### **Conventional assumptions**

• IP has the same impact in all countries, irrespective of level of development

• IP benefits always exceed costs

#### Lessons from history: USA

"...When the United States was still a relatively young and developing country, for example, it refused to respect international intellectual property rights on the grounds that it was freely entitled to foreign works to further its social and economic development."

U.S. Congress, Office of Technology Assessment, Intellectual Property Rights in an *Age of* Electronics and Information, OTA-CIT-302, Washington, DC: U.S. Government Printing Office, April 1986).

## • IP = innovation = development

#### Article 66.1 of the TRIPS Agreement

• 'In view of the special needs and requirements of least-developed country Members, their economic, financial and administrative constraints, and their need for flexibility to create a viable technological base, such Members shall not be required to apply the provisions of this Agreement...'

# **IP & innovation**

 Indeed, the historical evidence provides little or no support for the view that intellectual monopoly is an effective method of increasing innovation.

 M. Boldrin and D. Levine: Against Intellectual Monopoly, chapter 8, found at http://levine.sscnet.ucla.edu/papers/ip.ch.8.m1 004.pdf, at 2. 2007.

## Lessons from history

 ...nations with patent systems were not more innovative than nations without patents systems. Similarly, nations with longer patent terms were no more innovative than nations with shorter patent terms.

James Bessen and Michael Meurer (2008), <u>Patent Failure: How Judges, Bureaucrats,</u> <u>and Lawyers Put Innovators at Risk</u>, Princeton University Express, Princeton and Oxford.

• , p. 80.

# Empirical evidence: IP & development

 Survey of patent laws in over sixty countries: strengthening of patent rights resulted in an increase in filings from foreign applicants, with no effect on filings by local inventors.

Lerner J 'Patent Protection and Innovation Over 150 Years' (2002)
<u>http://www.epip.eu/papers/20030424/epip/papers/cd/papers\_speakers/Le</u>
<u>rner\_Paper\_EPIP\_210403.pdf</u>

Empirical evidence: IP & development • Survey of 92 countries 1978-2002: "National patent protection alone does not stimulate domestic innovation... However, domestic innovation accelerates in countries with higher levels of economic development, educational attainment, and economic freedom.

Qian, Y. (2007) "Do Additional National Patent Laws Stimulate Domestic Innovation in a Global Patenting Environment: A Cross-Country Analysis of Pharmaceutical Patent Protection, 1978–2002", Review of Economics and Statistics August 2007

### **Rand Corporation**

- The findings from the empirical literature show that stronger IPRs may hamper innovation through technology diffusion and absorption in developing countries.
- It also found that stronger IPRs can hamper access to medicines in developing countries and do not necessarily encourage pharmaceutical innovation that responds to developing country needs.

• Emmanuel Hassan, Ohid Yaqub, Stephanie Diepeveen, Intellectual Property and Developing Countries. A review of the literature, 2010

#### IP and economic growth

- ...we find evidence suggesting that increased levels of growth lead to greater levels of IP protection, contradictory evidence in the literature linking IP with growth, a lack of evidence that increased levels of IP protection lead to actual use of the IP system...We suggest that IP may have few direct effects on growth and that any causality is a result of belief rather than actual deployment of IP.
- 124 developing countries: 1995-2011
- Richard Gold, Erica Shadeed and Jean-Frédéric Morin, 'Does intellectual property lead to economic growth?
- Insights from a novel IP dataset', Regulation & Governance (2017).

#### **IP** and innovation

• Nowadays, it is widely recognised that the management of innovation in countries like the US has been sub-optimal and led to a situation that is increasingly litigious and plagued by conflicts. In fields such as information technology, a whole set of weak patents and an epidemic of over-patenting has made subsequent innovation difficult and has eroded some of the gains from knowledge... Moreover, in some areas, such as in pharmaceuticals, ever-stronger IP protections has not necessarily led to an increase in the discovery of new chemical entities... There is a shrinking of the knowledge commons as even publicly funded and promoted innovation is privatised, thereby reducing both equity and efficiency.

• Dean Baker, Arjun Jayadev and Joseph Stiglitz, Innovation, Intellectual Property, and Development: A BETTER SET OF APPROACHES FOR THE 21st CENTURY, 2017

- This dissatisfaction with the current regime is magnified in the case of developing countries. Ever since the adoption of TRIPS, it has become increasingly clear that the intellectual property provisions of the WTO are not well-aligned with the needs of developing countries and that they serve corporate interests in developed countries disproportionately. These conflicts become more pronounced over time. For example, in the case of extending patent protection to global pharmaceutical companies at the expense of the health of the poor, or extending copyright for books well past the time needed to compensate the author, thereby limiting access to books and educational materials in developing countries.
- Dean Baker, Arjun Jayadev and Joseph Stiglitz, Innovation, Intellectual Property, and Development: A BETTER SET OF APPROACHES FOR THE 21st CENTURY, 2017

#### SOURCES OF INNOVATION

- Journals, patent documents
- Competitors (reverse engineering, technology diffusion)
- Consultancy and engineering firms
- R&D institutions, universities
- Users
- Competitors through licensing
- New R&D

## R&D intensity

High > 4%	Aeroespace, robotics, pharmaceuticals, scientific instruments, electrical machinery
Medium >1%	Chemistry, automobile, non-electrical machinery, rubber and plastics, non- ferrous metals
Low < 1%	Textiles, footwear and leather, food, beverage and tobacco, shipbuilding, petrol refineries, ferrous metals, paper and printing, wood and furniture

## Industrialization stages

<b>Initiation stage</b> (mature technologies are incorporated through informal channels)	Little or no impact of IP on local innovation. IP may affect access to goods
Internalization stage (	Little impact of IP on local
"incremental" innovations derived from	innovation. IP may reduce
routine exploitation of existing	technological diffusion and affect
technologies)	access to goods
<b>Generation stage</b> (Some R&D-	IP may help to consolidate local
intensive industries are established;	innovation strategies; problems of
coexistence of mature and advanced	access remain for part of the
industries	population

#### IP & development

- Keep the room to use different sources of innovation
- Adapt IP to national and sectoral needs by using TRIPS flexibilities (exceptions, CLs, rigorous criteria of patentability, etc.)

## DA: 45 recommendations (2007)

- <u>Cluster A: Technical Assistance and Capacity Building</u>
- <u>Cluster B: Norm-setting</u>, flexibilities, public policy and public domain
- <u>Cluster C: Technology Transfer, Information and</u> <u>Communication Technologies (ICT) and Access to</u> <u>Knowledge</u>
  - Cluster D: Assessment, Evaluation and Impact Studies
- <u>Cluster E: Institutional Matters including Mandate and</u> <u>Governance</u>
- <u>Cluster F: Other Issue</u>

# Proposal by Argentina and Brazil (2004)

 Development concerns should be fully incorporated into all WIPO activities.
WIPO's role, therefore, is not to be limited to the promotion of intellectual property protection.

## WIPO IP strategy

• A national IP strategy consists of a set of measures [that] encourage and facilitate the effective creation, development, management, and protection of IP at national level...

# The future of the WIPO Development Agenda