

countries that should be shouldering more of a burden in stimulating innovation. Also, I think it is very important to remember that many pharmaceutical companies do not even register their patents, and many countries in the developing world recognize the importance of access to their products there.¹³ In addition, the marginal cost of production of many pharmaceuticals is very low, so differential pricing regimes, if they can be enforced, can be highly effective in ensuring an effective return on innovation and access to these products in the developing world with fewer resources. Another solution, of course, would be for developed world countries to provide aid and charitable funding, such as we do, through PEPFAR, the Global AIDS Fund, in order to purchase drugs consistent with the intellectual property regimes.¹⁴

In sum, I don't think the question is a binary choice between how do we eat today and eat tomorrow. There is a way to thread the needle between the two polar ends of intellectual property and access. And a vigorous and profitable drug industry is not a problem to be solved but a goal to be encouraged for the health of all the world.

PROFESSOR REICHMAN: Thank you very much for the opportunity to be here today. The topic is "Will Intellectual Property Law Help or Hurt Developing Countries, in Ten Minutes or Less." You see the challenge. It's a very big topic. One has to ask which IP laws we are talking about, whose version of them is on the table, which countries are the focus of inquiry, what do we mean by "help or hurt," how do we measure the social benefits and costs, to whom, and over what time frame? We might also nudge the organizers to ask whether ever-increasing intellectual property rights will help or hurt the developed countries in the long run, because plenty of reputable economists and legal scholars have serious doubts about how far we can push this envelope.¹⁵

13. See MEDECINS SANS FRONTIERES, DRUG PATENTS UNDER THE SPOTLIGHT Annex A at 28-31 (2003), available at http://www.who.int/3by5/en/patents_2003.pdf (consisting of a table of information with respect to drug patent registration in various developing countries). See also, THE WORLD BANK, BATTLING HIV/AIDS: A DECISION MAKER'S GUIDE TO THE PROCUREMENT OF MEDICINES AND RELATED SUPPLIES 12-13, (Yolanda Tayler ed. 2004), available at http://www.who.int/hiv/amds/WB_battlingaids.pdf (describing the World Trade Organization's 2001 decision to allow least developed countries to elect not to enforce patents or data protection rules that might affect the procurement of medicines).

14. See The Global Fund, Fighting AIDS – About the Global Fund, <http://www.theglobalfund.org/en/about/aids/default.asp> (last visited Oct. 7, 2007) ("The Global Fund's purpose is to attract, manage and disburse resources to fight AIDS, TB and malaria."); About PEPFAR, <http://www.pepfar.gov/about> (last visited Oct. 7, 2007) ("The Emergency Plan is the largest commitment ever by any nation for an international health initiative dedicated to a single disease—a five-year, \$15 billion, multifaceted approach to combating the disease around the world.").

15. See Mark A. Lemly, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1032-33 (2005) (suggesting that the argument of granting more intellectual property right protection to inventors and thus allowing them to capture the full social value of their inventions are fundamentally misguided); see also Clemnte Forero-Pineda, *The Impact of Stronger Intellectual Property Rights on Science & Technology in Developing Countries*, 35 RESEARCH POL'Y 808 (2006) (reporting the negative effects of strengthening intellectual property protection on the development of the less advanced developing countries becoming more significant in some cases).

There's abundant evidence that IP as an institution can help every country. But it's also true that intellectual property laws are public goods; and like all public goods, they must be wisely managed. The same copyright laws that can promote the music industry in Africa, a project with which I have been associated,¹⁶ can also make access to textbooks and scientific knowledge unaffordable for most students in Africa, unless they're managed properly. When the United States was a developing country, we didn't protect foreign authors, and we didn't participate in international copyright conventions. Things are much more difficult now. If we look at industrial property, we can surely say that trade secret laws, unfair competition laws, trademark laws, and the like, benefit every country because you can't innovate without them. Keith Maskus has shown that even patent laws can help developing countries just by enabling them to import up-to-date, high-tech products that would not otherwise be available,¹⁷ not to mention licensing and possibilities of foreign direct investment.

At the same time, however, intellectual property rights can hurt if the foreign sellers impose terms that undermine the ability of entrepreneurs in this country to enter and compete in the global marketplace. Developing countries also need room to reverse engineer unpatentable know-how, to add value by adapting foreign goods to local conditions. In doing so, they have to blaze new trails, because historically no poor country—no country that is developed at present—ever had to formulate their development strategies in the presence of the high international standards we have today. That doesn't necessarily mean they're bad, but it means they're very challenging.

From a broader perspective, the economist Keith Maskus and I have recently published our view that what the TRIPS Agreement has actually given birth to is an incipient transnational system of innovation that could produce very powerful incentives to innovate for the benefit of all mankind.¹⁸ Someone working in a garage in Bangladesh can reach the whole market of the world. The question is, what norms are best for the system as a whole? There is a serious governance problem at the international level, a tendency to promote international IP standards that lock in rents from existing innovation while making future innovation more difficult. There are pressures on the ability of states to provide essential public goods—public health, education, food security, environmental safety, etc.—because many of the inputs are covered by intellectual property rights. And there are even problems in fostering healthy free enterprise economies, which I'm sure everyone here is in favor of, against the imposition, the regulatory obligations, of these intellectual

16. See Policy Sciences Center, Economic Development Projects, <http://www.policysciences.org/pennares.html> (last visited Oct. 7, 2007) (detailing his work with the African music industry).

17. See generally Bernard M. Hoekman, Keith E. Maskus & Kamal Saggi, *Transfer of Technology to Developing Countries: Unilateral & Multilateral Policy Options*, 33 WORLD DEV. 1587 (2005) (describing policies to foster technological growth).

18. Keith E. Maskus & Jerome H. Reichman, *The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods*, in INTERNATIONAL PUBLIC GOODS AND TRANSFER OF TECHNOLOGY UNDER A GLOBALIZED INTELLECTUAL PROPERTY REGIME 3, 33-44 (Keith E. Maskus & Jerome H. Reichman eds. 2005) [hereinafter Maskus, *Globalization*].

property standards.

In estimating the social cost and benefits of this emerging transnational system of innovation, we have to differentiate among many groups of countries at different levels of development. The poorest of the poor, the thirty-two poorest countries, known as the least developed countries, don't have to shoulder these problems, because they're exempt from these obligations until 2013. At the other extreme, high-income countries like India, China, and Brazil are struggling to maximize the benefits and minimize the costs of these intellectual property rights. They have cultural industries, high-tech industries that are profiting, but they also have problems in their public health sector and other sectors that are trying to catch up. So, they have a mix. Nevertheless, these countries have all begun to obtain large numbers of foreign patents abroad, which seem to be working out.

But then, there are all the other developing countries at much lower levels of income, the middle- and low-income countries; they have more serious problems. The different national and regional capabilities and endowments with the WTO members limit their absorptive capacities and reduce the potential benefits of open markets for knowledge goods. There is, in short, a technology divide, and that divide is widened by the high rents that must now be paid to technology exporters, and by the absence of any provisions in these international agreements that would confer differential and more favorable treatment on developing countries. This is the first time in history that we have had a trade agreement without such differential or more favorable provisions.

All of these countries must accordingly compete in markets for knowledge goods on roughly the same normative terms and conditions that govern advanced industrialized countries. All of them have to struggle and cope with the enormous challenges and burdens (including financial burdens) that a universal set of relatively high IP norms thrusts upon them. Even those countries that are not engaged in the knowledge-good-producing tournament still have the costs and the problems of organizing and maintaining the defense of foreign intellectual property owners, with serious implications for their exchequer. In other words, even developing countries that opt out of the innovation system must engage with the social costs of intellectual property norms, both as defensive measures and because they have to continue to provide other public goods. They have to master all of these flexibilities with varying degrees of success.

They're having a lot of problems, and we're trying to help them. But I think if they did a better job, they would be able to do more of what you want. Of course, it would help if the developed countries would ease off on the pressures on these countries for still higher levels of intellectual property protection, but that's another problem. When developing countries opt in to the production of knowledge goods for local consumption or export purposes, they have really big problems. They have to balance incentives for their own industries without discriminating against foreigners, because we have a

national treatment requirement.¹⁹ And then they are also under pressure, as you just heard, for political reasons, among others, to watch out for their public health and education problems.²⁰ Here, in short, even the economically dynamic developing countries must resolve tensions between calibrating TRIPS-compliant domestic norms to stimulate innovation and adjusting the same set of norms to provide access to knowledge and medicines on affordable terms and conditions. This is a really hard task.

More generally, the TRIPS agreement has obliged developing countries to engage in this delicate balancing act between private and public goods.²¹ The international system does not offer any guidance to these countries in this regard.²² We have no trusted governance mechanism for balancing public and private interest in this emerging transnational system of innovation. Think about that for a moment. We are always talking about the balance between public and private interests; thrashing it out in committees, thrashing about in hearings, in legislation. On the whole, I think we do a pretty good job of it. But they don't have the basis for doing this at the international system at all; they have very primitive means in their own countries. We lack theoretical premises and empirical evidence to determine which IP standards would best promote the diverse goals of this system over time. We have generated few ideas and little discussion about how to maintain the supply of other global public goods under the supranational IP regime, and have not yet begun to acknowledge the distributional problems involved.

Maskus and I have taken the view that we really don't need any more IPR standard-setting for the moment.²³ We've called for a moratorium. We think the developing countries need a breathing space to accommodate the social costs of the TRIPS Agreement and posterior TRIPS-Plus, and also TRIPS-Minus measures.²⁴ They must particularly master the nuances of existing international standards of protection, including these built-in and subsequently added flexibilities, with a view to adapting this legal infrastructure to their own assets, capabilities, and needs. We need a timeout.

We also need more reliable information about how IPRs are helping developing countries, especially in certain fields and at certain levels of per capita GDP. We need to encourage them to embrace a pro-competitive ethos. They need to experiment with new intellectual property models, including those based on open source solutions and the strategic use of liability rules; which is beginning to get quite a bit of play, because liability rules can cure market failures without impeding follow-on innovation, without creating barriers to entry, and without necessarily creating blocking effects.

19. JEROME H. REICHMAN & CATHERINE HASENZAHN, NON-VOLUNTARY LICENSING OF PATENTED INVENTIONS: HISTORICAL PERSPECTIVE, LEGAL FRAMEWORK UNDER TRIPS, AND AN OVERVIEW OF THE PRACTICE IN CANADA AND THE USA 13 (2003), available at http://www.ictsd.org/pubs/ictsd_series/iprs/CS_reichman_hasenzahl.pdf.

20. *Id.* at 16.

21. *Id.* at 14.

22. *Id.* at 13.

23. Maskus, *Globalization*, *supra* note 18, at 28.

24. *Id.* at 36.

Developing countries need to formulate suitable competition law, rules, and policies. They also need to be testing different approaches to stimulating and disseminating innovation in their own national and regional systems of innovation, which could give us valid experiments that might lead to new bottom-up proposals. For example, one of the things that we ought to be thinking about—in line with Secretary Azar’s remarks—is how to coordinate global contributions to the cost of clinical trials, because it is a global public good, and there shouldn’t be any free riding in that area.²⁵

We must particularly ensure that developing countries are connected to the worldwide flow of scientific and technical information, in what UNESCO has called “the drive for knowledge societies.”²⁶ We need better research exemptions in all intellectual property regimes. We want to ensure that government-funded and government-generated scientific research results are widely disseminated at affordable cost. We want to encourage the developing countries to start working on variants of our Bayh-Dole Act—maybe even improvements on our Bayh-Dole Act—to start public-private partnerships between their research universities and the private sector.²⁷

Looking beyond innovation, we must also find ways to ensure that progress in stimulating the production of knowledge goods leads to the support of other public goods, such as public health, agriculture, the environment, education, and scientific research. In other words, we should be working to reverse the trend that makes the globalization of private knowledge goods increasingly at odds with the provision of global public goods, including knowledge of the public good.²⁸ Instead, we should be taking steps to ensure that this emerging transnational system of innovation adequately fosters and supports the supply of both in an environment that remains responsive to basic human needs and fundamental human rights.

MR. SHERWOOD: I like to start a talk like this by reporting my observation, in probably twenty-five or so developing countries around the world, that in every country there are inventive, creative minds. And whether this natural resource is utilized to grow those economies or becomes a wasted asset is largely dependent on the local intellectual property system.²⁹ One of my favorite stories comes from Nicaragua, hardly an advanced developing country. I was there for the World Bank, and after I’d completed an interview with one of the local intellectual property attorneys, he asked me to wait a minute, and then reached in his desk drawer. He pulled out this strange-

25. See *supra* pp. 67-69.

26. Press Release, UNESCO, UNESCO Promotes “Knowledge Societies” to Maximize Impact of Comm’n Tech. (Mar. 10, 2003), available at http://portal.unesco.org/ci/en/ev.php-URL_ID=13170&URL_DO=DO_TOPIC&URL_SECTION=201.html.

27. Lita Nelson, *The Role of University Technology Transfer Operations in Assuring Access to Medicines and Vaccines in Developing Countries*, 2 YALE J. HEALTH POL’Y L. & ETHICS 301, 301-08 (2003), available at <http://www.yale.edu/yjhple/nelsen.pdf>.

28. Maskus, *Globalization*, *supra* note 18, at 42-45.

29. Daphne Yong-d’Herve, *How IP Benefits Developing Countries*, INT’L CHAMBER OF COM., June 22, 2005, <http://www.iccwbo.org/icccjda/index.html?cookies=no>.