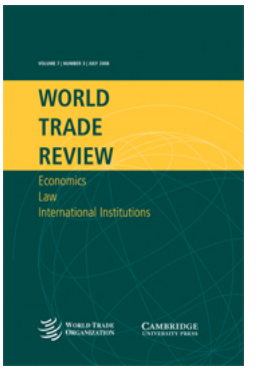

International Public Goods and Transfer of Technology Under a Globalized Intellectual Property Regime edited by Keith E. Maskus and Jerome H. Reichman Cambridge: Cambridge University Press, 2005

Edwin Lai

World Trade Review / Volume 7 / Issue 03 / July 2008, pp 576 - 579
DOI: 10.1017/S1474745608003911, Published online: 27 June 2008

forefront but also nuance what has sometimes been a fairly clumsy analytical construct. Having been backed into a corner by Marxists of varying persuasions and motivations, mainstream economic historians have, for a number of years, systematically underplayed what for other disciplines is obvious: the continued application of force, suasion, and sometimes outright plunder that has accompanied the development of the global economy. However, the authors make it very clear at the beginning that this is not a story about the primitive accumulation of capital as the wellspring of capitalist economic growth. ''Inventiveness and incentives'' (p. xx) are at the heart of this process for the authors, but they make a compelling case that for too long traditional narratives of the 'rise of the west and decline of the rest' have ignored – willfully or not – the role of the West's rich and meaningful interaction with the rest of the world in conditioning its growth prospects. This book represents a first step in the right direction.

As it stands, I can offer two criticisms of the book. First is its encyclopedic nature. This is both a curse and a blessing: a blessing in that it will be a sure source of citations for the authors as this is a wonderful reference apart from its other qualities; a curse in that one can only imagine that its length will have a detrimental effect on general – not even to say, popular – readership. As I have tried to impart above, this is a book that should be widely read. I can only hope that a shorter and snappier version might soon appear to address this fairly minor shortcoming.

Finally, the titular emphasis on power seems strangely underemphasized in the latter half on the interwar and post-World War II periods. True, the world economy might be converging on the armchair economist's optimistic assessment that we live in a world of purely voluntary exchange. But it counters the dominant view in some political science and international relation departments that globalization is a mere expression of Western power and dominance. The authors would do well to fully confront this divergence head-on or at least make this particular subtext of the declining role of power determining much more explicit in a future edition.

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doi:10.1017/S1474745608003911

International Public Goods and Transfer of Technology Under a Globalized Intellectual Property Regime

edited by Keith E. Maskus and Jerome H. Reichman
Cambridge: Cambridge University Press, 2005

This is a very useful book. This two-inch encyclopedic volume is indispensable to anyone who is interested in the law and economics of science, innovation, technology diffusion, and intellectual property rights (IPR) protection in the global context. Its coverage is both broad and deep. In 35 articles plus several insightful comments spreading over 922 pages, you can find useful analyses of your interest whether you are an economist, lawyer, or a social scientist.

This volume is a collection of papers presented in the Conference on International Public Goods and Transfer of Technology under a Globalized Intellectual Property

Regime in April 2003. A vast majority of the authors were economists and law professors, but there were also social scientists and professionals and scholars in non-profit organizations.

It is very hard to review a book like this, with such a diversity of themes being addressed by different authors. However, one theme keeps coming up in most papers – that is the question of the tension between intellectual property protection of knowledge and diffusion of knowledge. The 'global public goods' in the title refer to knowledge, and 'transfer of technology' in the title refers to transfer of knowledge, broadly speaking. At the heart of the current global IPR protection movement is the privatization of knowledge and the potential danger of the withering of the global knowledge commons.

The tension is clear: the more knowledge is protected, the slower is diffusion. Diffusion can mean the use of the knowledge by consumers or producers. But diffusion can also mean the use of the knowledge by future researchers who build on the fruits of past researchers, if R&D is cumulative in nature. If R&D is complementary in nature, future researchers can also use fruits of past researchers as basis for their inventions. The million-dollar question is: How much should we protect intellectual property?

The question is very important, but it is really hard to answer. If inventions are substitutable but neither cumulative nor complementary to each other, then it is relatively easy to come up with a theory of optimal IPR protection. The optimal strength of IPR would be to strike a balance between the dynamic gains from an increase in the rate of innovation and static deadweight losses from the granting of temporary monopoly powers to the IPR-holder. This theory of the optimal strength of patent protection was first put forward by Nordhaus (1969). However, even under the simple assumption that inventions are substitutable, and neither cumulative nor complementary, it is hard to identify in practice the optimal patent length and patent breadth, as industries differ in their characteristics such as the nature of R&D and market structure. The important policy question is: Are we over-protecting or under-protecting intellectual property?

Grossman and Lai (2004) applied Nordhaus's theory to a multi-country setting. Based on the simple assumption that inventions are neither substitutes nor complements nor cumulative in nature, they were able to compute a set of globally optimal strengths of IPR protection, which is stronger than the equilibrium set of protection when each country is free to act according to its own national interest. This result justifies having an international agreement to strengthen global IPR. Even in this simple setting, however, it is hard to identify in practice whether the world is over- or under-protecting IPR.

Largely due to lobbying of IP-producing firms, not least the pharmaceutical companies, the developed countries of the world have largely strengthened IPR protection in the last quarter of a century. On the global level, the North (i.e. the developed countries) successfully pushed through the Agreement on Trade-related aspects of Intellectual Property Rights (TRIPS) in 1994, which required less developed countries (LDCs, or the South) to substantially strengthen their IPR standards.

This volume focuses mainly on the global aspect of IPR strengthening. Most papers take a critical view by exposing the dangers of excess IPR protection, especially to developing countries.

Establishing the optimal global system of IPR protection is to strike a right balance between the costs and benefits of protection. The book includes discussions on the major costs of strengthening of IPR in the North and the South:

1. LDCs's access to affordable knowledge is now more limited. It is observed that the TRIPS requires LDCs to strengthen protection without making attendant commitment to ensuring the South's access to knowledge goods (Maskus and Reichman; Okediji; Abott). To help LDCs access essential medicine, Danzon, for example, suggests implementing price discrimination in pharmaceuticals in favor of LDCs, which is presumed to have higher elasticity of demand for medicine.

2. Many authors worry about the negative impact of privatizing knowledge on basic science, which relies heavily on the open-source nature of knowledge. For example, they worry about the privatization of data sets obtained from university research work. As a result, the public knowledge commons may be in danger of shrinking and withering in the face of privatization of knowledge. This would slow down the progress of science, as most of exploratory researches are cumulative in nature (David; Nelson; Maskin; Maskus and Reichman).

3. LDCs are in danger of having their traditional knowledge privatized. Granting IPR to traditional knowledge is a contentious issue. Although there are arguments for and against it, most authors are against it (Cottier and Panizzon; Dutfield; Taubman; Lange; Coombe).

The book also contains evaluations of the potential major benefits of strengthening IPR:

1. Stronger protection of IPR in the South should lead to more local innovation. Branstetter and his co-authors did not find much evidence of it in Japan. However, Reichman and Lewis suggest that LDCs can perhaps use liability rules to stimulate local innovation. These rules are similar in spirit to granting of some 'petty patents' and 'utility models' that compensate inventors of small-scale innovations.

2. TRIPS should induce more technology transfer from the North to South. Correa argues that there is not much evidence of it, whereas Maskus, Saggi, and Puttitanun found that the preponderance of evidence is in support of the view that IPR induces more technology transfer by FDI or licensing for countries with strong capability to absorb technology.

3. TRIPS should induce more innovations from the North. However, Kortum did not find evidence of it.

Therefore, the evidence on the benefits side has not been very definite, while there are clearer dangers on the costs side. In order to balance the costs and benefits sides of TRIPS, i.e. balancing the increased market power of the patent-holders on one side and access to technology by LDCs on the other side, many authors advocate the concomitant strengthening of competition policy to curb the IPR-holders' excessive market power so as to make knowledge goods accessible to users when necessary (Drexl; Janis; Ghosh).

I agree that we may be in real danger of over-protecting IPR in both the North and the South. The impact on LDCs may be particularly crucial, as they are more vulnerable to arm-twisting by the North through trade sanctions. This is not to say that many firms in developing countries are right in infringing legitimate IP rights. They are often wrong in doing so. LDCs should instead establish a TRIPS-compliant IP system in

conjunction with a set of competition laws that suit their own country. This system needs not be the same as that of the developed countries. But adopting it can place them on a path of more sustainable growth.

Setting the right balance in the global protection of IPR is a complex problem. The potential costs of fully implementing TRIPS in the South are very high, as it greatly increases the costs of accessing technology by LDCs. The potential threat to basic science can be substantial too. Therefore, a more gradual approach is recommended. It may be necessary to slow down the momentum of the current wave of IPR strengthening in the North as well as the South. A moratorium on stronger IPR standards, in the words of Maskus and Reichman, may not be a bad idea.

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doi:10.1017/S1474745608003923

WTO at the Margins: Small States and the Multilateral Trading System

edited by Roman Grynberg

Cambridge: Cambridge University Press, 2006

This volume consists of 20 chapters altogether. They are divided into three parts. Part I, *Theory and Evidence*, contains seven chapters, and deals with the plight and special features of small states. Part II, *WTO and Small Economies*, includes only three chapters, and serves as a bridge between the subject matter of Part I and that of Part III. The latter, *WTO Dispute Settlement*, consists of ten chapters and is devoted to institutional aspects of the WTO operations in concrete cases in which small states – to a large extent, but not exclusively – have been involved.

A single book review cannot possibly do justice to a volume of such wide scope and of a so highly diversified set of issues. The present review will therefore be confined to the papers presented in Part I, which merit the attention of an audience whose interest extends beyond the institutional intricacies of the WTO. The papers which will be reviewed are thus:

Ch. 1: 'A Theory of Trade and Development of Small States', by Roman Grynberg.
Ch. 2: 'Small Countries: A Survey of the Literature', by Michael Weatherhead.
Ch. 3: 'When Comparative Advantage Doesn't Matter: Business Costs in Small Economies', by L. Alan Winters and Pedro M. G. Martins.
Ch. 4: 'Can Small States Compete in Manufacturing?', by Ganeshan Wingaraja and David Joiner.
Ch. 5: 'The Economics of Isolation and Distance', by Stephen Redding and Anthony J. Venables.