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To my family

Preface

This book is the product of both scholarly research and a decade of professional involvement in global policy debates on trade, intellectual property (IP), and sustainable development. My goal has been to write a book that captures what those closest to TRIPS implementation know first hand while employing scholarly methods to help make sense of that experience. The outcome is, I hope a book that both appeals to those working in the policy arena and is compelling to scholars of international relations, political economy and international law.

My interest in IP debates began as a Warren Weaver Fellow at the Rockefeller Foundation in New York. At that time, Susan Sechler gave me the opportunity to work with Anthony So, Peter Matlon, and Joan Shigekawa to build a grant-making portfolio to promote a fairer course for international intellectual property policy. A central part of that initiative was the Bellagio Series on Intellectual Property and Sustainable and Development, which we launched in 2002. In the subsequent years, the Bellagio Series brought together policymakers, experts, diplomats, activists, and industry representatives with a variety of different perspectives on global IP policy. I had the great privilege of attending many of those meetings and this book draws extensively on conversations with fellow participants. I left the Rockefeller Foundation convinced of the need to bring greater transparency and accountability to global IP debates. After discussion with colleagues and friends, I founded *Intellectual Property Watch*, which is now the leading reporting service on international IP policy debates. My research subsequently benefited greatly from its coverage of IP news and from conversations with its Editor-in-Chief, William New.

This book also reflects personal experience of several hundred conferences, policy dialogues, strategy meetings, and informal gatherings on IP policy in developed and developing countries. During the course of this research, I also attended several WTO ministerials and regularly observed WIPO meetings on the WIPO Development Agenda and other issues. My analysis incorporates personal observations of the political dynamics of these processes and the players in them.

My research also benefited greatly from discussions with colleagues at the International Centre for Trade and Sustainable Development (ICTSD) in Geneva where I serve as a Resident Scholar. My role as Chair of the Board of

3D → Trade–Human Rights–Equitable Economy, and participation in an international commisson (sponsored by the UK Royal Society of Arts) that drafted the Adelphi Charter on Creativity, Innovation and Intellectual Property each yielded useful opportunities to share ideas with experts at the cutting edge of debates on intellectual property.

Among the many colleagues and friends whose ideas contributed to this book, I am particularly grateful to Ahmed Abdel Latif, Alejandro Argumedo, Leonardo de Athayde, Johannes Bernabe, Thiru Balasubramaniam, James Boyle, Carlos Correa, Maria Carmen Dominguez, Vera Franz, Brewster Grace, Chien Yen Goh, Rashid Kaukab, Soledad Leal, Faizel Ismail, Bernice Lee, Jamie Love, Ricardo Meléndez-Ortiz, Catherine Monagle, Sisule Musungu, Maria Julia Oliva, Davinia Ovett, Manon Ress, Pedro Roffe, Preeti Saran, Anthony So, Christophe Spennemann, Matthew Stilwell, Geoff Tansey, David Vivas, and Martin Watson. The analysis presented in this book also draws on over 150 interviews with individuals actively involved in global IP policy debates and TRIPS implementation. Appendix 1 lists all interviewees except those who requested anonymity. In the text, I only cite those who gave advance permission.

This book builds upon work completed for my doctorate in 2006. The development of my argument owed a great deal to discussions with my two doctoral supervisors at the University of Oxford, Andrew Hurrell and Kalypso Nicolaïdis, who provided wonderful advice, feedback, and support throughout the three years. Together, their knowledge of international relations scholarship served as a constant reminder that to study at Oxford is a great privilege. I also thank the Ford Foundation, Oxford University Press and the Universities UK Overseas Students Award Scheme for their financial support and University College for granting me a Chellgren Scholarship.

At Oxford, I have the very good fortune to work with colleagues at the Global Economic Governance Programme (GEG) and with its Director, Ngaire Woods. In 2007, while working to complete this book, I launched the Global Trade Governance Project at GEG, and was spurred on by the collegiality of Mayur Patel and Arunabha Ghosh. In the course of my research, I also benefited greatly from thought-provoking exchanges with Frederick Abbott, Diana Barrowclough, James Boyle, Rashad Cassim, Carlos Correa, Jeremy de Beer, Peter Drahos, Graham Dutfield, Peter Evans, Suzy Frankel, Richard Gold, Robert Howse, Christopher May, Neil Netanel, Ruth Okediji, John Odell, Louis Pauly, Susan Sell, Kenneth Shadlen, Richard Steinberg, Robert Wade, Robert Wolfe, and Peter Yu, among others.

For reading various drafts of this book, I extend great thanks to Isalene Bergamaschi, Alec Birkbeck, James Boyle, Caroline Dommen, Donna Green, Zoe Goodman, Maria Ivanova, Kaitlin Mara, William New, John Odell, Ricardo Meléndez-Ortiz, Catherine Monagle, Mayur Patel, Matthew Stilwell, Susan Sell, Ruth Okediji, Pedro Roffe, Gina Vea, David Vivas, Ngaire Woods, and

Caitlin Zaino. I am especially grateful to Ahmed Abdel Latif who read and commented on the full manuscript. I also benefited tremendously from comments provided by the examiners of my thesis and from an anonymous reviewer for Oxford University Press. Nicholas Duston, Alicia Santos-Martin, Pravir Palayathan, Priyanka Debnath, Tomas Felcman, Joshua Miller, Narae Lee, Allison Tovey, and Eliot Pence all provided valuable research assistance. Andrew Lowe served as valuable long-distance proofreader. At Oxford University Press, I also extend my thanks to Dominic Byatt, Lizzy Suffling, Louise Sprake, and Aimée Wright for guiding this manuscript to completion. The responsibility for any errors is of course mine.

Looking back, I thank Rolf Willmann for encouraging me to pursue a doctorate, Ram Manikkalingam for interpreting my first musings back in New York, and Sakiko Fukuda-Parr for spurring me to apply. Nancy Birdsall, Gordon Conway, and Daniel Esty each kindly supported my application to Oxford.

The completion of this book would long since have faltered without the encouragement of wonderful friends. In Oxford, I have been grateful for the friendship of Arunabha Ghosh, Leondardo Martinez, Mayur Patel, Kate Raworth, Kevin Watkins, and especially Ngaire Woods. From across the vast oceans, I am lucky to have unfailing support from Donna Green, Catherine Monagle, Maria Ivanova, Joanna Roche, and Allison Tovey. Closer to home, I am deeply grateful to my friends in Geneva, especially Diana Barrowclough, Caroline Dommen, Erica Harper, Leslie Jones, Richardo Meléndez-Ortiz, Matthew Stilwell, and Gina Vea. I owe a special debt to Ahmed, who promised to show me the North African desert sky when my doctorate was completed, and to Gina for sharing with me the place where the angels play.

Throughout the process of writing my doctorate and then completing this book, my parents were amazing. My father was my long-distance technical support team. My mother showed extraordinary patience and attention to detail in helping with my bibliography (in the process becoming one of the world's few experts on Endnotes!). I cannot thank them enough.

Finally, I thank my amazing partner, Anthony Alexander, for his encouragement, patience, and love as the hours I spent finishing this book turned into months. This book is dedicated to Alec and to my parents.

February 2008

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List of Abbreviations

ACP	African, Caribbean and Pacific Group of countries
ACT UP	AIDS Coalition to Unleash Power
ACWL	Advisory Centre on WTO Law
AGCC	Arab Gulf Cooperation Council
AGI	Association of Ghana Industries
AGILE	Accelerating Growth, Investment, and Liberalization with Equity
AGOA	Africa Growth and Opportunity Act
AIDS	Acquired Immune Deficiency Syndrome
AIPPI	Association internationale pour la protection de la propriété industrielle
ANCOM	Andean Community of Nations
ANPII	l'Association Nigérienne pour la promotion de l'invention et de l'innovation
APPIA	l'Association pour la promotion de la propriété intellectuelle en Afrique
ARCT	African Regional Centre for Technology
ARIPO	African Regional Intellectual Property Organization
ASEAN	Association of South East Asian Nations
AU	African Union
BIO	Biotech Industries Organization
BIP	Bilateral Intellectual Property Agreement
BIRPI	United International Bureaux for Intellectual Property Protection
BIT	Bilateral Investment Treaty
BSA	Business Software Alliance
CAFTA	Central American Free Trade Agreement
CBD	Convention on Biological Diversity
CCTT	Code of Conduct on the Transfer of Technology
CEEAC	Economic Community of Central African States
CEMAC	Central African Economic and Monetary Community
CFA	Communauté Financière Africaine
CIEL	Center for International Environmental Law

CIPIH	Commission on Intellectual Property Rights, Innovation and Public Health
CIPR	UK Commission on Intellectual Property Rights
CISAC	International Confederation of Societies of Authors and Composers
CLEA	Collection of Laws for Electronic Access
COM/AOC	Conference of Ministers of Agriculture of West and Central Africa
COMESSA	Community of Sahel-Saharan States
CPTech	Consumer Project on Technology (now known as Knowledge Ecology International (KEI))
DAI	Development Alternatives, Inc
DFID	Department for International Development (UK)
DHHS	Department of Health and Human Services
DMCA	Digital Millennium Copyright Act
DSU	Dispute Settlement Understanding
ECAP	European-ASEAN Intellectual Property Rights Cooperation Programme
ECOSOC	United Nations Economic and Social Council
ECOWAS	Economic Community of West African States
EFF	Electronic Frontiers Foundation
EFPIA	European Federation of Pharmaceutical Industries and Associations
EFTA	European Free Trade Area
ENP	European Neighbourhood Policy
EPA	Economic Partnership Agreements
EPO	European Patent Office
ETC	Action Group on Erosion, Technology and Concentration
FAO	UN Food and Agriculture Organization
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
FTAA	Free Trade Area of the Americas
G7	Group of Seven Industrialised Nations
G77	Group of 77
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GMO	Genetically Modified Organism
GRAIN	Genetic Resources Action International
GSK	GlaxoSmithKline

GSP	Generalized System of Preferences
GTZ	Gesellschaft für Technische Zusammenarbeit
HAI	Health Action International
HIV	Human immunodeficiency virus
IAC	Industry Advisory Commission
ICAM	l'Initiative Camerounaise pour l'accès aux médicaments
ICC	International Chamber of Commerce
ICSIR	India's Council for Scientific and Industrial Research
ICTSD	International Centre for Trade and Sustainable Development
IDA	International Development Association
IDRC	International Development Research Centre
IFAC	Industry Functional Advisory Committee
IFPMA	International Federation of Pharmaceutical Manufacturers Associations
IFPI	International Federation of the Phonographic Industry
IGIP	Inter-ministerial Group on IP
IIPI	International Intellectual Property Institute
IISD	International Institute for Sustainable Development
IMF	International Monetary Fund
INDECOPI	Peruvian Intellectual Property Office
INAO	Institut national des appellations d'origine
INPI	French Intellectual Property Office
IO	International Organization
IP	Intellectual Property
IPC	Intellectual Property Committee
IPGRI	International Plant Genetic Resources Institute
IPO	Intellectual Property Office
IPP	Intellectual Property Protection
IPR	Intellectual Property Rights
ITPGRFA	International Treaty on Plant Genetic Resources
ITU	International Telecommunications Unions
JICA	Japanese International Cooperation Agency
JIPO	Jamaican Intellectual Property Office
KEI	Knowledge Ecology International (formerly CPTech)
KIPO	Korean Intellectual Property Office
KMA	Kenya Medical Association
LAC	Latin America and the Caribbean
LDC	Least-Developed Country

MAI	Multilateral Agreement on Investment
MERCOSUR	Mercado Común del Sur
MFN	Most-Favoured Nation
MNC	Multinational Corporation
MOU	Memorandum of Understanding
MSF	Médecins Sans Frontières
NAFTA	North American Free Trade Agreement
NEPAD	New Partnership for Africa's Development
NEPHAK	Network for people living with HIV/AIDS in Kenya
NGO	Non-governmental Organization
NIEO	New International Economic Order
NMA	National Medical Association
OAMPI	Office Africain et Malgache de la propriété industrielle
OAPI	Organisation Africaine de la propriété intellectuelle
OAS	Organization of American States
OCAM	Organization commun Africain et Malgache
OAU	Organization of African Unity
OECD	Organization for Economic Cooperation and Development
OHADA	Organization for the Harmonization of Business Law in Africa
PACHA	Presidential Advisory Council on HIV/AIDS
PCIPD	Permanent Committee on IP and Development
PCT	Patent Cooperation Treaty
PhRMA	Pharmaceutical Researchers and Manufacturers of America
PIC	prior informed consent
PMA	Pharmaceutical Manufacturers Association
PSRP	Poverty Reduction Strategy Papers
PVP	Plant Variety Protection
QUNO	Quaker United Nations Office
RAFI	International Rural Advancement Foundation (now Action Group on Erosion, Technology, and Concentration (ETC))
RAME	Réseau Accès aux Médicaments Essentiels
SACU	Southern African Customs Union
SAG	Government of South Africa
SNL	Structure Nationale de Liaison (National Liaison Structure)
SWAK	Society for Women and AIDS in Kenya
TAC	The Treatment Action Campaign
TAPWAK	The Association of People living with AIDS in Kenya

TK	Traditional Knowledge
TIFA	Trade and Investment Framework Agreement
TNC	Transnational Corporation
TPA	Trade Promotion Agreement
TPM	technological protection measures
TPR	Trade Policy Review
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
TWN	Third World Network
UAM	Union Africaine et Malgache
UCC	Universal Copyright Convention
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICE	Union of Industrial and Employers' Federations of Europe
UNIDO	United Nations Industrial Development Organization
UPOV	International Union for the Protection of New Varieties of Plants
USAID	U.S. Agency for International Development (now USTDA)
USITC	U.S. International Trade Commission
USPTO	U.S. Patent and Trademark Office
USTDA	U.S. Trade and Development Agency
USTR	U.S. Trade Representative
WAEMU	West African Economic and Monetary Union
WCO	World Customs Organization
WCT	WIPO Copyright Treaty
WEF	World Economic Forum
WGTT	Working Group on Technology Transfer
WHA	World Health Assembly
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WOFAK	Women Fighting AIDS in Kenya
WPPT	WIPO Performances and Phonograms Treaty
WTO	World Trade Organization

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1

The TRIPS Implementation Game: A Fight for Ideas

The World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) is the centrepiece of the global system of rules, institutions, and practices governing the ownership and flow of knowledge, technology, and other intellectual assets. TRIPS emerged from the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) negotiations (1986–94), and was a victory for multinational companies determined to raise international intellectual property (IP) standards and boost IP protection in developing countries. During the TRIPS negotiations, industry lobbyists persuaded the world's economic powers to wage a protracted campaign against developing countries opposited to the deal. Developing countries protested that the Agreement would consolidate corporate monopolies over the ownership of ideas, exacerbate the north-south technology gap, and perversely speed the transfer of capital from developing to developed countries.[1] They argued that stronger IP standards would harm their development prospects[2] and that they were ill-equipped to harness any purported benefits.[3]

The conclusion of TRIPS represents a revolution in the history of IP protection. By establishing a universal, comprehensive, and legally binding set of substantive, minimum IP standards, TRIPS both strengthens and supplements the earlier patchwork, of international IP agreements.[4] To meet these standards, TRIPS calls on all of the WTO's 152 members[5] to take action within their borders.[6] This requirement is particularly onerous for developing countries as TRIPS demands far higher standards of IP protection than most would otherwise provide.

For developing countries, a second battle began after the TRIPS negotiations ended. As developing countries struggled to complete extensive reforms of IP laws, administration and enforcement, they faced mounting pressures from developed countries, multinational corporations, and some international organizations, to adopt even higher IP standards than TRIPS requires and to abstain from using the flexibilities available in TRIPS.

Amidst growing debates on globalization and inequality, TRIPS became a symbol of the vulnerability of developing countries to coercive pressures from the most powerful developed countries and galvanized critics regarding the influence of multinational corporations on global economic rules. While IP advocates insisted that stronger IP protection could serve as a 'power tool for development',[7] a host of prominent international economists, such as Jagdish Bhagwati and Joseph Stiglitz, questioned the place of TRIPS in the WTO system (and continue to do so).[8] TRIPS triggered an intense global debate on the relationship between IP regulation and development. In 2008, the chief economics commentator for the *Financial Times* described constraints upon developing countries in the area of IP as 'unconscionable'.[9] Cambridge economist Ha-Joon Chang, among others, emphasized the costs to developing countries of introducing 'irrelevant or unsuitable laws' that restrict access to technologies and knowledge.[10] Developing countries argued that TRIPS ignored the diversity of national needs and forced them to sacrifice the 'policy space'[11] that richer countries had harnessed in early stages of their growth.

Given the vocal concern expressed by developing countries during the TRIPS negotiations and after it came into force, one would reasonably expect them to have taken full advantage of the possibilities the Agreement provides to tailor implementation in response to national economic and social priorities. Careful examination of the empirical evidence from 1995 to 2007, however, reveals a more complex picture of how developing countries responded to this room for manoeuvre. There was striking diversity in the approach developing countries took to the implementation of TRIPS rights and obligations. Most notably, developing countries took varying advantage of the legal safeguards, options, and ambiguities in TRIPS, now commonly referred to as the TRIPS 'flexibilities'.[12] Further, a surprising number of developing country WTO members implemented even higher IP standards than those required by TRIPS. By contrast, some developing countries took advantage of a range of TRIPS flexibilities, but their approaches varied according to the type of IP (e.g. copyright or industrial property). Further, many developing countries missed their deadlines for bringing their laws into conformity with TRIPS, thus effectively claiming more flexibility than provided for in the Agreement. Across the developing world, governments struggled to upgrade institutional capacity and resources to effectively administer and enforce their IP laws.

Why did developing countries 'draw the line' differently when implementing TRIPS? Why did so many developing countries, but *curiously* not all, implement reforms that went beyond minimum TRIPS requirements? What explains the apparent contradiction between what most developing countries *said* about TRIPS and what many *did* in respect of its implementation?

This book advances the first scholarly effort to explain the variation in TRIPS implementation across the full spectrum of the WTO's developing country members, almost a third of which are least developed countries

(LDCs).[13] In so doing, I build on a fragmented but growing literature on the politics of global IP regulation and national IP reforms as well as the work of scholars of international political economy and compliance with international law. To date, the literature on TRIPS implementation has mostly provided legal description and analysis. Where political analyses exist, they usually focus on explaining TRIPS-'plus' reforms in selected developing countries. This book shares an interest in why IP laws in so many developing countries exceed TRIPS requirements, but its purpose is broader: that is, to explain why we see such *variation* across the WTO's developing country membership in how governments approached TRIPS implementation from 1995 until the end of 2007.

The reasons for variation in TRIPS implementation defy any one parsimonions explanation. In this book, I provide an account that is richer, more comprehensive, and more subtle than popular narratives about the reasons for TRIPS-plus outcomes. The first challenge is to unpack the range of actors and dynamics involved, and examine how their interplay contributed to variation in TRIPS implementation. The second is to balance a search for general conclusions with a recognition of the complexity of global IP politics, the broad scope of TRIPS, and the diversity of the group of countries under examination.

This book advances the metaphor of TRIPS implementation as a complex political game. Developed and developing country governments were the key players, flanked by teams comprising a range of stakeholders, including multinational corporations, non-governmental organizations (NGOs), international organizations (IOs), industry lobby groups, and academics. Within governments, a range of agencies were active. Trade officials and the staff of national IP offices played particularly critical roles. Each of the players devised strategic moves, appealed to both spectators and referees to influence ideas about 'fair play', advanced different interpretations of the rules, and tried to get away with whatever they could. This in turn demanded a mix of psychology, rhetoric, strategy, technical skill, power, and endurance.

The TRIPS implementation game was intensely played because the economic and social stakes were high and the playing field was deeply unequal. The final TRIPS deal left both proponents and detractors dissatisfied, provoking post-agreement efforts from both sides to revise the contested text, sway its interpretation, and influence how it was implemented. The impacts of strengthened IP protection were hotly debated. Further, across the period under study, IP interests evolved and diversified in both developed and developing countries. A dynamic interaction ensued between debates regarding possible revisions to TRIPS and the implementation of the Agreement at the national level.

At the centre of these debates were different interpretations of what constitutes legal, TRIPS-consistent behaviour. Like most of the negotiated outcomes embodied in international laws, TRIPS contains many ambiguities and a

variety of inbuilt options. Further, the negotiating history of many TRIPS provisions is disputed. Laws and actions which some developing countries deem consistent with TRIPS obligations, developed countries consider TRIPS-'minus'. Conversely, developing countries view some developed country interpretations of what constitutes TRIPS-'minimum' behaviour as TRIPS-plus. As developing countries took steps to implement TRIPS, their questions were many: What would constitute adequate implementation? How much 'wiggle room' could they legally exploit?

In this political context, explaining variation in TRIPS implementation demands attention to: (*a*) the interplay between evolving global debates on IP and national reforms to implement TRIPS; and (*b*) the interaction between international pressures on developing countries and the political dynamics within them. In the chapters that follow, I specify the key actors and trends in global IP debates, highlight where the interplay between negotiation and implementation was most intense, and identify which factors governed the interaction between international and national political dynamics to generate different kinds of variation in implementation. The evidence shows that explanations differ according to the particular aspects of TRIPS under study and whether the focus is on the use of particular flexibilities; the strength of standards overall; or the timing of implementation, administration, or enforcement. Several broad findings also emerge which I briefly foreshadow here.

First, accounting for variation demands a nuanced consideration of the international pressures on developing countries, one that delineates different forms and sources of power. Pressures for stronger IP protection were a ubiquitous part of the global political landscape for TRIPS implementation. Economic pressures exerted by developed countries and industries had a decisive impact on TRIPS implementation in some countries, but was not exercised equally across them. Further, across the developing world, countries faced more subtle forms of power. IP advocates made strategic use of ideas and knowledge to shape perceptions and understandings of what kind of IP reforms were appropriate, possible, and would garner economic and political rewards. Their opponents also harnessed the power of ideas, mounting a countervailing campaign to persuade countries to use TRIPS flexibilities. Capacity building was a key vehicle through which this ideational power struggle played out and had a decisive impact on the decisions many countries took.

Second, economic circumstances and political dynamics at the national level made a significant contribution to variation in TRIPS implementation. The developing countries that took most advantage of TRIPS flexibilities were those that drew on a broad range of ministries, stakeholders, and expertise, and that devised a policy framework through which they approached TRIPS implementation. The countries that had participated most in TRIPS negotiations had the greatest technical expertise on the Agreement and made

the most targeted efforts to use its flexibilities. In short, the politics within developing countries made a difference to TRIPS implementation: there was some room for agency and manoeuvre. Alongside the many instances where TRIPS-plus pressures prevailed largely unchallenged, there were important cases of resistance, some of which succeeded. Importantly, as economic and social circumstances changed and the configuration of domestic interest groups evolved, some countries perceived stronger IP protection to serve their interests in particular sectors.

This chapter presents an overview of the book. It begins with an introduction to historical debates on IP, the emergence of a developing country voice on international IP regulation, and the rocky, political road to TRIPS. It then introduces the Agreement and several core elements of variation in developing country approaches to its implementation, emphasizing variation in timing and in the use of TRIPS flexibilities. After a brief review of relevant literature, I set out my analytical framework for explaining variation in TRIPS implementation, and preview this book's contribution to the international relations literature and global IP policy debates. To conclude, I provide a note on methods, sources, and several boundaries that delimit the scope of this book.

1.1. An Introduction to the Politics of IP and TRIPS

1.1.1. *A History of Contestation*

Debates between developed and developing countries over TRIPS reflect tensions that inhere in the provision of IP rights and which have accompanied IP regulation since its inception. Laws on IP are one of the central means through which governments manage the ownership, availability, and use of ideas and technologies, and the distribution of the profits they generate. IP laws have a bearing on a range of critical and sometimes competing areas of public policy, from industrial and health policy to cultural, agricultural, and education policy. They can impact international competitiveness; the pace and focus of innovation; and affordable access to new technologies, knowledge, and creative works.

The origins of formal IP protection date back to fifteenth-century Venice when the first patents were issued and to the late seventeenth century when England laid the foundations for the first copyright laws.[14] Since then, the range of IP rights has expanded. Patents protect the underlying ideas used for industrial products or processes. Copyrights protect forms of expression, such as written materials and artistic works, whereas trademarks protect names and symbols associated with particular products and services. Through these and other IP rights (including geographical indications, plant breeders' rights, and utility models), governments grant inventors or creators private

rights to use, transfer, or profit from their work for a specified period of time. These rights enable IP holders to legally control (with certain conditions) the circumstances under which others can use their 'products of the mind'.[15] Once the term of protection ends, patented inventions and copyrighted works fall into the public domain where they may be freely used without permission or payment. (Trade secrets work differently: they enable owners to preclude any outside access to particular ideas indefinitely.)

In the case of patents, government intervention to grant private rights is conditional on the public disclosure of information about the invention through the publication of a patent document. Governments generally further balance private rights by including safeguards and exceptions in their IP laws that enable them, under selected circumstances, to promote public policy goals such as building local industry or boosting the availability and affordability of new inventions, ideas, technologies, and knowledge. To achieve these ends, many countries include provisions in their IP laws that, for example, limit the scope of patentability, enable compulsory licensing, require local use or 'working' of patents, or allow for 'fair use' of copyrighted materials. To guard against the abuse of the monopoly privileges that arise from private IP rights, governments may also complement IP laws with antitrust or competition laws.[16] In addition, in some countries, laws to promote the availability of medicines, protect genetic resources, or stimulate local industrial capacity operate in conjunction with IP laws.

In designing IP policies and laws, governments face several core recurring questions: what kinds of intangible assets warrant IP protection? To what degree should private rights be afforded to them? What is the right balance between private rights and public benefits? To what extent should a government extend private rights to foreigners? A core challenge for governments is how best to achieve the appropriate balance between, on the one hand, providing incentives for innovation and creativity and, on the other hand, ensuring the availability of the inputs necessary for further innovation and affordable public access to the products that emerge. To discern the right balance, governments must adjudicate a range of arguments for or against stronger IP protection from stakeholders working to advance particular private interests or public goals.

In a historical review of the recurring themes of patent debates, two leading legal scholars compile convincing evidence that 'there is little, if anything, that has been said for or against the patent system in the 20th century that was not said equally well in the 19th'.[17] Within developed countries, disputes between investors, the producers and inventors of IP, and consumers (and also among different groups within them) have prompted significant shifts in IP laws over time. The United States and Europe have, for example, experienced several cycles of IP reform, adjusting the terms of IP protection to their stage of economic development and to the changing preferences and

political influence of interest groups.[18] In the early nineteenth century, an anti-patent movement emerged in England, demanding not just reform but abolition of the patent system. There were also patent controversies in Europe from the 1850s to 1875. In the late nineteenth century, the UK House of Lords passed a bill calling for 'a reduction of patent protection to seven years, strictest examination of patent applications, forfeit of patents not worked after two years, and compulsory licensing of all patents'.[19] Further, in 1919 the UK reformed its patent law to exclude the patentability of chemical compounds in the face of a growing challenge from the German chemical industry.[20] In the United States, there have also been several rounds of debate in Congress about the appropriate level of IP protection, followed by changes in national IP laws.

Today, as at the time of the first efforts to make 'property out of knowledge', IP law-making is a political process 'in which particular conceptions of rights and duties are institutionalized; each settlement prompts new disputes, policy shifts, and new disputes again'.[21] To help build domestic industries, some businesses lobby for weak patent rights that enable them to copy and adapt foreign technologies. Knowledge-intensive industries, on the other hand, usually lobby for stronger patent protections to protect their investments in research and development. Consumers and public health advocates frequently appeal for weaker patent rights to make products like medicines cheaper. Creators, artists, and authors in cultural industries sometimes call for stronger copyright protections as do those companies that invest in them. Yet, to promote the availability of educational materials, librarians and educators frequently promote fair use exceptions to copyrights. In the absence of evidence-based assessments, the process of IP reform is often a war of ideas among competing interest groups pitting 'conviction against conviction, argument against argument, assumption against assumption'.[22]

1.1.2. *The Contested TRIPS Process and Outcome*

Since the late 1800s, developed countries worked to develop, strengthen, and harmonize international IP laws and to internationalize IP protection.[23] From bilateral arrangements, the first multilateral IP agreements emerged. To administer these treaties, governments created an international secretariat which ultimately became the World Intellectual Property Organization (WIPO). Over time, a global IP system emerged, comprising a dynamic set of national, regional, and multilateral legal instruments. By the mid-1980s, there were some eighteen international IP treaties (covering topics from patents, trademarks, and geographic indicators to industrial designs), most of which were administered by WIPO. (Appendix 2 provides a timeline of the core international IP agreements.) Both the significance of these treaties and the number of signatories varied. In practice, weak enforcement mechanisms

meant that governments could still exercise considerable discretion over the level and form of IP protection available within their borders.

Developing countries were largely uninvolved in the development of the core international IP treaties, several of which were negotiated in the colonial era. Only in the post-colonial era did distinct developing country concerns about international IP regulation emerge, culminating in their fight for a New International Economic Order (NIEO) and a North-South stand-off on reform of the international IP system in the 1970s and 1980s.[24] (See Chapter 2.)

In the 1980s, developed countries responded with an intensified push for stronger international IP protection. As U.S. pharmaceutical, agrochemical, electronic, software, and entertainment industries faced increasing threats from foreign competitors, the United States recruited Japan and the European Union to support their campaign extend the length and breadth of IP rights at the international level. In order to gain 'maximum returns' from increasing trade in IP-related goods and services,[25] they worked to add IP to the agenda of the Uruguay Round of GATT negotiations. Developing countries opposed this effort. They viewed the prospect of strengthened and binding international IP rules in the world trading system as an aggressive intrusion into the preserve of domestic regulation that would reinforce existing inequalities.[26]

At the time the TRIPS negotiations were launched, most developing and many developed country WTO members provided lower standards of protection than those required by the final Agreement. The length and scope of patent protection for instance, varied widely across developing countries (see Appendix 3).[27] Some developing countries did not have any modern IP laws at all.[28] While many Latin American countries had worked to tailor IP laws to national development priorities, IP standards in several African countries had not changed since the colonial era. Further, some developing countries had TRIPS-consistent or TRIPS-plus standards in some areas even before the negotiations concluded. Further, the approach to IP institutions, administration, and enforcement differed considerably among countries. Most developing countries nonetheless shared at least one common characteristic: the degree of actual IP protection that foreign and domestic IP rights' holders received was weak, even by governments' own assessments.[29]

As the Uruguay Round advanced, a core group of developing countries worked to stall negotiations, narrow the scope of the IP agenda, and secure provisions that would help them defend their policy space. Hamstrung by limited negotiating capacity and inadequate knowledge of the technical issues under negotiation, no more than twenty developing countries had the resources and expertise to follow the IP negotiations and their implications closely.[30] The most vocal developing countries, such as Brazil and India, faced increasing unilateral political and trade pressures to accept rules for stronger IP protection.[31] The TRIPS deal was sealed when progress on improved market

access for textiles and agriculture was linked to acquiescence on IP as part of a 'single undertaking' of agreements.[32] The result was a deeply contested agreement.[33]

1.1.3. *A High-Stakes Battle*

The intensity of the TRIPS debate was fuelled by the major social and economic interests at stake. Industries with a direct stake in TRIPS were among the world's largest and most profitable: the US$650 billion per year global pharmaceutical industry (estimated to increase to $US900 billion in the next four years), the commercial seed industry (worth an estimated US$21 billion per year), and the global software and entertainment industries (worth an estimated US$800 billion per year).[34] In many of these industries, a handful of companies monopolized markets and their business model depended on securing IP protection.[35] The IP playing field was uneven. Throughout the TRIPS negotiations, developed country corporations, research centres, and individuals together held over eighty per cent of the world's IP rights.[36]

Throughout the TRIPS negotiations, development economists and legal experts debated evidence regarding the relationship between IP and development.[37] IP proponents argued that stronger IP protection would encourage foreign direct investment (FDI), innovation, and technology transfer, and spur the development of national cultural and creative industries. In the face of growing trade in counterfeit medicines and other products, proponents presented stronger IP protection as a way to help protect public health and safety.

Critics warned that while stronger IP protection *might* foster such outcomes in some cases, this would require the right conditions, carefully tailored policies and laws, and a range of complementary measures.[38] Moreover, they emphasized that these same IP rules could also slow industrial development by constraining opportunities to copy and adapt technologies.[39] As net importers of IP, many developing countries sought to employ the same strategies of copying and reverse engineering that had served developed countries at similar stages of development, and thus wanted to limit the recognition of IP rights for foreigners.[40] Flexibility regarding the scope and terms of IP rights granted within their borders was considered central to national efforts to promote national industrial capacity, generate employment, and ensure affordable access to essential technologies and knowledge.

In addition, strengthened international IP rules were predicted to increase the price of seeds, medicines, and educational materials, which developing countries often import and impede domestic competition for such goods. Some critics also emphasized that IP rules that circumscribe the ability of farmers to save and share seeds could pose threats to global food security and the livelihoods of the world's billion-plus small-scale farmers.[41] For the

poorest and smallest countries, the evidence suggested that the potential economic returns of higher IP protection were a very distant prospect.[42]

To administer and enforce IP reforms undertaken to implement TRIPS, developing countries faced the cost of financing and enhancing relevant government agencies, and the opportunity cost of employing scarce human capital to administer IP rules in the face of more pressing social challenges.[43] To implement TRIPS, most developing countries needed to develop or import the relevant legal expertise and depended on external assistance to surmount the considerable financial, technical, and institutional challenges.[44] In 2002, the World Bank estimated that TRIPS implementation would generate annual net losses for Brazil of US$530 million, for China of US$5.1 billion, for India of US$903 million, and for the Republic of Korea of US$15.3 billion.[45] Questions arose about the fairness of requiring developing countries to devote scarce public resources to help private foreign multinational corporations collect licensing fees and royalties.[46] In countries where copying and imitation of foreign technologies and knowledge were widespread, there were complaints that stronger enforcement of IP rights would pose threats to the employment of millions of workers and raise the prices of products for poor consumers.

The overarching disparity between developed and developing countries in the generation and ownership of technology continued to fuel global IP debates even as TRIPS implementation advanced.[47] In 2005, despite the growth of R&D capacity in several developing countries, ten developed countries still accounted for over eighty per cent of global resources spent annually on R&D, controlled over ninety per cent of the technological output, and received over ninety per cent of global cross-border royalties and technology licence fees. The same year, developing countries paid net US$17 billion in royalty and licensing fees, mostly to IP rights holders in developed countries.[48] Also, in 2005, the United States alone earned US$33 billion from developed and developing countries through the global IP system, more than its total development assistance budget of US$27 billion for that year.[49]

1.1.4. *What Does TRIPS Require WTO Members To Do?*

While the pre-TRIPS global IP system provided 'a menu of treaties' from which countries could 'pick and choose and in some cases make reservations to',[50] TRIPS obliges all WTO members to implement minimum standards of protection within specified deadlines for virtually all categories of IP, namely copyright, trademarks, geographical indications, plant breeders' rights, industrial designs and patents, as well as layout designs of integrated circuits, undisclosed information, and trade secrets. TRIPS puts new and unparalleled emphasis on making privately held IP rights enforceable, demanding stronger provisions in national IP laws to promote enforcement of IP rights

at the border and within the domestic market. In addition, TRIPS incorporates provisions of many earlier WIPO and bilateral agreements, extending them to a broader group of countries and linking them for the first time to an effective enforcement mechanism (the WTO's Dispute Settlement Understanding).[51]

For the most part, developed countries already had TRIPS standards and IP institutions in place and needed to make only minor revisions to domestic IP laws and administration to implement TRIPS. For developing countries, on the other hand, implementation of TRIPS requires them to raise their IP standards (increasing the terms and scope of protection). For most countries, this involves a complex set of reforms to update or redraft existing laws, adopt new laws, judicially reinterpret existing laws, and/or promulgate new administrative regulations and guidelines. To give their IP laws effect, many countries need to strengthen and sometimes reorganize IP administration, and also to considerably increase the financial resources allocated to IP issues.

To conclude the TRIPS deal, the TRIPS proponents made some concessions to developing countries on some of the most controversial issues.[52] (and also to developed countries like Canada, which is also a net IP importer).[53] One such concession was that the opening paragraphs of TRIPS emphasize the right of WTO members to implement TRIPS in accordance with their own legal system and practice. The same section also affirms the rights of countries to adopt measures necessary to protect public health and nutrition and to promote the public interest in sectors of vital importance to socio-economic and technological development. TRIPS also includes a set of safeguards, options, and ambiguous provisions that together afford WTO members some room to interpret their obligations and tailor TRIPS implementation to address national priorities.[54] The existence of several of these flexibilities was later confirmed by the 2001 Doha Declaration on TRIPS and Public Health. (For more on TRIPS rights and obligations, see Chapter 3.) The Agreement allows WTO members to choose, for instance, their preferred system regarding exhaustion of rights and parallel importation, and to make certain exceptions to patent rights, including with respect to compulsory licences, pharmaceutical products, public and non-commercial use, and early working. TRIPS further permits countries to exempt plants, animals, and new uses of known products from patentability and leaves countries considerable room for discretion regarding their approach to the protection of undisclosed information. In the area of plant variety protection, countries can adopt either patent protection or a *sui generis* system, or a combination of both. And in the area of copyright, TRIPS includes opportunities for countries to use a range of limitations and exceptions. Intense debate on some provisions prompted negotiators to incorporate the prospect of future changes to TRIPS by mandating the membership to conduct several reviews and further negotiations through the TRIPS Council. TRIPS also permits

countries to determine within their own legal traditions how best to provide for effective enforcement of IP standards.

While many WTO agreements grant developing countries specific and substantive 'special and differential treatment' in recognition of the costs and challenges implementation poses, TRIPS includes only three concessions targeted to their exclusive benefit: transition periods for implementation; a legal obligation on developed countries to enhance technology transfer to LDCs; and a commitment on the part of developed countries to provide technical assistance and capacity-building.[55] The transition periods were significant because they postponed the date at which developing countries could become the subjects of WTO disputes for failure to implement the Agreement. Importantly, the transition periods were not a specific negotiating demand on the part of developing countries, many of which viewed the extended deadlines as arbitrary and insufficient concessions in the face of the Agreement's deeply unbalanced rules.

In contrast to the international IP agreements that preceded it, TRIPS prevents countries from 'going backward' by reducing their level of IP protection. Further, the links between TRIPS and the suite of other WTO agreements concluded as part of the Uruguay Round make it more difficult than ever before for developing countries to shy from their international IP commitments.

1.2. Variation in TRIPS Implementation

Despite their dissatisfaction with TRIPS, the Agreement spurred IP reforms across most developing country WTO members. By the end of 2007, the IP standards in developing country laws were higher than ever before, both in terms of the length and scope of IP protection. Most countries, for example, increased the term of patent protection to twenty years and extended the scope of patent protection to all fields of technology, as required by the Agreement. Given the binding nature of TRIPS and its focus on raising international IP standards to a common minimum, these shifts are not surprising. The degree to which there was variation in the IP reforms undertaken by developing countries does, however, warrant explanation.

In practice, there was a spectrum of approaches to TRIPS implementation. In the effort to implement laws 'consistent' with TRIPS, some countries adopted a TRIPS-'minimum' approach, whereby they took advantage of TRIPS flexibilities to tailor implementation to national priorities. In other cases, countries went beyond the minimum necessary to be consistent with TRIPS: that is, they took a TRIPS-'plus' approach.[56] Further, where countries did not conform to the minimum TRIPS requirements by, for example, failing to undertake legislative reforms to implement TRIPS within their deadlines, this can be characterized as a TRIPS-'minus' approach. (Note that LDCs that have not

yet reached their TRIPS deadlines would not be classified as TRIPS-minus as their commitments are not binding until the end of their transition period.) Some countries also coupled a TRIPS-minimum approach to some aspects of IP reform with a TRIPS-minus or TRIPS-plus approach in others. Diversity in how developing countries approached TRIPS implementation emerged in respect of the timing of reforms, the use of TRIPS flexibilities, and in the area of IP administration and enforcement. (Chapter 3 reviews this variation in detail).

The first element of variation concerns the timing of legislative reforms to implement TRIPS. The transition periods in TRIPS themselves anticipated variation in the timing of IP reforms by stipulating distinct deadlines for developing countries and LDCs. Many developing countries passed TRIPS-related legislation only weeks before their January 2000 deadline for TRIPS implementation. Almost half of the seventy-three developing countries with this deadline still had laws for TRIPS implementation pending approval in their legislatures at the time their transition period expired, or had yet to introduce relevant laws for consideration. In late 2007, several of these countries still lacked legislation to implement significant aspects of their TRIPS obligations. By contrast, almost half of the WTO's thirty founding LDC members adopted legislation to comply with TRIPS well in advance of their original 2006 deadline for implementation.[57] Further, a cluster of developing countries had implemented IP laws that met most TRIPS obligations even before the Agreement was concluded. In addition, many developing countries undertook several rounds of reforms to strengthen their IP laws. In some cases, subsequent reforms were designed to take greater advantage of TRIPS flexibilities.

There was also variation in the degree to which developing countries took advantage of TRIPS flexibilities. The majority of developing country WTO members combined a mix of TRIPS-plus, -minimum, and -minus standards, and the use of TRIPS flexibilities varied according to the type of IP. Brazil, for instance, incorporated a broad set of grounds for compulsory licensing in its patent law but provided a longer term of copyright protection than required by TRIPS. South Africa, on the other hand, offered TRIPS-plus patent protections for biotechnological inventions but took advantage of TRIPS safeguards in order to promote access to essential medicines. There were also patterns of variation in the overall extent to which countries used TRIPS flexibilities. Over a third of the WTO's 106 developing country members included a broad range of TRIPS-plus provisions in their laws. Over half of the countries in this TRIPS-plus group were LDCs – the same countries that the economic literature anticipates would adopt the lowest levels of IP protection.[58]

A third element of variation in TRIPS implementation among developing countries relates to how laws were subsequently put into practice through

regulatory and administrative measures. In general, IP laws require regulatory or administrative acts by the executive branch of government to give them practical effect. Decisions made in the course of the administration of laws can modify the effect of laws and produce variation in the effect of similar IP standards. In many African countries, for instance, IP authorities granted patents for subject matter that their laws excluded from patentability.[59] Countries also had different regulations and guidelines on what constitutes an 'inventive step' in their examination of patent applications.[60] The case of compulsory licensing provides a further example of how IP administration influenced whether developing countries actually made use of the flexibilities inscribed in their laws. Even though most developing countries incorporated TRIPS safeguards regarding compulsory licensing in their national laws, by the end of 2007 less than fifteen governments had actually issued such a licence.[61]

A further aspect of variation concerns the implementation of TRIPS enforcement provisions. TRIPS deadlines prompted most developing countries to tighten their laws on enforcement, but the legal approaches to enforcement and the scale of resources devoted to the task varied widely.[62] The task of mapping variation between countries is complicated by the fact that few countries regularly gather their own statistics.[63] Moreover, TRIPS allows countries to implement enforcement provisions within their own legal traditions and does not provide legal or quantitative benchmarks against which enforcement of laws might be measured or compared.[64] While attention to IP enforcement increased after TRIPS came into force, the simultaneous growth in production and consumption of counterfeit and pirated goods meant that the actual protection of IP rights, particularly in the area of copyright and trademarks did not necessarily increase. Although critics rightly emphasized that industry methodologies greatly inflated the scale of losses industry suffered due to IP enforcement problems, it is notable that many developing country governments themselves complained of inadequate resources and acknowledged shortcomings in their judicial and customs procedures related to enforcement.

1.3. Existing Literature and Popular Narratives

A governing literature by economists and lawyers deftly describes IP reforms related to TRIPS implementation in some developing countries (usually focusing on one sector or one aspect of TRIPS).[65] The question of *why* there is such *diversity* in developing country approaches to TRIPS implementation and IP reforms has not yet, however, attracted the systematic attention it deserves.[66] Where efforts to explore the *politics* of TRIPS implementation by developing countries exist, the accent is on explaining TRIPS-plus reforms in a subset of developing countries or the decisions taken in a single country.[67]

These studies and the growing scholarly literature on global IP debates do nonetheless offer many reflections relevant to explaining the variation in developing country behaviour with respect to TRIPS. In addition, commentaries by policymakers, NGOs, and industry groups in policy debates, opinion pieces, and in the international media provide useful insights. Further, the international relations (IR) literature on compliance with international law and the diffusion of policy ideas suggests several avenues for explaining the decisions developing countries took in respect of TRIPS implementation. Together, the scholarly literature and narratives from policy practitioners yield three broad approaches to explaining variation in TRIPS implementation.

A first approach emphasizes the national characteristics of developing countries as a core source of variation in TRIPS implementation. It reminds us that countries already had a diversity of IP standards before TRIPS came into force. Further, it emphasizes that we should expect countries to tailor IP reforms according to factors such as their overall economic wealth, the relative weight of IP-related imports and exports, technological factors (such as the degree of domestic technological innovation, industrialization, and R&D), the structure of domestic industry, the presence or potential for cultural or 'creative' industries, and the scale of national socio-economic challenges in areas of health and education that might be impacted by IP laws.[68] Economists, for instance, propose that the appropriate level of IP protection differs according to national economic circumstances and goals, and that one should not be surprised to see variation in how countries responded to TRIPS.[69] Wealthier countries are, for example, expected to offer higher IP standards, particularly where they export IP-related goods. Countries with a strong reliance on imports of knowledge-intensive goods are expected to adopt weaker domestic IP standards.

Several scholars also observe the impact of national *political* factors on IP reforms.[70] Here, the argument is that variation in political and institutional arrangements within countries influenced how governments undertook the process of reform and how permeable they were to lobbying by domestic interest groups and international actors.[71] A number of studies explore, for instance, how government coordination impacted the enforcement of IP laws in China and the evolving role of interest groups in TRIPS-related debates in India.[72] In addition, legal scholars draw attention to how administrative decisions in IP offices impact the degree to which countries take advantage of flexibilities in TRIPS and in their own national laws.[73]

A second approach to explaining variation in TRIPS implementation emphasizes the role of international power dynamics. The general argument proceeds as follows. The growth of knowledge-based industries generated an inexorable drive by multinational companies to protect and expand their profits by securing private property rights to their intellectual assets as widely as possible across the globe. The capacity of developing countries to resist

was constrained by their economic, political, and intellectual dependence on developed countries, IOs, and foreign corporations for investment, market access, development assistance, and political security.[74] In this context, variation in developing country responses to TRIPS is attributed to the degree of pressure applied by external powers and their strategic choices regarding target countries.[75] Economic pressures frequently referred to include trade threats and corporate lobbying, to secure stringent IP reforms and stronger international IP rules.[76] In addition, several scholars observe that monitoring by developed countries, the WTO TRIPS Council, and industry created a 'web of surveillance' that put additional pressure on developing countries.[77] Recent scholarship on how policy ideas diffuse and on the politics of IP-related capacity building alerts us to ways that learning, socialization, and emulation could serve as channels through which international pressures penetrated developing country decision-making on TRIPS.[78]

A third explanation for variation in TRIPS implementation calls on us to consider that governments can make empty promises. At the international level, developing countries sometimes sign onto international agreements in the hope of reputational rewards or economic favours with little intention or capacity to enforce them. Many countries understand well the importance of lip service to those issues of particular interest to their donors in the areas of sustainable development, human right and democratization.[79] In some case, there are shared understandings that compliance is not really expected. At the national level, a similar logic may apply to laws passed to implement international agreements: laws can be cheap where countries do not intend to enforce them or have little capacity to do so. For some commentators, the gap between the strength of IP standards and the effective level of protection that right-holders receive in many developing countries puts the significance of some of the observed variation in IP standards into question.[80] In certain cases, it is possible that neither membership of TRIPS or subsequent national IP reforms, whether TRIPS-plus or TRIPS-minus, reflect a meaningful commitment on the part of governments, particularly where countries new they faced little prospect of retaliation for non-compliance. For the weakest countries especially, the argument is that some of the TRIPS implementation that occurred on paper was simply a mechanical response to international obligations rather than an indication of a real intention to make changes on the ground. The implication of the 'empty promises' approach is that not all of the variation we see ought to be taken seriously as a subject of comparative analysis as the genuineness of the observed reforms may differ.

While each of these three approaches provides important insights into the reasons for aspects of the diversity in TRIPS implementation, none alone can account for the degree and distribution of variation. The challenge at hand is to draw together and build on these explanations to devise an analytical framework and set of arguments about what factors mattered most.

1.4. Explaining Variation in TRIPS Implementation

In this book, I explain variation as an outcome of the *interplay* of global IP debates, international power pressures, and political dynamics within developing countries. To set the scene, Chapter 2 reviews the evolution of developing country perspectives on international IP regulation, tracing the history of developing country concerns about international IP regulation from colonial times up until the signing of TRIPS.

Chapter 3 surveys the variation in TRIPS implementation among developing countries from 1995 to 2007. It begins with a summary of the core requirements TRIPS places on developing countries and then highlights the variation in how developing countries implemented these requirements, focusing particular attention on the timing of legislative reforms and the use of TRIPS flexibilities. The chapter then contrasts this variation with what the economic literature and the history of international IP negotiations lead us to expect. On the one hand, it shows that national economic circumstances and changing sectoral interests can indeed explain some aspects of the variation. On the other hand, the evidence also reveals significant divergences between the behaviour of many developing countries and the predictions advanced in the economic literature, particularly for many of the world's poorest countries which adopted TRIPS-plus approaches to implementation.[81]

Chapter 4 argues that disagreements over the final TRIPS text set the scene for a global fight over how developing countries implemented the Agreement. TRIPS implementation occurred amidst efforts by both developed and developing countries to 'remake' the original TRIPS deal, both by influencing what governments did on the ground and by working to renegotiate the terms of TRIPS. Developed countries and their multinational companies pushed for ever stronger IP protection. Developing countries defended TRIPS flexibilities and mounted a progressively more assertive call for global IP reform. Post-agreement bargaining on the terms of TRIPS and global IP regulation[82] gave rise to an increasingly complex global IP system. With the engagement of a growing range of non-state actors (including NGOs, industry, IOs, and academic experts), global IP debates intensified. Tensions rose over the use of TRIPS flexibilities, particularly in the area of public health, and there was growing interest in ensuring the development orientation of international IP rules. As the decade advanced, WIPO re-asserted itself as a key player. As the WIPO Secretariat became more engaged in global IP debates, it also became a target of them.

Over time, a cacophony of voices and interests animated global IP debates. Broadly speaking, most of the players joined or supported one of two archetypal 'teams'. Neither of the teams was monolithic. As global IP debates progressed, players within each team sometimes expressed divergent views, adopted more or less aggressive political strategies and definitive

positions, and expressed varying degrees of interest in dialogue with the other team.

One team, led by developed countries and multinational corporations, favoured a narrow and swift compliance-oriented approach to the implementation of TRIPS and advanced a 'compliance-plus' agenda for IP reforms more generally. This included pushing developing countries to go beyond minimum TRIPS implementation, to sacrifice the use of TRIPS flexibilities, and to add new stronger IP standards to their domestic laws. In addition, this team argued for even stronger global IP regulation and more stringent enforcement in developing countries, and worked to influence the positions developing countries took in ongoing international IP negotiations and global IP debates.[83]

An opposing 'pro-development' team called for developing countries to take time to tailor implementation of TRIPS to their national needs, including by taking advantage of the flexibilities available in the Agreement. They also advocated reform of international IP rules, citing the need for greater balance in the global IP system to ensure proper attention to development and public-interest considerations.[84] The players on this side included NGOs, academics, some IOs (such as UNCTAD and the WHO), most developing country governments, as well as some foundations and development-oriented government agencies in developed countries.

Importantly, the scale of resources at the disposal of each of these two teams, and their legitimacy in the eyes of developing country officials, varied. The pro-IP team had greater financial reserves, access to governments, and global reach across and within developing countries, particularly through the IP community in each country notably, those with a pro-IP stance often stated and believed that their agenda would also help development in poorer countries. Further, many of those in the 'pro-development' were not anti-IP, but rather supported a balanced IP system. Nonetheless, the characterization of teams as pro-IP or pro-development serves to mark a distinction in perspective that members of each side acknowledged and used.

Chapter 5 explores how international pressures contributed to variation in TRIPS implementation. Some countries faced pressure in advance of their first efforts to draft, debate, and implement TRIPS-related IP reforms. Once TRIPS-related reforms were in place, many countries subsequently faced additional pressures to repeal, modify, or strengthen provisions in their laws. Most countries also faced international pressures in the area of administration and enforcement of laws, including regarding the practical use of flexibilities included in their national laws.

The intensity and focus of international pressures varied by country. In my analysis, I disentangle two kinds of power that were exerted (sometimes separately but often in tandem), identify the multiple pressure tools deployed,

and specify which players were involved. *Economic* power was used where players deliberately deployed their material resources and capacities to manipulate the strategic and economic constraints of other countries, to push them to do something that they would not otherwise do, or to compel them to desist from a particular action.[85] Developed countries worked, for instance, to link economic rewards with the positions that developing countries took in international IP negotiations and their progress on TRIPS reforms. Examples of tools used to exert economic power included bilateral trade and investment deals, WTO disputes and accession agreements, trade sanctions, and the threat of sanctions. The United States, for example, sometimes threatened, 'either change your IP policies or I will withdraw your trade preferences'. Coercive, economic pressures had a clear and decisive interest on some countries, but the success rate of such efforts differed and there was variation in the specific target countries, the issue-focus, and the intensity of pressure applied.

Ideational power was also at play. Each team used the power of ideas to advance distinctive perspectives on the pros and cons of different approaches to TRIPS implementation, to dominate the political environment for IP reforms, to influence the terms of debate in international negotiations,[86] and to shape how developing countries behaved at the national level.[87] Ideational power operated through efforts to influence expertise, know-how, and institutional capabilities on IP matters in developing countries, as well as understandings, beliefs, and discourses about IP. Tools used included monitoring of IP reforms, framing of IP debates, and building sympathetic knowledge communities of analysts, critics, and experts. The core framing mechanisms employed were research, international media campaigns, and public outreach. In addition, ideational power and economic power were combined in the provision of capacity-building,[88] Each team worked to provide technical advice and training, shape expertise, and build institutional capacity in ways that reflected their distinctive preferences.[89]

The pro-IP team used ideational power to advance three overarching messages: economic, legal, and political. On the economic front, they emphasized the benefits of swift TRIPS implementation, stronger IP protection, and higher international IP standards for innovation, foreign direct investment, and technology transfer. That is, they worked to advance the idea that stronger IP protection was economically desirable for developing countries in its own right. On the legal front, irrespective of the relative merits of TRIPS implementation for developing countries, the pro-IP advocates emphasized that TRIPS implementation was a legal commitment: the integrity of the multilateral trading system and the rule of law demanded that countries conform. On the political front, as global IP debates intensified, the pro-IP team embedded pressures for stronger IP protection in a broader political bargain. Support for stronger domestic and international IP protection was presented as a condition for accessing and maintaining economic and political

rewards from developed countries and their companies in areas as diverse as political security, investment, market access, and foreign aid. Even where the bargain was not explicitly articulated, its presence was keenly perceived by the leaders and officials of many developing countries. Evidence of political will in the area of IP protection became an integral part of the package of reforms developed countries needed to undertake to demonstrate their commitment to good governance and economic globalization. Developing countries were left with little doubt that positive talk and performance on TRIPS implementation shaped their global reputation, and with it their ability to secure foreign aid and trade deals, and to maintain broader political alliances. The pro-development team used ideational power to counter TRIPS-plus pressures and to battle the 'hegemony' of pro-IP discourse in global IP debates.[90]

In Chapter 6, I investigate how links between international and domestic factors contributed to variation in TRIPS implementation. National economic circumstances and political factors *within* developing countries shaped the capacity of governments to filter and manage international pressures regarding TRIPS implementation and the influence of global IP debates. Within developing countries, three factors influenced their susceptibility to external pressures, sometimes filtering and sometimes amplifying their impact, and thus contributed to variation in TRIPS implementation: (*a*) government capacity; (*b*) public engagement; and (*c*) government coordination. In terms of government capacity, the expertise and institutional competence of governments made a difference, as did the accountability and control of national IP offices. Public debate also had an impact, most notably through the relationships between governments and parliaments, the engagement of interest groups, and the degree of regulatory capture. Coordination within government contributed to divergences in implementation as well. Key factors included the degree to which IP decision-making was embedded in broader public policymaking processes, the communication between the internal and external faces of developing country governments, and the relationships between national governments, foreign donors, and regional and multilateral IOs.[91] To illustrate how the interplay between global IP debates, international pressures, and national politics generated variation, the chapter concludes with several mini case studies.

Chapter 7 explores the politics of TRIPS implementation in francophone Africa. Comprised of the world's poorest countries, the francophone African region was where one would most expect governments to have taken full advantage of TRIPS flexibilities, especially as these countries escaped the direct economic pressures that other developing countries experienced. Yet in reality, LDCs in francophone Africa adopted very strong IP standards well in advance of their TRIPS deadlines. This extreme 'outlier' case,[92] sheds light on how the combination of weak national capacity, capacity-building,

and a regional approach to IP regulation impacted TRIPS implementation. It shows that national institutional arrangements amplified the influence of international pressure and also how, even in the absence of explicit economic pressures, the compliance-plus global political environment influenced government perceptions and impacted their decisions.

To conclude, Chapter 8 draws together my core findings regarding the reasons for variation in TRIPS implementation and proposes a set of implications and strategies for those working for IP regulated tailored to the development priorities of developing countries.

1.5. Why This Book Matters

This book presents new empirically-grounded scholarly analysis of the *implementation* of TRIPS. It provides a comparative review of selected aspects of developing country implementation of TRIPS from 1995 to 2007. This time frame matters because it includes each of the deadlines by which all WTO members – developed, developing, and LDCs – were originally required to have implemented TRIPS.

This book also addresses an important gap in the scholarly literature by taking up the *politics* of the *implementation* of WTO agreements, including TRIPS. In the wake of the Uruguay Round, developing countries pushed for discussion of the challenges they faced in respect of 'implementation issues'.[93] Existing studies of the implementation of WTO agreements show that responses to commitments vary widely, and that developing countries do indeed face many difficulties.[94] The issue of WTO-related implementation has nontheless largely failed to attract either the political attention developing countries desire, or the interest of scholars of international relations and compliance with international law. To date, WTO scholars have generally examined implementation from a legal or descriptive perspective, often overlooking the ways in which it is a dynamic political process and the scope for different interpretations of legal commitments.

Whereas a growing literature explores the potential for developing countries to act collectively to advance their interests in international trade negotiations, countries usually stand alone when it comes to translating WTO laws into national policy.[95] As WTO rules reach further inside the borders of states and pressure for their implementation intensifies, the research terrain for scholars of international political economy has expanded. Even though TRIPS has inspired a burgeoning literature from critics and supporters, economists and lawyers, there has been surprisingly little effort by political scientists to complement studies of the process of WTO and IP negotiations with the analysis of the implementation process.[96]

This book makes the case for greater consideration of how the political dynamics of compliance with international law[97] are affected by the contested nature of international agreements and post-agreement bargaining to revise or clarify their provisions.[98] It also shows that WTO negotiations extend far beyond the conclusion of formal negotiating rounds and the entry into force of agreements: the TRIPS implementation process was influenced by ongoing IP negotiations among WTO members within and beyond the WTO context. Further, my analysis emphasizes that WTO rules exist within a web of bilateral, regional, and international agreements; analyses of implementation must thus locate rules within this broader context.

In general, scholars of compliance focus on what helps bring 'rogue' states into compliance with international rules. They assume these rules reflect a 'balance of advantage' and that governments 'ought' to comply with them either for their own 'good', for the credibility and durability of the system, or for the sake of some broader global public objective or principles (such as environmental protection, development, or human rights). These assumptions weaken the usefulness of the compliance literature for explaining TRIPS implementation. In this book, I take up Peter Gerhart's argument that TRIPS lacks substantive validity.[99] Only by acknowledging disagreements about the origins, legitimacy and interpretation of TRIPS, and the uneven distribution of its benefits, can we understand the politics of implementation. I also show that the narrow focus of many compliance scholars on the effectiveness of unilateral pressures, such as trade threats, is ill-suited to the far more complex set of interactions revealed in this study. In addition, I emphasize that TRIPS imposes positive obligations on States; it requires States to *do* a set of things. This study provides empirical evidence to support Gerhart's argument that the dynamics and politics of compliance with the 'positive commands' of international law may differ from those associated with 'negative commands', particularly where the regulatory commitments encroach deep into areas of law hitherto considered the national preserve.[100]

This book breaks new ground by proposing an analytical framework for studying the politics of TRIPS implementation in developing countries and the variation that emerges. The focus of much of the commentary on TRIPS has been the international dimension of the politics surrounding the Agreement.[101] Taking the lead from scholars of international political economy, this book shows that consideration of the way international pressures and domestic politics *interact* is required to understand the variation in how countries implement international IP laws.[102] In so doing, attention must shift beyond governments as unitary actors to explore the institutional arrangements within them, and also to consider the interactions among states, IOs, companies, NGOs, and experts.[103]

At the national level, this book draws attention to the role of IP offices in guiding the implementation of international IP agreements and as the

primary government interlocutors with international donors and the core recipients of their technical advice and capacity-building. I thus introduce national IP offices and the networks among them as a subject for further comparative study by scholars interested in processes of global regulatory harmonization and cooperation.

The TRIPS implementation process provides strong evidence to support the argument that capacity-building can play a decisive role in inducing, promoting, and sustaining compliance with international law.[104] Where patterns of non-compliance stem from administrative breakdowns, the ambiguity and technicality of international agreements, or weak technical capacity of some governments, 'managerialist' scholars of compliance propose that capacity-building may be a more effective tool for compliance than the threat of punishment.[105] In the case of TRIPS implementation, however, capacity-building was not the consensual tool that managerialist scholars of compliance describe. Rather in the context of debates on the scope of TRIPS rights and obligations, capacity-building was a highly politicized instrument used by an array of stakeholders to advance their respective agendas. Its influence was particularly significant in light of the limited technical expertise of most developing countries and the relatively low level of resources they had hitherto been devoted to IP protection.

This book also helps correct the relative neglect of the distinctive experiences of developing countries in their international relations and in the governance of the global economy.[106] My analysis of TRIPS implementation sheds new light on the nature, dynamics, and exercise of power in the global economy, providing specific examples of how different kinds of power are expressed and by whom, and how this impacts the way developing country governments respond to international legal commitments. By explaining the process and subtleties of how TRIPS was implemented, this book gives substance to the view that developing countries' policies are often set by others. By detailing the mechanisms through which developing countries were both coerced and persuaded to identify with, and mimic, the IP policies of richer countries, this book also contributes to the growing literature on how policy ideas are diffused in the global economy.[107]

My case study on TRIPS implementation in francophone Africa draws attention to the need for deeper analysis of the objectives, practice, and implications of delegation to regional organizations. At the time TRIPS came into force, over a third of the WTO's developing country members already belonged to regional IP arrangements among Arab, Andean, or African countries. In this book, I explore how the secretariats of these regional IP arrangements affected the way their members responded to TRIPS.

Finally, this book also adds new empirical evidence to the scholarly literature regarding the role of IOs in international relations.[108] IOs had a significant influence on global IP debates and also on TRIPS implementation

in many developing countries. The most influential IOs were the WTO and WIPO, both of which were instructed by their member governments to help developing countries implement TRIPS.[109] On a lesser financial scale, IOs such as the United Nations Conference on Trade and Development (UNCTAD) and the World Health Organization (WHO) also played a role in advising and assisting developing countries on TRIPS implementation. The Secretariats of IOs competed for influence on global IP debates and on developing country decision-making. They sometimes expressed the power and interests of particular countries or interest groups, and also emerged as authoritative players in their own right. I emphasize the role of WIPO as a central player in the TRIPS implementation game, highlighting its governance and activities as topics ripe for further critical study by scholars of international relations.

1.6. Methods and Sources

The analysis advanced in this book draws on a decade of professional experience in international debates on trade and IP decision-making. This study also draws on over 100 interviews with individuals engaged in the TRIPS implementation process, including staff of IOs, capital-based government officials, Geneva-based negotiators, academic experts, journalists, and a range of representatives from international NGOs and industry. With the exception of those who asked not to be listed, those consulted are listed in Appendix 1. For the case study on francophone Africa, I conducted a further set of interviews with relevant officials, scholars, and NGOs active in that region. Most interviewees specifically requested not to be cited by name in the text.

My analysis of variation in TRIPS implementation draws from an original, cross-national comparative review of TRIPS implementation of 106 developing country members of the WTO. The goal of the survey was to gather sufficient detail to illustrate the scope of variation among developing countries rather than to present an exhaustive survey or a definitive legal assessment of IP laws in developing countries or their compliance with TRIPS. The latter tasks would often involve a team of legal experts. Further, it will take several years of implementation and court action to determine the precise scope, boundaries, and effects of many IP laws. Moreover, the process of IP reform is dynamic and ongoing. At the time of writing, IP legislative reforms were still underway, particularly in developing countries that supplemented TRIPs obligations with further multilateral and bilateral commitments.

The evidence discussed in this book was drawn from a wide range of primary and secondary sources. The key primary sources were WTO and WIPO compilations of national IP laws. These laws were not, however, available in a database format that enabled electronic searches or comparisons across countries regarding the implementation of particular TRIPS requirements

or use of flexibilities.[110] Additional official sources of data on TRIPS implementation included the summaries of TRIPS Council meetings, notifications by countries of their IP laws and regulations, and TRIPS Council Reviews of the IP legislation of WTO members,[111] government responses to a TRIPS Council IP enforcement checklist,[112] and the IP chapters of the WTO Secretariat's Trade Policy Review reports on members.[113] Notably, in presenting information for the TRIPS Council and for Trade Policy reviews, many developing countries conveyed minimal information about their implementation efforts (sometimes to avoid or divert critical attention and to avoid use of information against them in potential disputes) and presented a positive picture of their efforts and intentions with respect to this process. The annual USTR Special 301 Reports and the yearly U.S. National Trade Estimate reports also provided information about TRIPS implementation, though the political purposes of these analyses similarly called for caution in accepting how developing country laws were characterized.[114] I also cross-checked information with secondary sources, namely government, industry, and NGO reports, which, while also often subjective, helped to provide a fuller picture of implementation. These included annual country and sector reports from industry associations,[115] the World Economic Forum (WEF),[116] and periodic reports published by NGOs such as Médecins Sans Frontières (MSF), Third World Network (TWN), and Oxfam.

The survey also benefited from country studies on TRIPS implementation in francophone Africa, Brazil, China, India, Mexico, Nepal, and Venezuela, as well as studies on the use of TRIPS flexibilities in Kenya and Uganda.[117] I also drew on examples presented in national legal textbooks[118] and reviews of particular IP laws in (e.g. patent laws in Egypt, Brazil, and India as well as plant variety protection laws in China).[119] Studies of enforcement and piracy in developing countries were also useful sources of data.[120] Examples cited in several studies of TRIPS implementation options and several cross-national legal studies of IP standards in developing countries were also drawn upon.[121] The latter were, however, limited either by scope (e.g. covering only patent or copyright protection)[122] or duration (covering only the period up until 2000).[123] Finally, my analysis draws on reports regarding IP reforms in developing countries from international and national news publishers as well as independent news services such as *BRIDGES Weekly*, *Inside U.S. Trade*, *Intellectual Property Watch*, and the *South-North Development Monitor*.

1.7. Scope

A note on the scope of this book is in order. My intention is to offer a global perspective on variation in TRIPS implementation and a framework for understanding the variation among developing countries in their responses

to TRIPS that captures the complexity of the political process. I use striking examples from a range of different countries to illustrate my arguments but do not propose to explain all aspects of variation across developing countries or to undertake a detailed examination of TRIPS implementation in any one country. While much attention in the global media focuses on IP protection and enforcement in the largest developing countries, such as Brazil, China, and India, my research is intentionally concerned with the broader range of developing countries. In particular, I set aside any detailed examination of TRIPS implementation in China, which has already attracted considerable scholarly attention and whose economic and political circumstances render it a case apart from other developing countries.

Finally, this book does not explore the impacts of TRIPS implementation on developing countries, their development goals, or other public policy objectives. It also does not attempt to assess or affirm the various claims by stakeholders regarding potential or actual impacts. Given the broad scope of TRIPS and the vast array of debates on global IP regulation, I devote most attention to issues of copyright, patents, and plant variety protection, which were the areas where IP debates were most consistent and intense both during and post the TRIPS negotiations. By contrast, IP laws related to integrated circuits, geographical indications, and trademarks are not taken up in detail. My analysis concentrates on legislative reforms and their interpretation by developing countries. It explores issues of IP administration only where they are relevant to these matters. The larger task of analysing the political dynamics of how countries enforced the laws they passed to implement TRIPS are deferred for future study. I do, however, consider how concerns about enforcement, piracy, and counterfeiting emerged in global IP debates and influenced the political environment for decision-making on TRIPS implementation.

Notes

1. For reviews of these arguments, see Finger and Schuler (2000), Maskus (2000*a*), Rodrik (2001), and Stiglitz (2002).
2. While aware of the vast diversity of countries that make up those commonly referred to as 'developing countries', the terminology remains useful for the purposes of this research. The WTO does not have formal criteria for developing country status. Instead, developing countries in the WTO self-ascribe to this status. The UN designation of least-developed country (LDC) is however accepted and used in the WTO context. Where helpful to allow for a more fine-grained analysis, I differentiate developing countries according to region and economic status, e.g. LDCs, emerging developing countries, and African countries.
3. The leading historical accounts of the origins and process of the TRIPS negotiations include Beier and Schicker (1996), Drahos (1995), Gervais (1998), Matthews

(2002), Ryan (1998), Sell (1995, 1998, 2003*b*), Stewart (1993), and Wolfhard (1991).

4. Okediji (2003*a*: 1, note 1). The legal significance of TRIPS in the context of international IP regulation is also discussed comprehensively by Reichman (1997, 1998*b*).
5. This figure represents the WTO membership as of 5 February 2008.
6. In contrast to most previous GATT agreements, which focused on removing trade barriers at the border, TRIPS set out positive obligations on WTO members to take action within the realm of domestic regulation. Alongside TRIPS, the Uruguay Round also produced two other agreements specifically focused on 'behind the border' measures to address non-tariff barriers to trade: the Agreement on Technical Barriers to Trade and the Agreement on Sanitary and Phytosanitary Standards.
7. Idris (2002).
8. Bhagwati (2001) and Stiglitz (2002: 245–6).
9. Wolf (2007).
10. Chang (2007).
11. 'Policy space' is a term widely used by developing country negotiators in the context of international trade negotiations to refer to the scope for governments to implement explicit pro-development policies (e.g. to support domestic industries, international competitiveness, local innovative capacities, and affordable access to technologies, knowledge, and information). See Group of 77 (2004). The 2004 UNCTAD Sao Paolo Declaration emphasized, for example, the importance of preserving policy space in international trade rules.
12. The widespread use of the term 'flexibilities' to refer to these safeguards and options emerged in the late 1990s in the context of the negotiations leading to the Doha Declaration on TRIPS and Public Health.
13. This survey excludes WTO members from Eastern Europe (many of which are now EU members or in the process of acceding to the EU) and the former CIS States (or Newly Independent States, such as Armenia, Georgia, Kyrgyz Republic, and Moldova). These countries do not generally claim developing country status at the WTO, instead designating themselves as 'economies in transition'.
14. In 1962, rising public literacy and the growing use of the printing press in England prompted the King to pass a Licensing Act, which established a register of licensed books and required a copy of each book to be deposited with the Stationer's Company. The 1710 Statute of Anne was the first copyright law and granted rights to authors for a fixed period. The English 1624 Law on Monopolies was the first formal industrial property law.
15. The most widely cited rationale for IP protection is to correct market failures whereby innovation, knowledge, and creativity may be underproduced due to fears of misappropriation and difficulties securing economic returns on the investment. For reviews of debates on this rationale, see Machlup and Penrose (1950) and May and Sell (2005).
16. Correa (2007*b*).
17. Machlup and Penrose (1950: 10, 28).
18. See May and Sell (2005), and Sell and May (2001).
19. Machlup and Penrose (1950: 4).

20. Ibid.
21. May and Sell (2005: 1).
22. Machlup and Penrose (1950: 10, 28).
23. May (2000, 2002).
24. Patel et al. (2001). Also see Chapter 2, note 92.
25. Drahos (2002*b*: 3).
26. Mowrey and Rosenberg (1989: 278).
27. Dutfield (2000) and WIPO (1988).
28. May (2000: 1).
29. This conclusion draws from reports submitted by developing countries for their respective national Trade Policy Reviews and their responses to questions posed during the TRIPS Council's review of TRIPS implementing legislation in 2000–1.
30. Drahos (2002*b*), Matthews (2002), and Stewart (1993).
31. *Economic and Political Weekly* (1989), Drahos (1995), Kumar (1993), Raghavan (1990), and Sell (2003*b*).
32. Ibid.
33. For a critical assessment of the implications of the Uruguay Round for developing countries, see Hoekman and Kostecki (2001), Raghavan (1990), and UNDP (2003*b*). For a positive assessment, see Schott (1994).
34. These figures draw from news reports in the *Economist* in 2007 and 2008, and Smith et al. (2008).
35. For example, ten companies including Monsanto (USA), DuPont/Pioneer (USA), Syngenta (Switzerland), and Groupe Limagrain (France) control half of the world's commercial seed sales. See ETC (2005: 1).
36. Kumar (1993).
37. For summaries of debates that took place during the TRIPS negotiations, see CIPR (2002), Correa (2000*a*), Raghavan (1990), UNCTAD (1996), UNDP (2003*b*: 203–34), Watal (2001), and Yusef (1995). For the views of various economists during the negotiations, see for example, Binley (1992), Deardorff (1990), Grossman and Helpmann (1991), Kumar (1993), Primo Braga (1989, 1990), and Rapp and Rozek (1990).
38. Others have argued that stronger IP protections need not be a prerequisite for technology transfer. Binley (1992) observes, for example, that 'Korea benefited from technology transfer in numerous industries via licensing arrangements, subcontracting agreements and the location of foreign subsidiaries during a period in which its intellectual property laws were as weak as any of the other LDCs'. Regarding the link between the strength of IP rights and FDI in developing countries, Evenson (1993: 366) observed at the time of the TRIPS negotiations that 'the literature does not show strong correlations'. For a summary of the economic literature on IP, see Maskus (2000*a*).
39. Fink and Maskus (2005) and Maskus (2000*a*, 2004).
40. Drahos (2002*b*: 3), Maskus (1990), and Sell (1998).
41. Tansey and Rajotte (2008).
42. Maskus (1990).
43. See, for example, Finger and Shuler (1999).
44. Finger and Schuler (2000) and UNCTAD (2007).

45. World Bank (2002).
46. See Maskus (2000*a*), and Finger and Schuler (2000).
47. Kumar (2002).
48. Chang (2007).
49. Ibid.
50. Okediji (2003*a*).
51. Ibid.
52. For a comprehensive analysis of specific TRIPS provisions and their negotiating history, see UNCTAD-ICTSD (2005).
53. For a discussion of Canada's role in international IP negotiations, see Morin (2008).
54. For an overview of TRIPS flexibilities, see South Centre (1997) and Correa (2000*a*).
55. Reichman (1995: 783–4: note 115) affirms that unlike prior multilateral trade agreements, TRIPS 'provides no special regime that weakens international minimum standards as such for developing countries'.
56. The term TRIPS-plus is often specifically used in policy circles to characterize international agreements that require signatories to increase their level of IP protection beyond that required by TRIPS or which include provisions that reduce the scope or effectiveness of the flexibilities included in TRIPS or the ability of countries to use them.
57. Cambodia and Nepal subsequently acceded to the WTO, bringing the total number of LDC members to thirty-two. The transition periods available to LDCs are not automatically available to newly acceding members of the WTO. See Abbott and Correa (2007). Also see discussion on accessions in Chapter 5.
58. Maskus (2000*a*).
59. Musungu and Oh (2006).
60. Correa (2007*a*).
61. This figure was calculated by the author on the basis of studies by Love (2007), Oh (2006), Khor (2007), and Yoke Ling (2006), and a review of news reports until December 2007. For further discussion, see Chapter 6.
62. The tensions about the appropriate methodology for assessing and measuring the degree of IP protection and enforcement are discussed in Ginarte and Park (1997), Lee and Mansfield (1996), Mansfield (1994), Ostergard (2000), Primo Braga and Fink (2000: 39), Shadlen et al. (2005), Sherwood (1997), and Watal (2001).
63. A further option would be to find a measure of a country's political commitment to giving practical effect to their IP laws, such as the level of resources devoted. However, even the best-intentioned government may find its efforts to increase effective protection thwarted by unresponsive government agencies and factors such as a generally slow and inefficient judicial system.
64. Watal (2001).
65. Bentolila (2002/03), Shadlen (2004*a*), Shadlen et al. (2005), and Watal (2001).
66. Kenneth Shadlen (2006, 2008), a comparative political scientist, is the only scholar thus far to have specifically taken up the task of explaining variance in IP reforms in developing countries (with a particular focus on Latin America).

67. Das (2003) and Ramanna (2005).
68. Fink and Maskus (2005), Maskus (2000*a*), and UNCTAD (2007).
69. Ibid.
70. See Correa (2007*c*), Drahos (2007*a*), Shadlen et al. (2005), Shadlen (2006, 2007), and UNCTAD (2008).
71. Das (2003), Ramanna (2005), and Shadlen (2006, 2008).
72. Mertha (2005), Mertha and Pahre (2005), Das (2003), and Ramanna (2005).
73. Correa (2007*a*), Drahos (2007*a*), and Garrison (2006).
74. Sell (2003*b*) and Musungu and Oh (2006: 43). On the relationship between trade agreements and political security considerations, see Gruber (2000).
75. Several leading IP scholars discuss the use of coercion to influence international IP negotiations and IP standards in developing countries. See Abbott (2004), Correa (2004*a*, 2004*b*), Drahos (2002*b*, 2003, 2004*b*), MSF (2003), Oxfam (2002, 2004*a*), and Shadlen et al. (2005). For similar analyses of 'bullying' by developed countries, see the analysis by NGOs such as GRAIN (2003), MSF (2003), and Oxfam (2002, 2004*a*, 2004*b*). GRAIN (2003) has argued, for example, that 'the European Union is aggressively forcing developing countries to adopt the strictest intellectual property rules on seeds that are possible'.
76. See, for example, Drahos (1995, 1997, 2003), Matthews (2005), May (2004, 2006*a*), and Sell (2003*b*). Andersen (2006*a*, 2006*b*) reviews how capacity-building and industry lobbying influenced the adoption of the Philippines' plant variety protection law.
77. Sell (2003*b*: 121). Also see Matthews (2002) for discussion of the role and activities of the TRIPS Council.
78. Maskus (2006) explores how IP policies in the agricultural arena took hold in the Asia-Pacific region. For further analysis of policy diffusion in international relations, see Fordham and Asal (2007), Gleditsch and Ward (2006), Sabatier (2007), Simmons and Elkins (2004), Simmons et al. (2006), Strang and Soule (1998), True and Mintrom (2001), and Wolfe (2005).
79. Hathaway (2003), and Hafner-Burton and Tsutsui (2005) discuss the cost of commitments to international laws and the rationale for empty promises to comply with them.
80. Author's interviews with selected government and 10 officials.
81. Ibid.
82. For analysis of the dynamics of international negotiations and global IP debates since TRIPS, see for example, Drahos (2002*a*), Halbert (2005), May (2006*c*), Okediji (2003*a*), and Sell (2006).
83. See notes 39 and 45.
84. Sell (2003*a*), and Sell and Prakash (2004).
85. This definition draws from the definition of compulsory power in Barnett and Duvall (2005).
86. This analysis draws on the work of Bierstecker (1992, 1995), Goldstein and Keohane (1993), Sell (1998), and Woods (1995) exploring the role of ideas in international policy debates.
87. This analysis draws on literature that explores how 'epistemic communities' and 'technocratic elites' influence international policy debates. See Haas (1992*a*),

Howse (2002), and Cogburn (2007). In the realm of IP regulation, Braithwaite and Drahos (2000), Dutfield (2000), and Sell (2003*a*) have explored the influence of the community of IP professionals on international IP regulation.

88. The scale and nature of IP-related capacity-building to IP reforms in developing countries have attracted critical attention from several scholars. The following scholars each note the bias of technical assistance from IOs and developed countries in favour of a compliance-driven approach to TRIPS and of strengthened IP protection in general: Matthews (2005), Matthews and Munoz-Tellez (2006), and May (2004). Several NGOs also published critical reviews, for example, Bellmann and Vivas-Eugui (2004), Kostecki (2005), Musungu (2003), and Pengelly (2005).
89. The importance of ideas in debates on international IP regulation has been emphasized by Drahos (1996), Mayne (2002), Odell and Sell (2006), Okediji (2003*a*), Sell (1998, 2003*b*), and Sell and Prakash (2002).
90. The notion of a hegemonic pro-IP discourse in international IP negotiations has been advanced persuasively by Abdel Latif (2005), reflecting on his own experience as an Egyptian diplomat responsible for IP negotiations in Geneva.
91. Abdel Latif (2005).
92. Van Evera (1997: 86, 91–2) argues that a single 'outlier' case may be particularly useful where outcomes are poorly explained by existing theories and where close examination of the case may help elucidate otherwise under-appreciated causes.
93. See, for example, South Centre (2004).
94. Examples of assessments include FAO (2003), Oxfam (2005), U.S. Chamber of Commerce (2005), USTR (2004), VanGrasstek and Sauve (2006), and Wolfe (2003). For the domestic politics of implementing WTO rules in the United States and Europe, see Princen (2004) and Destler (2005). For analysis of the political factors influencing the implementation of the recommendations and rulings of the Dispute Settlement Body, see Barton et al. (2006: 61–70) and Petersmann (1997).
95. For analysis of developing country efforts to harness coalitions in international trade negotiations, see Kahler and Odell (1989), Narlikar (2002, 2003), Odell (2006), Shukla (1994), South Centre (2003), Tussie and Glover (1993), and Winham (1998).
96. The study of international trade negotiations by IR scholars was pioneered by John Odell (2000). Also see Odell (2006).
97. The compliance literature seeks to shed light on the incentives and conditions which foster compliance with international regimes and on the relative effectiveness of various tools that might be employed to further promote compliance, including conditionality, sanctions, and side-payments. For a synthesis of this literature, see Raustiala (2000). For a discussion on sources of compliance and motivations, see Young (1994). Also see Chayes and Chayes (1993, 1995), Cortell and James (2000), Downs and Jones (2002), Raustiala and Slaughter (2002), Simmons (1998), and Spector et al. (2003).
98. For discussion of post-agreement bargaining on other international issues, see Jonsson and Tallberg (1998).
99. The importance of this point for the examination of compliance with TRIPS was made by Gerhart (2000) in response to the managerialist literature on compliance

exemplified by the work of Chayes and Chayes (1993), Downs (1998), and Downs et al. (1996).

100. Gerhart (2000).
101. For contributions exploring the interaction of national and international factors, see Evans et al. (1993), Gourevitch (1978), Moravscik (1993), and Putnam (1988). For analysis of how interactions between national and international factors explained the way developing country governments behaved in the context of structural adjustment policies, see Haggard and Kaufman (1992).
102. Drahos (2007*a*), Correa (2007*a*, 2007*c*), Mertha (2005), Shadlen (2006), and Shadlen et al. (2005).
103. Wolfe (2005).
104. See note 99.
105. Managerialist scholars argue that formal enforcement actions (such as sanctions) are not (and are not likely to prove) a particularly effective instrument in promoting the overall level of regime compliance. See Chayes and Chayes (1993).
106. For literature examining the applicability of mainstream IR theory to the developing world, see Aydinli and Matthews (2000), Dunn and Shaw (2001), Lavelle (2005), Neuman (1998), Puchala (1998: 149), Thomas and Wilkin (2004), and Woods (2000).
107. See note 78.
108. Theoretical sources for analysis of how IOs may acquire and exert institutional power and independent 'agency' include Barnett and Finnemore (1999, 2004, 2005), Barnett and Duvall (2005), and Checkel (2005). The nature of international bureaucracies and the role of their staff in global politics have long attracted the attention of IR scholars. See Cox (1996), Cox and Jacobson (1973), Langrod (1963), and Weiss (1975).
109. WIPO-WTO (1996).
110. TRIPS requires members to notify the Council for TRIPS regarding several aspects of their implementation of the Agreement, including their laws and regulations. WIPO makes the laws and regulations contained in its collection available through its monthly review 'Industrial Property and Copyright' and through its online Collection of Laws for Electronic Access (CLEA). See http://www.wto.org/english/docs_e/docs_e.htm and http://www.wipo.int/clea/en/index.jsp.
111. In 1996–7, the TRIPS Council conducted reviews of TRIPS implementing legislation of developed country members, followed in 2000–1 with reviews of developing countries with a 2000 deadline for TRIPS implementation. For documentation related to the reviews, see http://www.wto.org/english/tratop_e/trips_e/intel8_e.htm.
112. For TRIPS Council enforcement checklist and responses, see http://www.wto.org/english/tratop_e/trips_e/intel8_e.htm.
113. For the documentation related to WTO Trade Policy Reviews, see http://www.wto.org/english/tratop_e/tpr_e/tpr_e.htm.
114. The USTR Special 301 reports and press releases are available at http://www.ustr.gov. The annual U.S. National Trade Estimates reports review factors affecting U.S. trade interests in a broad range of countries and include

commentaries on the state of IP protection in those countries. For these reports, see the U.S. Trade Compliance Center at http://tcc.export.gov.

115. Industry associations that produce such regular reports include the International Intellectual Property Alliance, the International Federation of Pharmaceutical Manufacturers Associations (IFPMA), the International Chamber of Commerce (ICC), the Pharmaceutical Research and Manufacturers of America (PhRMA), and the Biotech Industries Organization (BIO).
116. See Lopez-Claros et al. (2006).
117. On TRIPS implementation, see Karky (2004), Kongolo (2000*c*), Maskus (2000*b*), Perez (1998), and Sheppard (1999). On the use of TRIPS flexibilities, see Lewis-Lettington and Munyi (2004).
118. See, for example, Astudillo (1999) and Dean (1989).
119. Balat and Loutfi (2004), Marc (2001), and Varella (2004).
120. Shadlen (2006).
121. Correa (2007*c*) includes selected examples of the use of TRIPS flexibilities in a range of developing countries.
122. Consumers International (2006) presents a review of the use of copyright flexibilities in Asia. Musungu and Oh (2006) surveys the use of TRIPS flexibilities in the area of public health in forty-nine developing countries.
123. Thorpe (2002) surveys the use of a broad range of TRIPS flexibilities up until 2000. Sell (1998) and Sheppard (1999) each present a review of TRIPS implementation up until 1998.

2

Developing Countries in the Global IP System

The history of the global intellectual property (IP) system set the political backdrop for developing country responses to TRIPS. This chapter traces how developing countries participated in the international IP system through three phases, from the colonial era up until the close of the Uruguay Round.

The first formal encounters between developing countries, Western concepts of IP, and international IP rules began during colonial era. As colonial powers imposed their respective legal regimes in their colonies, variation in the IP regimes of developing countries emerged.

A second phase began in the post-colonial era. In the late 1960s, a distinct developing country discourse on international IP regulation emerged, led by countries in the Americas and India in favour of reforms that would advance their industrialization, and boost access to technologies and knowledge. While there were regional differences in the approach developing countries took to IP regulation, most national IP systems continued to be dominated by foreign commercial priorities. Local expertise and institutional capacity to manage IP systems were generally weak.

In the mid-1980s, developing countries faced counter-pressures from developed countries and knowledge-based multinational companies to agree to the inclusion of strengthened international IP commitments in the multilateral trading system, a prospect they greatly opposed.[1] To break the North–South stand-off, developed countries launched an economic and diplomatic offensive that ultimately forced developing countries to concede. The terms of the TRIPS deal that the supporters won were, however, deeply contested, setting the scene for intense battles over its implementation.

2.1. The Colonial Era: Variation and External Control

In most developing countries, Western conceptions of privately held rights over intellectual assets have no local cultural or legal roots.[2] For many

countries, pre-colonial commercial legal arrangements with European powers marked their first encounter with Western practices related to IP.[3] Subsequently, formal IP laws in developing countries emerged largely from colonial administration.[4] The trajectory of IP laws was, however, not uniform across the developing world. Most notably, the experience of a number of countries in the Americas was distinct from that of many countries in Africa, Asia, and the Pacific.

In Latin America and the Caribbean (LAC), the establishment of national IP laws began in the wake of independence from the Spanish and Portuguese in the early nineteenth century. Several countries in the Americas promulgated formal IP laws far earlier than other developing countries and indeed earlier than many developed countries. In 1809, Brazil followed England, the United States, and France, to become the fourth country to adopt an industrial property law. As with most national laws, Brazil adopted the French Civil Code enacted by Napoleon in 1804 (also known as the Napoleonic Code) as the foundation for IP laws. In 1832, the first Mexican industrial property law was passed (replacing Mexico's first ordinance on industrial property established in 1820 by a Spanish court decree). By the 1850s, eight Latin American countries had formal IP laws, several decades before some developed countries took similar action.[5]

In Africa, Asia, and the Pacific, the formal introduction of IP laws began later in the nineteenth century, and was undertaken by European colonial powers. Spurred on by the 1884 Congress of Berlin, the colonizers moved swiftly to impose new laws, authorities, and institutions throughout their respective territories to regulate their dealings with local populations and their own citizens.[6] In so doing, the major colonial powers, especially France and Great Britain, laid the foundations for an enduring influence on legal development in developing countries and on how law was perceived and understood.[7]

In most of its possessions, the British Empire introduced the whole body of its prevailing law, sometimes supplemented by local ordinances.[8] Under British colonial rule, India acquired a patent law in 1856, long before many European countries. In the early twentieth century, the United Kingdom transplanted its 1911 Copyright Act throughout its Empire including in East Africa, Malaysia, and Nigeria.[9] In the 1930s, for instance, the Federated Malay States, North Borneo, and Sarawak adopted laws based on the same British Copyright Act under pressure from British publishers and collecting societies concerned about the copying of their works.[10]

France also applied its own IP laws to its colonies.[11] While political debates in France impacted upon how some of its laws applied in its colonies, French IP law remained dominant throughout the colonial period. Until 1962, French laws governed patent rights in the majority of francophone African countries, and the French National Institute for Intellectual Property (INPI) served as

the central IP authority. In the Philippines, Spanish rule saw the introduction of Spanish patent law. When the United States assumed control of the Philippines in 1898, the U.S. Patent and Trademarks Office examined its patent applications according to U.S. law. The trajectory of Korean patent law was similarly externally driven. Under Japanese occupation, Korea's patent law was replaced by Japan's law in 1910. Then, under U.S. military administration, U.S. patent law was transplanted to Korea in 1946. In countries under the influence of the former Soviet Union after the Second World War, such as Vietnam, Soviet laws served as the model for IP laws.[12]

Across the developing world, colonial IP laws embodied concepts alien to many traditional and indigenous approaches to the stewardship of ideas, knowledge, and innovation, and did little to incorporate them.[13] For colonial powers keen to 'civilize' new subjects, the imposition of their laws was considered a precondition for progress.[14] Colonial administrators held 'customary' or 'traditional' laws of their dominions in low regard, particularly because they did not serve the commercial interests of colonizers determined to extract as much wealth from the colonies as they could.[15] While the approach colonial powers took to existing customary laws differed, they were equally disinclined to tailor laws to build innovation and technological capacity in their colonies. Colonial legal systems also failed to build either local IP expertise or an IP 'culture' among their subjects. In francophone Africa, for instance, France supplied legal experts and expertise from the *métropole*, devoting little attention to training colonial subjects in matters of legal administration in general and far less in the area of IP. While the British had a greater emphasis on socializing the legal profession in its colonies and generating an English legal culture, this practice rarely extended to the realm of IP, which remained largely administered from London. India was a notable exception in that colonial administrators did take measures to foster the development of a cadre of local IP experts.

The first contact of developing countries with *international* IP law began in the late nineteenth century with the forging of the first multilateral IP agreements,[16] namely the 1883 International Convention for the Protection of Industrial Property (the Paris Convention)[17] and the 1886 Berne Convention for the Protection of Literary and Artistic Works (the Berne Convention).[18] Together, these two treaties were designed to enhance the degree of protection that IP holders enjoyed in foreign jurisdictions[19] and to replace the loose network of reciprocal IP arrangements that European powers had previously included in some of their bilateral commercial treaties.[20] The cornerstone of both the Paris and Berne Conventions is the principle of National Treatment, which provides that signatory countries shall extend to foreign nationals the same advantages, rights, and legal remedies against infringement as enjoyed by their own nationals. In 1893, the secretariats of the Berne and Paris Conventions were merged to form the United International Bureaux for

Intellectual Property Protection (BIRPI), the predecessor of the World Intellectual Property Organization (WIPO).

Only a handful of developing countries were among the original signatories of the Berne and Paris Conventions and fewer participated in their negotiation.[21] Of the twelve countries that participated in the original Berne negotiations (two as observers), only three countries now classified as developing were present, namely Haiti, Liberia, and Tunisia. In the case of the Paris Convention, only Brazil, Ecuador, El Salvador, and Guatemala were founding members of the Union, along with Tunisia which became a member through adherence as a French protectorate.[22] Notably, almost half of the original signatories to the Paris Convention lacked national patent regimes at the time of their ratification, including Ecuador, El Salvador, and Guatemala, Serbia, Switzerland, and the Netherlands.[23] The three former countries left the Paris Union in 1886, 1887, and 1895 respectively, only rejoining more than 100 years later with the adoption of TRIPS.

The reach of the Berne and Paris Conventions gradually extended across the developing world, primarily through the accessions of the major colonial powers (France, Germany, Italy, Belgium, Spain, and the United Kingdom).[24] Using Article 19 of the Berne Convention (the so-called colonial clause), European powers included their vast colonial holdings of territories, colonies, and protectorates in the terms of their respective accessions.[25] In 1914, the addition of a further two colonial powers to the Berne system, Portugal and the Netherlands, further extended the global reach of international IP law.[26] Only two countries from the Americas joined the Berne Convention: Brazil in 1922 and Canada in 1928. Instead, a distinct inter-American approach to IP protection emerged among Latin American and Caribbean countries and the United States.[27] Several inter-American treaties on copyright were adopted between 1889 and 1946 (namely, the Montevideo, Mexico, Rio, Buenos Aires, Caracas, Havana, and Washington Conventions).[28] Meanwhile, two further international IP treaties came into force: the 1891 Madrid Agreement concerning the international registration of trademarks and the 1925 Hague Agreement on the international deposit of industrial designs.

2.2. The Post-colonial Era: Reform and Resistance

2.2.1. *Variation in Post-colonial Reforms*

With decolonization in the 1950s and 1960s, the diversity of approaches to IP law among developing countries continued. Despite independence, most developing countries maintained strong policy and legal links with their formal colonizers, particularly those countries that emerged from colonization with weak and fragile governments.

In many newly sovereign countries, IP laws promulgated after independence still closely resembled earlier colonial laws or those of former colonial powers. Most former British colonies and dominions, for instance, enacted copyright laws based on the same 1911 British Copyright Act that had served as the foundation for their colonial laws.[29] In Lesotho, for instance, Britain's 1919 Patents, Trade Marks, and Designs Protection Proclamation operated until 1989. In most anglophone African countries, governments re-registered patents already approved in the United Kingdom, often irrespective of whether such patents were consistent with their new national patent laws.[30] In francophone Africa, many countries adopted copyright laws that replicated those of France at the time and in some cases simply kept prior French laws in place.[31] Despite obtaining independence in 1968, Mauritius continued to rely on the French Trade Marks Act (1968) and Patents Act (1975) for over twenty years. Upon acquiring independence in 1947, the Philippines created an independent patent system but modelled it on U.S. patent law.[32]

Across Africa, regional arrangements facilitated the enduring influence of former colonial powers on IP laws. In September 1962, twelve francophone African countries signed the Libreville Agreement which established a regional framework for industrial protection largely based on French legislation and created the African and Malagasy Patent Rights Authority (OAMPI).[33] The Agreement was updated in 1977 at which time OAMPI became the African Intellectual Property Organization (OAPI), but French influence on the legal provisions in the Agreement and on national copyright laws continued.[34] (See Chapter 7.)

Anglophone African countries followed suit in the 1970s. A regional seminar on patents and copyright held in Nairobi recommended the pooling of national resources on industrial property and the creation of a regional organization. In 1973, WIPO and the United Nations Economic Commission for Africa (UNECA) moved this agenda forward, responding to a formal request from anglophone African countries for assistance.[35] Following meetings at the UNECA headquarters in Ethiopia and at WIPO in Geneva, a draft agreement on the creation of the Industrial Property Organization for English-speaking Africa (ESARIPO) was prepared and adopted in 1976 by a diplomatic conference in Lusaka, Zambia. The ECA and WIPO served jointly as the Secretariat of ESARIPO until 1981 when the organization established an independent Secretariat. In 1985, ESARIPO members amended the Lusaka Agreement to open membership to all African countries and became the African Regional Industrial Property Organization (ARIPO). While the OAPI system serves as the equivalent of a regional IP law for most aspects of IP and derives primarily from French IP laws, the ARIPO system coexists with the national IP laws in its member states and draws primarily from British IP law.[36] The scope of ARIPO's activities subsequently expanded from industrial property to include traditional knowledge, copyright, genetic resources, and

expressions of folklore knowledge, prompting a further name change to the African Regional Intellectual Property Organization (ARIPO).

By contrast, in the Americas and some Asian countries, the era of decolonization sparked efforts to substantially revise their IP laws and related policies. In the Americas, countries focused on reforming their own prior laws. Convinced that governments must play a central role in advancing national development, these countries adopted policies with an eye to building domestic industrial capacity and shifting their comparative advantage in the international economy.[37] Common strategies deployed by Argentina, Brazil, Colombia, Mexico, and Peru included import controls to protect domestic markets, subsidies to channel investment into new sectors, regulations on foreign investment to spur backwards linkages and technology transfer, and the reform of IP regimes to make modern technologies cheaper and foreign innovations more widely available. Specific IP reforms included restrictions on the private rights of (largely foreign) patent holders and licensing practices that were more favourable to local producers.[38]

The approach adopted by the Andean Community, established in 1969 by Chile, Colombia, Bolivia, Ecuador, and Peru, exemplified the 'reformist' agenda.[39] United by a joint commitment to industrial development and deeper regional integration, the Andean countries adopted common rules on foreign direct investment (FDI), IP (including licences and royalties), and technology transfer.[40] The Andean Community's Decision 24, adopted in 1970, was the centrepiece of this approach.[41] The Decision set forth a series of performance requirements for foreign investors and stipulated that all contracts covering technology imports, patents, and trademarks be submitted to member states for examination and approval. In Colombia, for instance, the criteria for evaluating technology contracts included consideration of the potentials effects on the national balance of payments and employment.[42] A significant additional element of the Andean approach was that members were barred from unilaterally forging IP agreements with third countries or with international organizations (IOs) that were considered contrary to the common IP policies.[43] The practical implication was that no individual Andean country could join the Paris Union while Decision 24 was in force.[44]

Meanwhile in Asia, the newly independent Indian government sought the advice of two national expert committees on appropriate reforms to its patent system.[45] The Patent Enquiry Committee (1948–50) concluded that, 'the Indian patent system has failed in its main purpose, namely to stimulate inventions among Indians and to encourage the development and exploitation of new inventions for industrial purposes in the country so as to secure the benefits thereof to the largest section of the public'.[46] Later, the Ayyangar Committee (1957–9) noted that 80 to 90 per cent of patents in India were held by foreigners. The Committee argued that this limited the affordability and accessibility of goods in India while enabling foreigners to gain monopolistic

control of the local market.[47] On the advice of these two committees, India reformed its IP laws to better address its specific social priorities (e.g. increased access to medicines at lower prices), economic realities (e.g. low domestic capacity for research and development (R&D)), and national development priorities (e.g. building national industrial capacity, fostering R&D in areas of national significance, and rural development).[48]

The reformist efforts by some developing countries to tailor IP laws to national priorities were exemplified by their approach to IP protection for pharmaceuticals. In 1970, India adopted a new Patent Law which allowed patents on the methods or processes related to new medicines but not on medicines themselves. The new law also limited the term of patents in areas of social concern, such as food and health, to seven years (in contrast to fourteen years for other inventions), including for pharmaceutical processes. This law then became the legal foundation for India's generic drug industry.[49] Brazil, Mexico, and Argentina similarly lowered standards of patent protection to stimulate local production of generic medicines. From 1971 to 1996, Brazil did not, for example, permit patents on chemical products or on pharmaceutical and nutritional processes and products.[50]

Importantly, the revised IP laws of the 'reformist' developing countries did not diverge radically from prevailing practice in developed countries. Indeed, IP standards among developed countries also varied considerably at that time.[51] Through legislative or procedural means, many developed countries favoured domestic IP owners over foreigners.[52] There was diversity in the scope and term of IP rights and also in the range of exceptions to patentability. Notably, in the 1970s, no other country in the world beyond the United States granted protection for pharmaceutical products. The IP policies of reformist developing countries were nonetheless unpopular, particularly among pharmaceutical cartels in developed countries which had hitherto dominated the international market for medicines.[53]

2.2.2. *The Rise of Developing Country Voices for Reform of International IP Rules*

With the end of the colonial era, the growth in the number of sovereign developing countries resulted in an expanding membership of international IP agreements. Developing country membership of the Paris Union grew from three to fifteen between 1900 and 1958, and then to forty-four by 1973.[54] African countries were the swiftest to join the international IP system. Egypt, Morocco, and Tunisia, for instance, became members of the Paris Union before 1960, followed by a further twenty-two African country members by 1975. Membership of the Berne Convention also grew. BIPRI moved swiftly to facilitate a system whereby newly independent states in Africa and Asia that were no longer bound by Berne's colonial clause could issue 'declarations

of continued adherence'.[55] Through such declarations, and also sometimes by virtue of customary law, the Berne Convention continued to apply in many countries on the same terms as in the pre-independence accession of the former colonial power. The automatism and formalism of this process forestalled careful reflection among new signatories as to the alignment of these agreements with their national interests.[56] Reflecting on the accession of eleven francophone African countries to the Berne Convention between 1962 and 1964, one critic argues persuasively that in the aftermath of independence, these countries were 'so totally dependent economically and culturally upon France (and Belgium) and so inexperienced in copyright matters that their adherence was, in effect, politically dictated by the "mother country"'.[57]

The response of developing countries to the international IP system in the post-colonial era also varied by region. A range of larger developing countries delayed their adherence to the international IP conventions. In the Americas, governments were sceptical of the merits of international IP agreements and proceeded cautiously.[58] Bangladesh, China, India, Malaysia, Pakistan, Korea, Sudan, and Thailand all joined the Paris Union only in the 1980s. India became a member in 1998 and Pakistan in 2004. In 1970, only eight countries from Latin America and the Caribbean were members of the Paris Union: Argentina, Brazil, Cuba, the Dominican Republic, Haiti, Mexico, Trinidad and Tobago, and Uruguay. The majority of developing countries in the Americas postponed adherence to the Paris Convention until the 1990s after the adoption of TRIPS.

In addition, most Latin American countries also declined to join the Berne Convention in part because they already adhered to inter-American treaties regulating copyright. Further, like some of the newly independent states no longer bound by the Berne Convention, they were reluctant to join what they perceived as a developed country grouping, that demanded standards they considered too high. In 1970, only Argentina, Brazil, Mexico, and Uruguay from LAC were members of the Berne Convention (most joined only post-TRIPS).[59] Instead, most LAC countries joined the United Nations Educational, Scientific and Cultural Organization's (UNESCO) 1952 Universal Copyright Convention (UCC).[60] The UCC emerged as an alternative to Berne, bringing developing countries together with the Soviet Union and the United States[61], neither of which intended to adhere to the Berne Convention but were interested in an international system for copyright protection. The UCC regime was less protective than Berne but attracted more signatories.[62]

Meanwhile, to advance specific commercial interests, developed countries pushed for a growing number of international IP agreements. Between 1957 and 1961, four new international treaties were concluded, covering issues including the classification of marks, and the protection of geographical indications, performances and broadcasts, plant varieties (see Appendix 2).

In 1957, for instance, France hosted the first preparatory meetings for a new treaty to protect new plant varieties at the prompting of commercial plant breeders and the International Chamber of Commerce (ICC). Beginning in the 1920s and 1930s, several European countries had introduced distinct *sui generis* legislation, separate from patent law, for the protection of so-called breeders' rights.[63] The result of international talks emerged in 1961 in Paris, when six European countries founded the International Convention for the Protection of New Varieties of Plants which in turn established an International Union (UPOV).[64] The Convention provides exclusive property rights to breeders of new plant varieties for a given period of time and came into force in 1968. The UPOV Convention was subsequently revised several times, each time strengthening the protection available to plant breeders.[65]

From the 1960s onward, the Andean countries, Argentina, and Brazil led the assertion of a distinct developing country voice on international IP regulation. In 1961, Brazil tabled a first proposal on patents and developing countries at the UN General Assembly. The proposal resulted in a General Assembly Resolution calling on the UN Secretary General to prepare a study that would include analysis of the effects of patents on developing country economies and a survey of patent legislation.[66] Concerned about the progressive strengthening of the Paris Convention since its inception,[67] Brazil's goal was to use the Resolution and subsequent UN report to push for revisions to the Convention that would better address the special needs of developing countries.[68]

Developing countries were also active in promoting reforms of international copyright treaties in the 1960s. Led by India, they argued that their ability to improve mass education was limited by publishing cartels and the high royalties and licensing fees demanded by developed country copyright holders. This concern culminated in a campaign to revise the Berne Convention and the UCC to increase their access to information, literature, and artistic works.[69]

This growing activism provoked concern in BIRPI and among its developed country members that developing countries might challenge the agency's primacy on international IP issues and push for other parts of the international system, such as the UN Economic and Social Council (ECOSOC), to play a greater role.[70] In 1962, keen to attract a greater number of developing countries in what was largely a 'developed country club', BIRPI's members established a Committee of Governmental Experts charged with considering structural and administrative reforms that would facilitate its transformation into a fully-fledged international organization and its incorporation into the UN system.[71]

In 1964, the UN published its response to the 1961 Resolution, highlighting a range of challenges for developing countries with respect to the patent system.[72] The report demurred on the question of holding an international

conference to examine problems related to patents. Developing countries nonetheless continued to push for reform of the major IP conventions.[73]

In 1966, the nine developing countries[74] attending discussions on the reform of BIRPI successfully ensured that membership of the proposed new organization would not require accession to either of its two core conventions (Paris and Berne).[75] In 1967, the Convention establishing the World Intellectual Property Organization (WIPO) was approved at the Stockholm Diplomatic Conference. At the same meeting, after much wrangling between developed and developing countries, a Protocol was added to both the Berne Convention and the UCC, extending selected special rights to developing countries to limit the rights of authors and publishers in the area of translation and reproduction.[76] Concerns from copyright holders in developed countries, however, prevented the ratification of the Berne Protocol. A further four years of intense negotiations yielded a less ambitious Appendix to the Berne Convention (the so-called Paris revisions) which grants developing countries special permissions to issue compulsory licences for the translation and reproduction of copyrighted works, but establishes more restrictive conditions than the original Protocol.[77] Subsequent use of the Appendix by developing countries was further constrained by the complicated procedures it established for issuing compulsory licences.[78]

Meanwhile, the call for reform of the Paris Convention intensified.[79] In the 1970s, nationals of developing countries held only around 1 per cent of the world's 3.5 million patents.[80] As net technology-importing countries, developing countries contended that the granting of monopoly IP rights in their markets favoured the commercial strategies of foreign enterprises over national interests.[81] Indeed, the evidence showed that 80 per cent of patents granted worldwide at that time were owned by major corporations from five industrialized countries.[82] Further, over 80 per cent of the patents in force in developing countries were held by foreigners and registered on the basis of research conducted elsewhere.[83] Developing countries thus argued that international patent rules were intrinsically unbalanced in favour of developed countries.[84] They also questioned the purported links between stronger IP protection and increased domestic innovation, noting that even where patents were granted in their countries, 'a very small number were actually used in domestic production'.[85] In addition, they contended that the monopoly IP rights frustrated competition and made many technologies unaffordable in their markets.

At the United Nations, the developing country call for more development-friendly international regimes extended far beyond the IP arena. In 1964, they had already achieved the establishment of the United Nations Conference on Trade and Development (UNCTAD). In addition, they succeeded in pushing for the incorporation of the principle of special and differential treatment, and other provisions designed to favour developing countries, in the General

Agreement on Tariffs and Trade (GATT).[86] In 1970, developing countries achieved a UN General Assembly Resolution on an 'International Development Strategy for the Second UN Development Decade',[87] which included a call for a programme to promote technology transfer, including a 'review of the international conventions on patents'.[88] In 1972, Latin American countries pushed the case for reform at a regional conference on science and technology organized by the Organization of American States (OAS) in Brazil.[89] In the resulting 'Consensus of Brasilia', governments claimed that IP regimes had 'become inadequate and have been exploited by technology exporters to impose consumption patterns and obtain production, distribution, and trade privileges'.[90] The same year, developing countries called on UNCTAD for an update of the UN's 1964 study to further improve understanding of the role of the international patent system in technology transfer. In 1973, in a report to ECOSOC on the relationship between WIPO and the UN, the WIPO Director General reported his view that 'it would probably be more practical to concentrate on new international instruments which could be better geared to the solution of some problems of transfer of technology, restrictive business practices, etc.'.[91] Citing the 1971 Paris revisions to the Berne Convention as a precedent, however, the Director General did nonetheless concede that 'if a revision of existing conventions would appear more desirable, and feasible, such revision, even if substantial, would be possible'.[92]

The year 1973 also marked the consolidation of developing country efforts to incorporate their reformist agenda for the international IP system into a broader call for fairer international economic relations. Developing countries launched their agenda for a New International Economic Order (NIEO) at the 1973 Summit Conference of Non-Aligned Nations held in Algiers. In 1974, when the global oil crisis shifted the power dynamics at the UN in their favour, developing countries seized the opportunity to secure the General Assembly's adoption of a 'Declaration and Program of Action on the NIEO',[93] as well as a UN Charter of Economic Rights and Duties of States.[94]

The NIEO agenda included specific proposals to promote international cooperation in science and technology, industrialization of developing countries, and fairer terms for technology transfer. Reflecting their concern about the unequal global distribution of technology ownership, developing countries achieved statements in the UN Charter affirming that '[e]very State has the right to benefit from the advances and developments in science and technology for the acceleration of its economic and social development' and that all countries should cooperate to develop 'internationally accepted guidelines or regulations for the transfer of technology'.[95]

To further advance their agenda on technology transfer, developing countries worked in the 1970s to empower several parts of the UN system, including UNCTAD, ECOSOC, and the UN Industrial Development Organization (UNIDO). At UNCTAD, developing countries pushed for a Code of

Conduct on the Transfer of Technology (CCTT) to promote technology transfer under more advantageous terms.[96] Developing countries also called for a UN Code of Conduct on Transnational Corporations (TNCs) to better regulate the monopoly power of transnational corporations and their contribution to national development.[97] While the push for the Codes ultimately failed, developing countries used the negotiations to question the scope of rights, including IP rights, extended to foreign individuals and companies active within their borders.[98] In addition, throughout the negotiations for the 1982 UN Convention on the Law of the Sea, developing countries pushed for commitments to technology transfer on fair and reasonable terms and conditions.[99]

In 1974, WIPO concluded an agreement with the UN, thereby establishing itself as a UN-specialized agency and securing recognition as the primary UN actor in the area of IP.[100] Developing countries used the agreement as an opportunity to make WIPO's mandate and activities more strongly informed by the development agenda they had advanced in the UN system. The original 1967 Convention establishing WIPO had emphasized the desire of members to encourage 'creative activity' by promoting 'the protection of intellectual property throughout the world', and by modernizing and improving the efficiency of the administration of its conventions. The 1974 Agreement between WIPO and the UN assigns WIPO broader responsibilities, namely 'for promoting creative intellectual activity and for facilitating the transfer of technology related to industrial property to the developing countries in order to accelerate economic, social, and cultural development'.[101]

In 1975, UNCTAD released its report on the role of the international patent system in the transfer of technology to developing countries.[102] Compared to the earlier 1964 ECOSOC study, this report advanced more assertive conclusions on the need for the revision of international conventions.[103] While WIPO was involved in the study, largely to show it could respond to development concerns, its leadership remained cautious about the need for reform. Developing countries used the 1975 UN General Assembly to advance a resolution calling for the reform of the Paris Convention to ensure that it met the 'special needs of developing countries'.[104] Soon thereafter, WIPO established an Ad Hoc Group of Governmental Experts on the Revision of the Paris Convention. In 1977, WIPO's members adopted a Declaration of Objectives to set the framework for the subsequent Diplomatic Conference.[105] The Declaration emphasized that industrial property systems should help advance the industrialization of developing countries, including by improving access to technology, the terms of technology transfer, the actual working of inventions in developing countries, and greater inventive activity within their borders.[106] When governments formally began the review process in 1980, the Paris Union became a 'battleground' between developed and developing countries.[107]

2.3. The Counteroffensive for Stronger IP Protection

In the 1980s, a developed country counteroffensive to strengthen international IP protection began to build momentum. As concerns about waning competitiveness grew, developed country governments attached increasing importance to the strategic role of technology and the protection of intangible assets for their economic growth and trade prospects.[108]

In the United States, over 25 per cent of exports in the 1980s contained a high IP component (chemicals, books, movies, records, electrical equipment, and computers) compared to 10 per cent in the post-war period.[109] While rapid advances in information and communication technologies had increased opportunities for international trade in knowledge-based goods, they also multiplied the possibilities for imitation, copying, and unauthorized use of technologies. Together these factors altered the economic dynamics of the so-called content and R&D-based industries.[110] U.S. corporations drew attention to a range of challenges posed by weak protection of IP within and beyond national borders, claiming that stronger rights were central to their business model both at home and abroad.[111] Initially, the United States and Europe focused on threats from each other and from the growing industrial strength of the Japanese economy. The spotlight then turned to the domestic IP policies of new competitors perceived to endanger returns from trade and investment in IP-related goods and services.[112] As the U.S. trade deficit burgeoned, competition from cheaper products produced in newly industrializing countries in East and Southeast Asia, such as Korea and Taiwan, became a core concern.[113]

Facing cuts to their profit margins, foreign export markets, and also domestic market shares, U.S. industries complained that competitors were 'free-riding' on their R&D investments. They called on the U.S. government to help halt imitation and reverse engineering abroad. Like-minded leaders of major U.S. corporations then mobilized to consolidate a U.S. agenda for a trade-based conception of IP rights and to integrate IP into international trade policies. Key actors included the International Intellectual Property Alliance, the Pharmaceutical Manufacturers Association, the Chemical Manufacturers Association, the National Agricultural Chemicals Association, the Motor Equipment Manufacturers Association, the Auto Exports Council, the International Anti-counterfeiting Coalition, and the Semiconductor Industry Association.[114] Their push to link trade and IP was facilitated by reforms to U.S. trade law and USTR, which gave U.S. corporations even greater access to, and influence on, the U.S. trade policymaking process.[115] The international IP agenda of the U.S. government was firmly captured by large IP producers and exporters (even as debates continued to erupt in U.S. Congress about the appropriate balance in national IP laws and policies).[116]

A core concern of developed country multinationals was that IP laws and practices in developing countries favoured domestic IP holders over foreigners and offered little effective protection to non-national IP holders.[117] Pharmaceutical companies facing competitive threats from cheaper generic versions of medicines complained about the narrow scope and short term of patent protection in many developing countries, lack of transparency in the patent-granting process, and limited legal security in respect of the enforcement of patent rights.[118] Together, representatives of companies from many different sectors alleged that developing countries lacked vigilance in preventing the production of counterfeit goods and the unauthorized use of trademarks.[119] Companies in the entertainment industry charged that developing countries were too tolerant of piracy of sound recordings and video, citing losses of billions of dollars per year.[120]

U.S. and European multinational companies were particularly frustrated by the diversity of the strength and duration of IP rights around the world (see Appendix 3). Of the ninety-eight developed and developing country members of the Paris Convention, forty-nine excluded pharmaceutical products from protection, forty-five excluded animal varieties, forty-four excluded methods of treatment, forty-four excluded plant varieties, forty-two excluded biological processes for producing animal or plant varieties, thirty-five excluded food products, thirty-two excluded computer programs, and twenty-two excluded chemical products.[121] Many developing countries still had in place some or all of the exceptions that most developed countries had abandoned ten to twenty years earlier. Countries such as India, China, and Vietnam exempted pharmaceutical products, food products, *and* chemicals from patentability.[122] Importantly, the picture varied among developing countries. A large proportion of the poorest developing countries, particularly those which had inherited IP laws from their colonizers, did not incorporate many of the IP exceptions, exclusions, and limitations found elsewhere. A core priority of large multinational companies was to ensure that the steps that countries such as India, Brazil, Argentina, and Mexico had taken to lower IP protection would not set a precedent for other countries to follow.

Existing international IP agreements offered concerned multinational companies little recourse. Many developing countries had not yet acceded to the various WIPO conventions, which in any case were widely acknowledged to be 'toothless'.[123] While developing countries hoped to use revisions to WIPO's Paris Convention to 'reclaim some of the flexibilities lost in the numerous and substantial revisions' since 1883 (such as the diminishing scope for countries to use compulsory licensing and revoke patents), developed countries wanted the revision process to further strengthen the rights of patent holders.[124] At the ensuing negotiations held between 1981 and 1983, 'developing countries were as intent on lowering the international minimum standards of

patent protection as the developed countries were resolved to elevate the same standards'.[125] Especially contentious were developing country proposals to strengthen their ability to use compulsory licences.[126] The United States considered such proposals to be 'tantamount to expropriation'[127] of the rights of U.S. IP holders (despite the fact that the U.S. government itself made use of compulsory licences in several areas it considered critical to the national interest).[128] Developing countries achieved little headway. Their efforts were further frustrated when the WIPO Director General introduced a proposal to address issues of concern to developed countries through a Complementary Agreement to the Paris Convention, thereby countering the push for reform of the main convention. An Expert Group appointed to consider WIPO's proposal expanded its mandate to include consideration of increased substantive standards for some aspects of patent protection (e.g. the minimum duration of rights, the scope of patentability, and enforcement).[129] In 1991, a Diplomatic Conference for the proposed Complementary Agreement was convened in The Hague. Ultimately a North–South stalement, combined with important differences among developed countries (on issues such as 'first to file' versus 'first to invent'), stalled this set of negotiations.[130]

Meanwhile, having lost confidence in WIPO as the prime forum for negotiation of international IP rules and improving their enforcement, U.S. officials had begun to pursue other tools for strengthening international IP regulation, most notably in the multilateral trading system[131] (Developed countries had hitherto called upon the GATT system to address only IP matters specifically related to international trade in counterfeit goods).[132]

2.3.1. *Unilateral Pressures on Developing Countries*

In the early 1980s, the United States and the European Union intensified the process of bolstering their respective trade laws, equipping themselves with new unilateral tools to push for stronger IP protection in developing countries.[133] A combination of both sticks (unilateral threats) and carrots (promises of new market access for products of interest to developing countries) were used. Simultaneously, these tools were harnessed to pressure developing countries to accept the inclusion of IP rules in the GATT regime.

In 1981, the Caribbean Basic Economic Recovery Act elevated IP protection to one of the principle priorities of U.S. trade policy. In 1984, the U.S. Congress bolstered Section 301 of the U.S. Trade and Tariff Act, authorizing the U.S. administration to link its trading partners' trade benefits to performance in the area of IP protection.[134] The Act required USTR to identify countries that denied adequate and effective IP protection, to specify 'priority countries' that were the most important transgressors and failed to undertake or make progress in negotiations with the USTR, and to initiate investigations which could lead to remedial action. Also in 1984, the Generalized System of

Preferences (GSP) Renewal Act established IP protection as one of the criteria governing the eligibility of countries for GSP treatment of their exports to the United States authorizing the President to withdraw GSP tariff concessions from a developing country considered to have 'weak' IP protection.[135] At the time of the renewal, some 140 developing countries received U.S. GSP benefits.[136] These included many of the countries that would become key players in the TRIPS discussions, such as Argentina, Brazil, India, and South Korea. Given the great number of developing countries in the GSP system, the inclusion of IP considerations as one of the criteria for trade benefits gave the United States substantial leverage to push for IP improvements across the developing world. Developing countries expressed strong concerns. At a meeting of the GATT Committee on Trade and Development in November 1985, some developing country representatives criticized the U.S. approach as 'quite alien to the spirit and purpose' of the GSP system, namely to help them gain access to markets.[137]

Later in the 1980s, the U.S. Congress further expanded the administration's tool kit for strengthening IP protection at home and abroad. The 1988 Process Patents Amendment Act provided that buyers importing any products into the U.S. domestic market made in violation of U.S. IP laws would be liable to civil suit by the U.S. holders of the violated IP rights.[138] The same year, the Omnibus Trade and Competitiveness Act introduced further changes to the 1974 Trade Act. A partial amendment to Section 337 of the Act allowed for the complete exclusion from the United States of any import manufactured in a way that violated the IP rights held by U.S. individuals or firms under domestic law, without any requirement of injury to the U.S. producer.[139] The so-called Special 301 provisions of the Act also gave the U.S. government new tools for applying pressure on countries for practices that violated IP rights protected under domestic U.S. law (irrespective of whether those products entered into the United States). The Special 301 provisions instructed USTR to remedy 'unfair' trade practices through the use of monitoring and the threat or actual imposition of trade sanctions.

In line with its Special 301 powers, USTR began to conduct annual reviews of the IP practices of U.S. trading partners, identifying countries that failed to provide adequate and effective IP protection, or fair and equitable market access for U.S. nationals relying on IP. It then categorized countries according to its assessment of how damaging their alleged malfeasances were to U.S. commercial interests. Priority Foreign Countries were those that USTR deemed to have the most onerous or egregious policies with the greatest adverse impact on U.S. IP right holders or products. These countries were subject to accelerated investigations and possible sanctions. Alternatively, USTR placed countries on its Priority Watch List (for countries that did not provide adequate IP protection and enforcement or market access for U.S. persons relying on IP protection) or Watch List (for countries USTR believed merited bilateral

attention to address underlying IP problems). Critically, the 1988 revisions also made resisting U.S. IP priorities in a multilateral forum one of conditions that could lead to designation as a Priority Foreign Country and therefore subject to further investigation.

The Special 301 provisions provoked an outcry from India and Brazil, and critical commentary from leading trade law experts who challenged the legality of U.S. Special 301 actions.[140] The European Communities initiated a GATT Panel which found in 1989 that Section 337 of the U.S. Trade Act violated GATT National Treatment obligations because it provided weaker procedural protection to foreigners than to U.S. firms and individuals accused of violating U.S. IP laws.[141] Leading trade scholars derided Special 301 as 'aggressively extraterritorial' on the grounds that it 'does not refer to any set of norms or principles in order to define adequate intellectual property protection among U.S. trade partners – the implicit assumption being that any level of protection inferior to that provided by U.S. law is an unfair trade practice'.[142]

Meanwhile, the European Union also developed tools to link IP protection to trade benefits. In 1984, a Council Regulation empowered the European Commission to engage in trade retaliation against 'illicit commercial practices' (defined as violations of 'international law or generally accepted rules') by non-EU countries that affected EU economic interests.[143] In contrast to U.S. practice, the European instrument focused primarily on violations of obligations in international treaties, such as the Berne and Paris Conventions. The Regulation was rarely used, however, in part because the European Commission was unable to build consensus among members for its deployment.[144] The Commission did nonetheless take some bilateral action on IP issues, including the suspension of its GSP concessions to Korea.[145]

The United States and Europe also worked simultaneously to include IP provisions in a growing network of bilateral and regional agreements. In the mid-1980s, U.S. bilateral trade agreements with Israel and Vietnam were among the first to include IP commitments. The United States also negotiated a first generation of IP-specific bilateral agreements with Ecuador, China, Korea, the Philippines, Taiwan, and Sri Lanka (which focused mostly on IP enforcement rather than standards) and some twenty bilateral investment treaties (BITS) with developing countries that included provisions related to IP protection.[146] In addition, the United States worked to strengthen IP protection in Latin America through bilateral discussions with ministers and diplomats. Only in Ecuador did these efforts result in a formal bilateral IP agreement.

The European Union's approach was more subtle but still very important. The European Commission, observes Peter Drahos, was a 'quiet free-rider' on U.S. efforts, 'sometimes sending in negotiators to conclude a bilateral agreement on intellectual property with a developing country after U.S. negotiators had brought that country to the negotiating table using the 301 process'.[147]

The combined force of unilateral pressures worked. Between 1985 and 1995, at least eighteen developing countries undertook reforms to strengthen patent protection, namely Argentina, Bangladesh, Benin, Brazil, Burkina Faso, Chile, China (twice), Colombia, Ecuador, Indonesia, the Republic of Korea, Malaysia, Mali, Mexico, Paraguay, Peru, Thailand, and Venezuela.[148]

2.3.2. *The Multilateral Agenda and the TRIPS Negotiations*

Alongside unilateral pressures on developing countries to improve IP protection, the United States worked to strengthen multilateral IP regulation. To advance this goal, the United States embarked on a deliberate effort to shift IP discussions from WIPO to the GATT where U.S. strategists assessed that the prospects for obtaining stronger international IP standards were highest. Compared to WIPO and other UN fora, developing countries were poorly organized in the GATT context. The GATT negotiation process would also gave the United States the possibility to leverage progress on their international IP agenda in exchange for movement on developing country market access priorities. Further, the inclusion of a multilateral IP agreement in the GATT system would enable the United States to use trade remedies to push for stronger IP enforcement.[149] Not surprisingly, developing countries opposed the move to include IP in the Uruguay Round. When the United States raised IP issues in a GATT experts meeting in 1985, countries such as Brazil and India perceived the move as a frontal attack on their efforts to reform international and national IP rules. They insisted that the GATT's purview be limited to trade in goods and argued that WIPO was a more appropriate and competent forum for multilateral IP negotiations.[150]

The United States was not dissuaded. Supported by industry lobbyists, the U.S. government worked to enlist the support of European countries and Japan,[151] as well as a network of economists and legal scholars willing to build the case as to why strengthened IP protection would be good for development. The argument they advanced was that IP protection would help developing countries attract FDI, promote technology transfer, stimulate domestic innovation, and increase their global competitiveness.[152] In Geneva, the United States and the European Union insisted that the inclusion of IP on the Uruguay Round agenda was a necessary concession for launching new trade negotiations.

To overcome developing country opposition to the inclusion of IP in the GATT negotiating agenda, developed countries deployed a full range of carrots and sticks.[153] In September 1985, President Reagan cited Brazil and Korea as indulging in unfair trade practices.[154] Using its GSP Renewal Act, the United States threatened Brazil with trade penalties to pressure it to grant protection for pharmaceutical products and processes. In 1986, the United States extracted IP protections from Korea in a bilateral trade agreement that

they subsequently characterized as a model for TRIPS. By the end of that year, developed countries succeeded in inserting 'trade-related' aspects of IP into the official negotiating agenda set out in the GATT Ministerial Declaration of Punta del Este.[155]

The use of the term '*trade-related aspects of intellectual property*' in the Ministerial Declaration was a negotiated expression that developing countries hoped would help them qualify and limit the scope of subsequent IP negotiations.[156] When the Round began, the question of the scope of IP negotiations was the focus of debate.

In contrast to their activism on IP issues at WIPO and the UN, only a small and loosely coordinated grouping of ten developing countries engaged in IP discussions at the GATT in the early days of the Round. Together, Argentina, Brazil, Cuba, Egypt, India, Nicaragua, Nigeria, Peru, Tanzania, and Yugoslavia[157] continued to insist that there should not be comprehensive IP negotiations within the GATT.[158] Their goal was to narrow the interpretation of the Ministerial mandate, with an eye on limiting discussion to the clarification of existing GATT rules such as those related to border controls and trade in counterfeit goods (GATT Articles 9 and 10 (d)).[159] The remaining developing countries were not involved due to either lack of resources or lack of knowledge of the issues. The developing country efforts to limit the scope of negotiations was swiftly overwhelmed. Between 1987 and 1990, some ninety-seven working documents were submitted to the TRIPS negotiating group, but only nineteen of these came from developing countries.[160]

Determined to move negotiations forward, the United States used unilateral sticks to put pressure on those developing countries active in the GATT negotiations. When USTR announced the first findings of its new Special 301 reviews in 1988, ten developing countries were listed for bilateral attention, five of which were key countries opposing the U.S. IP agenda at the GATT.[161] Brazil and India, the greatest force of resistance in the multilateral negotiations, were placed in the more serious category of Priority Watch List, while Argentina, Egypt, and Yugoslavia were put on the Watch List.[162] In 1987, Mexico was the first country for which the U.S. supplemented Special 301 threats with the actual withdrawal of GSP benefits. The United States then struck Brazil just before the December 1988 mid-term review of the Uruguay Round,[163] followed by Thailand in 1989.[164] Table 2.1 highlights the scope and intensity of U.S. bilateral trade pressures on those twenty or so developing countries which were most active during the TRIPS negotiations.

The momentum towards TRIPS accelerated as collaboration between industry and developed country governments intensified.[165] On the U.S. side, the CEOs of twelve multinationals coordinated to sell the idea of TRIPS to the U.S. Congress and government officials.[166] In her political analysis of the emergence of the U.S. position on TRIPS, Susan Sell documents how the pro-TRIPS agenda of U.S. multinationals became not only the official mandate of

Table 2.1. U.S. trade action against key developing countries active in the GATT negotiations (1985–93)

	1985	1986	1987	1988	1989	1990	1991	1992	1993
Americas									
Argentina				x	x	x	x	x	x
Brazil	x		x	**X**	x	x	x	x	x
Chile				x	x	x	x	x	x
Colombia					x	x	x	x	x
Cuba									
Mexico			**X**		x				
Nicaragua									
Peru								x	x
Uruguay									
Venezuela					x	x	x	x	x
Asia									
Hong Kong*									
India					x	x	x	**X**	x
Indonesia					x	x			
Malaysia					x	x			x
Singapore*									
South Korea*	x			x				x	
Thailand					**X**	x	x	x	x
Africa									
Egypt					x	x	x	x	x
Nigeria									
Tanzania									
Europe									
Yugoslavia					x	x	x	x	x

Source: adapted from Table 1 in Drahos and Braithwaite (2003).

x Countries that were listed, subject to a petition or investigated under the U.S. GSP or Special 301 systems.
X Countries subjected to imposition of trade penalties.
* Countries that received favourable GSP packages as rewards for improved IP protection.

the U.S. government, but also the basis of the final TRIPS text.[167] In 1988, a coalition of business interests from the United States, Japan, and Europe, called the Intellectual Property Committee (IPC), submitted a comprehensive draft of a proposed TRIPS text to their governments.[168] The IPC then led a consensus-building effort to enrol and sustain the support of the United States, the European Commission, and Japan to promote this draft. As support galvanized, meetings of the so-called Friends of Intellectual Property Group took place in Washington and beyond, where the United States circulated further draft texts of a possible agreement.[169]

Despite the mounting pressures, developing countries continued to resist. Even as many developing countries were shifting, albeit often reluctantly, from import substitution to more liberal, export-oriented economic strategies, the push for TRIPS was considered a step too far. The TRIPS agenda, like the structural adjustment reforms advanced by the World Bank and International Monetary Fund (IMF) in the 1980s and 1990s, was perceived as a serious threat to national industrial policies and development.[170] In January 1989, the

Group of 77 developing countries (G77) issued a collective statement in which they described the GATT IP negotiations as an attempt to use IP protection 'as a mere device and instrument for promoting the trade competitive interests of developed countries and their TNCs'.[171] They further argued that developed countries were advancing 'protectionist' IP policies in order to 'safeguard and increase their dominant positions in the world market'.[172] This trend, they contested, would lead progressively 'to the concentration of technological and economic power in the hands of the industrialized countries and in favour of their TNCs and state-owned monopolies', thus perpetuating 'the technological gap between the technological haves and have-nots'.[173]

In the second half of 1989, the negotiations gathered speed. Developed countries submitted several draft negotiating proposals to the GATT Secretariat (first the Europeans, then the United States, Switzerland, and Japan). A core group of fourteen developing countries conceded they would have no choice but to participate more fully in the TRIPS discussions (Argentina, Brazil, Chile, Colombia, Cuba, Egypt, India, Nigeria, Peru, Tanzania, and Uruguay later joined by Pakistan and Zimbabwe).[174] Together, they submitted a detailed proposal designed to minimize attention to substantive standards on IP and to contain the scope of any eventual agreement by focusing on two issues: principles for the use of IP rights, and trade in counterfeit and pirated goods. On the first issue, developing countries emphasized the importance of the public policy objectives underlying national IP systems, the necessity of recognizing such objectives at the international level, and the need to specify some basic principles that could elucidate the application of any standards established in the TRIPS Agreement. Given the diverse needs and levels of development among them, developing countries used the proposal to insist upon the need to respect and safeguard national legal systems and traditions on IP. In addition, the proposal included detailed perspectives on the appropriate scope of patents, compulsory licensing, and the control of anti-competitive practices.[175]

But the TRIPS proponents had already decided among themselves upon the core elements of the Agreement. By early 1990, five draft texts of an agreement had been submitted to the TRIPS negotiators and at the GATT Ministerial that year, the chairman of the negotiations presented a comprehensive proposed text to serve as a basis for future TRIPS discussions.[176]

Developing countries faced increasing difficulty in countering the pro-TRIPS agenda. With the support of the GATT Secretariat, developed countries pushed ahead with a constant series of bilateral discussions, small group consultations, and informal group processes.[177] Around fifteen developing countries were involved in some aspects of these discussions. Only a few countries, notably India, Argentina, and Brazil, were a tenacious presence in the highly technical and legally complex negotiations.[178] Most developing country delegations were comprised of generalist officials from national

trade ministries or Permanent Missions in Geneva rather than IP specialists. Most negotiators thus lacked the legal mastery of the technical details and implications necessary to engage substantively in discussion.[179] 'Negotiation fatigue'[180] overwhelmed many developing country delegations and even the leading negotiators 'came to feel they were wasting their time'.[181]

Meanwhile, the United States and Europe had been working to dilute opposition to negotiations in Geneva by forcing domestic IP reforms at the national level in developing countries and isolating the most defiant countries.[182] They concluded a series of bilateral agreements that strengthened IP protection such that 'accepting TRIPS was no big deal'.[183] Mexico, for example, agreed to IP protections in its negotiations for a North American Free Trade Agreement (NAFTA) with the United States that later served as the template for TRIPS.[184] The United States gave some countries, namely Hong Kong, Singapore, and South Korea, favourable GSP packages as rewards for improved IP protection.[185] 'Hard-line' countries such as Brazil and India were subject to further trade threats.[186] In the face of intense U.S. pressure, the Brazilian President announced in 1990 that he would pursue the IP reforms called for by the United States. With this tentative 'truce' in place, USTR removed its trade measures against Brazil in early July and India subsequently experienced less support from Brazil in the Geneva trade negotiations on IP matters.[187] The United States also launched Special 301 proceedings against India in 1991 for its allegedly inadequate IP standards, followed by trade sanctions in 1992. Although India held out longer than any other country in rejecting TRIPS and also much of the trade liberalization agenda of the Uruguay Round, Indian diplomats eventually tempered their defensive stance in Geneva. In each of the countries targeted by U.S. and EU trade officials, the capacity to resist was undermined by weak coordination between negotiators in Geneva and national capitals and between some of the key developing countries.

In only a few developing countries did domestic political factors come into play during the TRIPS negotiations. Brazil, India, and Argentina were each lobbied by domestic pharmaceutical industries determined to maintain their ability to manufacture and export generic medicines. There were also some first efforts by public health activists from Health Action International (HAI) to sensitize developing country negotiators to public health implications. In addition, India, the Philippines, and Peru each faced campaigns against the prospect of patents on seeds led by NGOs, academics, peasants, and farmers' movements. The same critics also protested against the misappropriation and theft of local genetic resources and traditional knowledge, particularly through the bioprospecting activities of multinational companies.[188] By 1992, global NGO campaigns against biopiracy and patents on life forms were underway, with activists taking up the cause in international negotiations on plant genetic resources at the Food and Agriculture Organization (FAO) and on biological diversity at the Rio Earth Summit.[189] In most developing countries,

however, there were few stakeholders in either industry or civil society that articulated any interests or positions with respect to TRIPS.

Ultimately, developing countries were overwhelmed by developed country pressure. The deal was sealed with the introduction of the 'single undertaking' as a device to help close the Uruguay Round. Developing countries were cornered. In order to gain long-sought improvements in market access for their textiles and agricultural products, they were forced to concede to TRIPS.[190]

2.4. Implementation Amidst Contestation

TRIPS was included as one of the WTO's core agreements despite consistent opposition on the part of developing countries. Less than 20 of the 106 developing country WTO members that are now bound by the Agreement were involved in the negotiations. Most of these countries had limited input into the technical aspects of the discussion and concentrated mainly on containing the Agreement's scope. Upon signing the Agreement, most developing countries thus had poor understanding of its provisions and implications. Only as the push for TRIPS implementation intensified did many developing countries take stock of the extent of their commitments.

Dissatisfaction with TRIPS spurred ongoing debate between developed and developing countries on the terms of the bargain, and laid the foundations for a dynamic interaction between efforts to alter the TRIPS deal and the process of implementation.[191] After several decades of opposition to stronger international IP laws, and amidst concurrent efforts to defend their policy space, what actions did developing countries take to implement TRIPS? Did they take full advantage of the flexibilities available to them? To what extent did developing countries tailor IP laws to reflect national priorities and minimize potential costs? The following chapter highlights the striking variation in how developing countries approached the task of implementing the Agreement they so widely resented.

Notes

1. See Chapter 1, note 3.
2. For background on indigenous, traditional, and community-based approaches to law and the management of intellectual assets, see Dutfield (2004). Ruth Gana (1995) provides a useful overview of how European philosophy influenced the development of IP laws in developing countries. Also see Alford (1993).
3. For a discussion of the European legal influence in Africa before colonialism, see Adewoye (1977: 33–5), Ehrensaft (1972), and Priestly (1969).
4. Okediji (2003*a*: 323).

5. The dates of the first IP laws in these countries were as follows: Cuba (1833), Chile (1844), Venezuela (1842), Paraguay (1845), Colombia (1848), and Argentina (1846). These first countries were followed in the early twentieth century by El Salvador (1901), Honduras (1902), Panama (1905), Dominican Republic (1907), and Bolivia (1916). For further discussion, see Roffe (2007) and Patel (1974).
6. Okediji (2003*a*: 321).
7. Roberts and Mann (1991: 5).
8. Roberts and Mann (1991: 11–24).
9. Gana (1996: 447). Also see Allot (1976) and Geller (1994).
10. Tee (1994).
11. Betts and Asiwaju (1985: 321).
12. Tran (2003).
13. See Kumar (1993: 27, 162), Endeshaw (1996: 151), and Okediji (2003*a*: 335, n. 373 and 374).
14. Endeshaw (1996: 150).
15. Okediji (2003*a*: 322–3).
16. For a history of the first international IP treaties, see Anderfelt (1971), Beier (1984), Coulter (1991), and Gaultier (1997).
17. The Paris Convention addresses the protection of patents and trademarks (commonly referred to together as 'industrial property'), setting some minimum standards for each. See WIPO (1983).
18. See Ricketson (1987).
19. Matthews (2002: 11) and May (2003: 6).
20. European countries sometimes included reciprocal commitments to respect IP in their bilateral commercial treaties. The scope of protection provided was limited and often discriminatory. See Culbertson (1930: 26).
21. The Berne and Paris Conventions began with fourteen and eleven signatories respectively.
22. Other developing countries that joined the Paris Union in its first decades were the Dominican Republic (1890), Mexico (1903), Cuba (1904), Morocco (1917), Lebanon (1924), Syria (1924), and South Africa (1947). See Patel (1974: 13–14).
23. Roffe and Vea (2008) and Schiff (1971).
24. Okediji (2003*a*) and Ricketson (1987).
25. Okediji (2003*a*: 324) and Ricketson (1987: 79).
26. The UK accession, for example, included 'all the colonies and possessions of Her Britannic Majesty'. See Ricketson (1987: 79).
27. Ladas (1938).
28. Totcharova (2006).
29. Kongolo (2000*a*: 269–70).
30. Ibid.
31. Cazenave (1989) and Endeshaw (1996). In Chad, for instance, national regulation of copyright is still governed directly by French law. Chad also belongs to a regional IP agreement, the Bangui Agreement, which includes a complementary regional legal framework for copyright protection. See Chapter 7.
32. Astudillo (1999).

33. See Cazenave (1989). Chapter 7 provides a detailed account of the history of IP protection in Francophone Africa.
34. Ibid.
35. This history draws from ARIPO's website at http://www.aripo.wipo.net/background.html.
36. For further discussion, see Chapter 7.
37. The contribution of state-led approaches to development remains intensely disputed as does the question of the appropriate lessons to draw for contemporary development strategy. See Amsden and Hikino (1994), Amsden (2001), Wade (2003), and World Bank (1988–9).
38. Sell (1998: 80–5) provides a summary of these efforts. For a broader view of IP policies in Latin America at the time, see Correa (1981) and Roffe (2007).
39. The Andean Community of Nations (ANCOM) was called the Andean Pact until the 1969 signing of the Cartagena Agreement. Chile withdrew from ANCOM in 1976. Venezuela joined in 1980 but then withdrew in 2006.
40. See Abbott (1975), Adler (1987), and Remiche (1982).
41. Another element of the ANCOM framework was a foreign investment code that limited foreign ownership and control of domestic enterprises.
42. Baranson (1981).
43. Roffe and Vea (2008).
44. This Decision was repealed in 1991. By 1999, all of the Andean countries had joined the Paris Union.
45. Vedaraman (1972: 43).
46. Government of India (1949).
47. Ayyangar (1959).
48. Ramanna (2005).
49. Roffe (2000).
50. Gontijo (2005).
51. Roffe (1974).
52. May (2003: 6–8) and Matthews (2002: 11).
53. Drahos (2002*b*: 5). In the 1960s, for example, Mexico's success in the manufacture of steroids contributed to the decline of European producers' dominance in that area. See Gereffi (1983).
54. In 2007, the Paris Union had over 170 members, including 115 developing countries (not including Eastern European states or those in the Commonwealth of Independent States).
55. Okediji (2003*a*) and Ricketson (1987: 799–806).
56. Ruth Okediji (2003*a*: 323) emphasizes that the ongoing application of the Berne Convention in former colonies was considered 'presumptively appropriate, necessary and legitimate'. She argues that the prevailing view at the time was that independent statehood gave rise to obligations of ongoing adherence, in large part to protect the interests of citizens of other countries.
57. Lazar (1971: 12).
58. Roffe and Vea (2008).
59. Roffe (2007).
60. Anderfelt (1971).

61. The United States became bound by the Berne Convention only in 1989.
62. The UCC specifies, for instance, that the standard copyright term should be the life of the author plus (at least) twenty-five years whereas the Berne Convention calls for a copyright term of the life of the author plus fifty years.
63. For historical analysis of UPOV, see Andersen (2006*a*: 13) and Fowler (1994: 14).
64. UPOV is an independent intergovernmental organization. Pursuant to an agreement concluded between WIPO and UPOV, the Director General of WIPO is the Secretary General of UPOV, and WIPO provides administrative services to UPOV.
65. The latest revision, the 1991 Act, came into force in 1998.
66. UN General Assembly (1961). Also see Kunz-Hallstein (1979).
67. Roffe (2007).
68. The resolution called for the UN Secretary General's report to consider the advisability of holding an international conference to examine problems related to patents and the special needs of developing countries.
69. Drahos (2002*b*: 4). For a history of these efforts, see Johnson (1970–1), Olian (1974), Ricketson (1987), and Yu (2004). For a critical perspective on the Berne Convention, see Story (2003).
70. Ladas (1975), and Musungu and Dutfield (2003).
71. Bogsch (1992), and Musungu and Dutfield (2003: 4).
72. UNDESA (1964).
73. Patel (1974).
74. In total, thirty-nine member states participated in the second meeting of the Committee of Governmental Experts in 1966. See Patel (1974).
75. Many developing countries postponed their accession to the Paris Union, for instance, until the 1990s after the entry into force of TRIPS (including India and the Andean countries).
76. The Stockholm Protocol enabled developing countries to make special reservations to the Berne Convention in respect of translations, reproduction, broadcasting, and educational use of copyrighted works. Under the Protocol, the translation rights of an author would expire if they were not used for ten years in a particular developing country. The Protocol also permitted developing countries to grant compulsory licences for purposes related to teaching, study, and research, and for translation rights where these had not been used for three years. In addition, developing countries could grant non-exclusive licences for the reproduction for educational or cultural purposes of works if they were not published in that country within three years of publication in the country of origin. See Johnson (1970–1).
77. See Tocups (1982), Story (2003), and UNESCO (1973).
78. Okediji (2003*a*: 328) observes that the Appendix is 'generally acknowledged as a failure in terms of its utility to and use by developing countries'. Between 1971 and 1998, only eight developing countries declared their intention to use the Appendix. There were no further declarations until 2004–6 when a further eleven countries notified WIPO that they intended to avail themselves of rights provided in the Appendix. Notifications aside, subsequent efforts to make actual, practical use of these rights were scarce.

79. For a review of developing country engagement at BIRPI and WIPO, see May (2006*c*).
80. Patel (1989: 978, 980).
81. Roffe and Tesfachew (2001: 381).
82. O'Brien (1974: 30).
83. O'Brien (1974: 30) observes that these patents bore 'no relation whatsoever to the flow of domestic inventive activity'.
84. Drahos (2002*b*).
85. Ibid.
86. For discussion of the emergence of UNCTAD and Part IV of the GATT, see Gardner (1964), Rothstein (1979), Wells (1969), Whalley (1989), Williams (1991), and Zartman (1987).
87. UN General Assembly (1970).
88. For further background on this Resolution, see Patel (1974).
89. White (1975).
90. Seidel (1974: 51–2).
91. WIPO (1973).
92. Ibid.
93. For a history of the NIEO and surrounding discussion, see Bhagwati (1977), Cox (1979), Krasner (1985), Murphy (1984), and Rothstein (1979).
94. UN General Assembly (1974).
95. Ibid.
96. A Code was drafted but never adopted. See UNCTAD (1985).
97. The developing country agenda in this respect was clearly reflected in a 1973 UNCTAD Resolution affirming the sovereign right of countries 'to take the necessary measures to ensure that foreign capital operates in accordance with the national development needs of the countries concerned, including measures to limit the repatriation of profits'. See UNCTAD (1973).
98. The provisions of the Code and its political history are analysed by Conrood (1977) and Sell (1998).
99. Oxman (1982).
100. Anderfelt (1971), Bogsch (1992), May (2006*c*), and Musungu and Dutfield (2003).
101. See WIPO (1975).
102. UN (1975).
103. UNDESA (1964).
104. UN General Assembly (1975).
105. WIPO (1979).
106. Ibid.
107. Drahos (2002*b*: 166).
108. For analyses of this period, see Kastenmeier and Beier (1989), Hartridge and Subramanium (1989), Roffe and Tesfachew (2001: 390), and Sell (2003*b*: 75).
109. See Office of Technology Assessment (1986).
110. May (2000: 81–5).
111. Drahos (2002*b*: 5, 2003: 1), Dutfield (2003), and Sell (2003*b*).
112. Trebilcock and Howse (2001: 307).

113. Bergsten (1973) provides a clear, summary of the core concerns.
114. Sell (2003*b*).
115. Ibid.
116. Subramanian (1991).
117. May (2000: 6–8) and Matthews (2002: 11).
118. IPC (1988). The IPC also raised concerns about safety risks associated with imitations of some products.
119. Trebilcock and Howse (2001).
120. Sell (2003*b*).
121. WIPO (1988).
122. Dutfield (2000).
123. May (2000: 6). While the various treaties administered by WIPO contain general obligations with respect to implementation, they lack strong enforcement mechanisms for the settlement of disputes regarding the protection offered to non-nationals. See Beier and Schicker (1996). Stewart (1993) notes that the WIPO Conventions do nonetheless offer countries the possibility of accepting the jurisdiction of the International Court of Justice. WIPO has also appointed special informal committees of experts to address particular disagreements about the functioning of its Conventions.
124. Roffe and Vea (2008: 13). Also see Kunz-Hallstein (1979).
125. Reichman and Hasenzahl (2002: 12).
126. For further analysis of these debates, see Yu (2008).
127. This statement by Michael Kirk, former head of the international division at the U.S. Office of Patents and Trademarks (USPTO), is cited in Lewis (1982). Also see Mills (1985).
128. Reichman and Hasenzahl (2002).
129. Salmon (2003).
130. Salmon (2003: 433). Also see Gervais (2002).
131. Sell (2003*b*).
132. In 1978, the EU and U.S. jointly submitted a draft proposal on anti-counterfeiting measures during Tokyo Round negotiations. In 1982, the United States followed up by circulating a further draft proposal. See UNCTAD-ICTSD (2005).
133. In 1974, the United States had already augmented Section 337 (Unfair Trade Practices and Intellectual Property Rights) of its trade law to allow for unilateral action against foreign products produced in ways that violated the IP rights that U.S. individuals or firms hold under U.S. law.
134. At the same time, Congress adapted Section 305 of the Act to link U.S. trade negotiating objectives more closely with its IP interests.
135. The GSP system was developed in the 1960s under the auspices of UNCTAD. Established in 1974, the U.S. GSP system enables designated countries to export eligible products into the U.S. duty-free and is renewed periodically by Congress. Section 505 of the 1984 GSP Renewal Act called on the U.S. President to give 'great weight' to the protection of foreign IP rights assessing which countries would gain preferential treatment under the scheme. The Act did not, however, require proof of injury to a particular American industry nor evidence that the IP laws of the country concerned discriminated against American or other foreign IP

rights holders or otherwise did not meet norms in international conventions. See Trebilcock and Howse (2001: 318).
136. Drahos (2004*c*: 12).
137. GATT (1984–5).
138. This provision arguably violated the GATT's National Treatment principle as the risk of liability was only attached to imported products. See Trebilcock and Howse (2001: 318)
139. The product could only enter the U.S. market if the foreign producer and the U.S. rights holder entered into a voluntary settlement (usually a licensing agreement).
140. Trade experts Hudec (1990*a*, 1990*b*) and Jackson (1989) each published remarks to this effect. When the U.S. imposed tariff increases on Brazil in 1988, Jackson (1989: 343) noted that this was 'clearly a violation of the GATT'. Also see Drahos (2004*c*: 16).
141. While Section 337 was partially amended in 1994, the European Commission maintains that its procedures and remedies discriminate against EU industries and goods. See GATT (1989).
142. Trebilcock and Howse (2001: 318).
143. The Regulation does not, however, appear to explicitly specify the nature or level of the retaliation contemplated. See Bourgeois and Laurent (1985) and EC (1988).
144. Drahos (2002*b*: 15).
145. Brueckmann (1990), and Trebilcock and Howse (2001: 319).
146. For information on U.S. BITS at http://www.tcc.mac.doc.gov.
147. For an overview of EU strategy and agreements forged in the pre-TRIPS era, see Panagariya (2002) and Santa Cruz (2006).
148. UNCTAD (1996).
149. Abbott (1989), and Braithwaite and Drahos (2000: 61–4).
150. Drahos (2002*b*: 2004c: 19).
151. Drahos (2002*b*: 6).
152. Ryan (1998).
153. This history has been detailed at length by Drahos (2002*b*, 2004*c*).
154. Odell (2000).
155. GATT (1986).
156. Watal (2001) and UNCTAD-ICTSD (2005).
157. Yugoslavia aligned itself with developing countries during the Uruguay Round.
158. Bradley (1987: 57, 81).
159. Bradley (1987).
160. Drahos (2004*c*: 25).
161. For information on its Special 301 actions, see http://www.ustr.gov.
162. Abbott (1989).
163. In 1987, after thirty-six months of talks with Brazil on pharmaceutical patents had not yielded any agreement, the United States launched an investigation.
164. In the case of Brazil, new tariffs were imposed on Brazilian paper products, certain medicines, and consumer electronic items. See Varella (2004) and Getlan (1995).
165. Sell (2003*b*).
166. Ibid.
167. Ibid.

168. IPC (1988).
169. Sell (2003*b*).
170. Wade (2003).
171. Cited in Raghavan (1989).
172. Ibid.
173. Ibid.
174. Drahos (2002*b*: 774) argues persuasively that developing countries 'had simply run out of alternatives and options [. . .]. If they did not negotiate multilaterally they would each have to face the U.S. alone. [. . .] Furthermore, if they resisted the U.S. multilaterally they could expect to be on the receiving end of a 301 action'.
175. UNCTAD-ICTSD (2005).
176. Gervais (1998: 15) and UNCTAD-ICTSD (2005).
177. This included the '10 + 10 group' (meaning ten developed countries plus ten developing countries). The size and membership of the 10 + 10 group varied according to the IP issue under discussion. The most active developing countries were Argentina, Brazil, Chile, Colombia, Egypt, Hong Kong, India, Indonesia, Malaysia, Mexico, Peru, Singapore, South Korea, and Thailand. This list included some that had not been part of the earlier negotiations and excluded several of those that had been (most notably from Africa). See Matthews (2002: 38). Also see Drahos (2004*c*) and Gorlin (1999).
178. Drahos (2002*b*: 11), Gervais (1998: 15), and Matthews (2002: 44).
179. Balasubramanium (2000).
180. This term was coined by Braithwaite and Drahos (2000: 197).
181. Drahos (2002*b*: 11).
182. Drahos (2002*b*: 170), citing the words of a U.S. trade negotiator.
183. Drahos and Braithwaite (2002*a*: 105).
184. Correa (2000*b*).
185. Drahos and Braithwaite (2003).
186. Drahos (2002*b*: 170).
187. Drahos (2002*b*: 171).
188. GRAIN (1991), Hathaway (1993), Kloppenberg and Rodriguez (1992), Perlas and Salazar (1991), Sahai (2002), and Shiva (1997).
189. Ibid.
190. Braithwaite and Drahos (2000: 197).
191. TWN (2003*b*: viii).

3

Variation in TRIPS Implementation (1995–2007)

This chapter explores the evidence of variation in TRIPS implementation. It begins with a review of the core TRIPS rights and obligations, and the key areas in which TRIPS offers countries some room for manoeuvre. It then provides examples of the variation in how developing countries implemented TRIPS in their national legislation, focusing on the timeframe in which IP reforms preceded and the use of TRIPS flexibilities.[1] The chapter continues by proposing a typology of countries according to variation in their IP standards and overall use of TRIPS flexibilities. Throughout the chapter, I alert readers to IP reforms directly attributable to TRIPS-plus commitments that some countries undertook after TRIPS was concluded (most notably through bilateral trade agreements and ratification of new multilateral IP treaties, such as the WIPO Internet Treaties). In general, however, questions of motivation and causality for the legal reforms undertaken are deferred for systematic exploration Chapters 4 to 6. The chapter concludes by highlighting instances where the evidence of variation in TRIPS implementation contrasts with what the economic literature on IP protection and development leads us to expect.

3.1. The TRIPS Outcome

TRIPS opens with a preliminary section on 'Objectives and Principles', that emphasizes the balance of rights and obligations in the Agreement. In so doing, TRIPS promotes a balance between incentives for innovation and the use of existing inventions and creations. These objectives and principles provide the legal framework for efforts by developing countries to use the flexibilities in the Agreement and to adapt IP protection at the national level to meet social and development goals. Article 1 sets out the core principle of the Agreement, namely that members can implement TRIPS in accordance with their own legal system and practice. Among other elements, this section

grants WTO members the right to adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development (Article 8.1). It also stipulates the rights of members to adopt measures to prevent the abuse of IP rights by right-holders or the resort by them to practices that unreasonably restrain trade or adversely affect the international transfer of technology (Article 8.2). The opening section of TRIPS also emphasizes the importance of technological innovation, and of the transfer and dissemination of technology, social and economic welfare broadly, and advancing the mutual advantage of both producers and users of technological knowledge in the implementation of the Agreement.

A further core principle of TRIPS is its requirement that all WTO members apply the two core GATT principles of non-discrimination by 1 January 2006: national treatment and most-favoured nation (MFN) treatment (Articles 3, 4, and 5). In so doing, the Agreement diminishes the scope for WTO members to discriminate between different foreign inventors and creators, or to favour their nationals over foreigners in the realm of IP protection.[2] The incorporation of TRIPS into the WTO also made national implementation of international IP laws subject to an effective international dispute settlement mechanism for the first time. Where a WTO member believes that the content or enforcement of the national laws of another member state impedes the rights of its nationals (i.e. that the member is violating its TRIPS obligations), it can bring a case to the WTO Dispute Settlement Understanding (DSU). While countries are bound to comply with WTO rules to which they have committed themselves, they are only formally designated 'out of compliance' if successfully challenged by another country through the DSU. If a country is indeed found to be non-compliant as alleged, it may be required to either pay a fine or to remedy the non-compliance. Failing such action, the DSU may provide for sanctions in cases of non-compliance with its decisions. For trade-dependent, IP-importing developing countries, the prospect that failure to implement TRIPS could result in trade retaliation is one of the Agreement's most pernicious aspects.

TRIPS includes a moratorium on 'non-violation' and 'situation' complaints in the area of IP. Disputes in the WTO generally emerge from allegations that a country has violated a particular WTO agreement. In some situations, however, a government can initiate dispute settlement proceedings even if a specific agreement has not been violated but where it can show that it has been deprived of an expected benefit because of another government's action (i.e. a non-violation complaint), or because of any other situation that exists.[3] Governments excluded the application of such non-violation and situation complaints with respect to TRIPS on the grounds that the exercise or threat of such complaints could severely erode the use of TRIPS flexibilities, and might risk recurring threats of dispute settlement proceedings.[4] The agreement not

to pursue non-violation cases with respect to countries' obligations under TRIPS was established for an initial period of five years until 1999. (The moratorium was later extended and remained in place at the time of publishing (see Chapter 4)).

The proponents of TRIPS did not achieve everything they wanted in the Agreement. The resistance of developing countries and some developed countries, such as Canada, on key aspects of the text forced negotiators to leave both gaps and ambiguities in TRIPS, and also to designate several issues for further discussion. While TRIPS certainly goes far beyond the limited agreement on counterfeit goods that developing countries had been willing to entertain, it does include a (contentious) series of rights, options, safeguards, and ambiguities that WTO members can exploit in their implementation of the Agreement. A brief summary of key commitments and flexibilities follows.

3.1.1. *Commitments to Minimum IP Standards*

TRIPS obliges WTO members to implement minimum standards for most of the core categories of IP.[5] In so doing, TRIPS incorporates and builds on a range of provisions contained in several pre-existing international IP conventions, most notably the Paris and Berne conventions, which many WTO members had not previously ratified.[6] While most existing international treaties allowed countries considerable national discretion to determine their own IP standards, TRIPS sets forth specific substantive rules. In the area of copyright, for example, TRIPS specifies that all countries must expand the scope of copyright protection to software and original data compilations (databases), and provide rental rights for sound recordings, films, and computer programs.[7] It also incorporates a fifty-year copyright term (as required in the Berne Convention).[8]

In the area of patents, TRIPS demands for the first time a minimum period of protection of twenty years. (The Paris Convention had, by contrast, been silent on the question of patent duration.) Notably, the issue of patent term was one of the areas in which a subset of developing countries faced particular pressures for TRIPS-plus laws in subsequent bilateral trade negotiations, with the United States and the European Union. In Jordan, Guatemala, and Chile, for example, IP laws now provide for an extension of the term of patent protection to compensate for a loss of the effective period of protection due to regulatory delays in marketing approval for new pharmaceutical or chemical products.[9] While the United States pushed for such provisions in TRIPS, the Agreement is silent on this particular matter. TRIPS also gave detailed instructions about the scope of patent protection, including a requirement that countries make patents available for products and processes without discrimination as to the field of technology.

TRIPS requires national patent laws to confer on patent holders exclusive rights for product and process patents. Governments must provide 'negative rights' to prohibit certain acts from being undertaken without the owner's consent, including making the patented product or using the patented process, offering the product for sale or selling the product, and importing the patented product or the product obtained directly by the patented process.

TRIPS also requires governments to ensure their laws provide for enforcement of IP rights. Importantly, although IP rights are private rights, TRIPS places an unprecedented set of obligations on governments to make available procedures to ensure that private IP right holders can take 'effective action' against IP infringement. Specifically, TRIPS obliges countries to establish enforcement procedures that include expeditious remedies to prevent infringements and remedies that constitute a deterrent to further infringements. In so doing, countries are required to apply procedures that are fair and equitable, protect against abuse, and avoid new barriers to legitimate trade. Enforcement procedures must not be unnecessarily complicated or costly nor can they cause unreasonable time limits or unwarranted delays. Penalties for infringement must be tough enough to deter further violations. TRIPS also requires that countries provide rules for obtaining evidence, criminal procedures, civil and administrative remedies, and provisional measures. Those involved in court processes should be able to ask a court to review an administrative decision or appeal a lower court's ruling.

Significantly, TRIPS also calls on governments to intervene directly to help enforce the private rights of IP holders, including through border measures and criminal procedures. TRIPS demands that courts should have the right, under certain conditions, to order the disposal or destruction of pirated or counterfeit goods, and that wilful trademark counterfeiting or copyright piracy on a commercial scale should be criminal offences. In addition, TRIPS requires governments to ensure IP holders can receive the assistance of customs authorities to prevent imports of counterfeit and pirated goods. While the TRIPS provisions on enforcement are significantly stronger and more specific than any prior international IP agreement, the Agreement does leave countries important room for discretion (discussed in Section 3.2.7 below).

TRIPS also requires developing countries to take legislative action regarding the administration of IP law.[10] By reference to the Berne Convention, TRIPS requires clear and fair procedures for IP registration, and obliges members to establish collecting agencies (organizations that collect and disperse licensing and royalty fees for copyright holders) either independently or within government. Through its incorporation again by reference of provisions of the Paris Convention, TRIPS obliges all WTO members to establish a special industrial property service and a central office for administration of patents, utility models, industrial designs, and trademarks. For most developing countries, putting these legal reforms into action requires the commitment of new

financial resources, increased managerial, technical, and legal expertise, as well as improved organizational capacity, infrastructure, and management procedures.

Finally, TRIPS stipulates that any WTO member that changes its IP laws, regulations, and practice must not do so in any way that reduces the degree of its consistency with the Agreement.

3.1.2. *TRIPS Flexibilities*

TRIPS includes a range of rights, safeguards, and options that WTO members can exploit in their implementation of the Agreement. The importance of these flexibilities was explicitly reaffirmed in the 2001 Doha Declaration on the TRIPS Agreement and Public Health.[11] In the area of patents, TRIPS allows countries to exempt plants, animals, and micro-organisms from patentability (Article 27.3(b)).[12] In the realm of copyright, countries retain the right to exempt some types of uses from the control of copyright owners.[13] TRIPS also provides WTO members the option to choose a *sui generis* system for the protection of plant varieties (in lieu of patents).[14] In addition, TRIPS includes certain safeguards, such as provisions specifying that countries can issue compulsory licences under certain circumstances.[15] Several elements of TRIPS are also ambiguous or broadly defined, thereby providing governments some scope for interpretation and 'reading between the lines' when it comes to implementation. In addition, there are several issues related to the interpretation and administration of IP laws where TRIPS is silent and governments have scope to tailor their laws and administrative procedures as they see fit.[16]

Importantly, TRIPS grants WTO members different deadlines for implementation depending on their level of economic development (see Table 3.1). Developed countries were given one year to make their laws and practices consistent with the Agreement. Developing countries (and transition economies under certain conditions) were granted a transition period of five years, until January 2000 (Article 65). Least-developed countries (LDCs) were expected to implement TRIPS by January 2006, with a possibility of further extension (Article 66). TRIPS also provides additional transition periods in the area of patent protection. In general, TRIPS requires WTO members to provide patent

Table 3.1. TRIPS transition periods

1996	Industrialized countries
2000	Developing countries and economies in transition[a]
2005	Developing country products not previously patented
2006	LDCs – original deadline
2013	LDCs – revised general deadline[a]
2016	LDCs – deadline for patents, test data protection, and exclusive marketing rights for pharmaceuticals

[a] National treatment and MFN treatment obligations apply as of 1996.

protection without discrimination as to the field of technology. During the TRIPS negotiations, however, developing countries opposed binding obligations to provide patent protection to chemical and pharmaceutical products, accepting only requirements for process-related patents in these fields. Ultimately, countries that did not extend patent protection to all types of technology (such as pharmaceutical and agricultural chemical products) at the time TRIPS came into force were given more time, until January 2005, to introduce such protection (Article 65.4). Meanwhile, these countries were required by 1995 to establish a 'mailbox' system through which applications for such patents could be filed, recorded, and stored, though no examination or grant of patents was required until the end of the transition period on 1 January 2005 (Article 70.8).[17] Further, if a country allowed the relevant pharmaceutical or agricultural chemical products to be marketed during the transition period, it was required (subject to certain conditions) to provide an exclusive marketing right for the product for up to five years after obtaining marketing approval or until the grant or rejection of a product patent application, whichever timeframe was shorter (Article 70.9).[18] For LDCs, the transition period for the protection of pharmaceutical products was the same as their general deadline for TRIPS implementation (1 January 2006) and there was no mailbox requirement for LDCs.

In 2001, the Doha Declaration on the TRIPS Agreement and Public Health granted LDCs an additional ten years (until 1 January 2016) to provide patent protection and exclusive marketing rights for pharmaceutical and chemical products.[19] Further, in late 2005, faced with an approaching deadline for TRIPS implementation, LDCs collectively exercised their rights under TRIPS Article 66.1 to request an extension to their general deadline for TRIPS implementation.[20] After some negotiation, they were granted a seven-and-a-half-year extension of their deadline, giving them until mid-2013 to implement TRIPS, with the possibility of further extensions.[21]

In 2005, the scope of TRIPS flexibilities broadened when the first, and only, formal amendment to TRIPS (and indeed to any WTO Agreement) was approved. In December that year, WTO members agreed to make permanent a waiver regarding patents and public health that had been adopted in August 2003.[22] The 30 August waiver, and the subsequent amendment, aimed to facilitate the ability of countries with insufficient manufacturing capabilities to obtain cheaper generic versions of patented medicines by importing pharmaceuticals manufactured under compulsory licences.[23]

3.1.3. *Developed Country Commitments and Obligations*

In recognition of the financial costs and regulatory burdens associated with upgrading IP systems to meet TRIPS standards, TRIPS includes a developed-country commitment to provide technical and financial cooperation to

developing and least developed countries 'on request and on mutually agreed terms and conditions' (Article 67). TRIPS stipulates that this cooperation should include assistance in the preparation of domestic legislation on the protection and enforcement of IP rights as well as on the prevention of their abuse, and support for establishment or reinforcement of domestic offices and agencies relevant to TRIPS implementation, including the training of personnel. In addition, TRIPS includes a legal obligation on developed countries to promote technology transfer to LDCs (Article 66.2).[24]

3.1.4. *Reviews and the Role of the TRIPS Council*

TRIPS establishes the TRIPS Council and charges it with ongoing monitoring of implementation by member states.[25] When finalizing TRIPS, governments incorporated commitments to conduct several reviews through the TRIPS Council to provide the possibility for future clarifications, revisions, or amendments to the Agreement. TRIPS calls for a full review of the Agreement at the end of the transition period for developing countries (the year 2000) and every two years thereafter (Article 71.1), and also for a review of Article 27.3(b) (related to the protection of plant varieties). The TRIPS Council was also required to examine the effectiveness of TRIPS provisions on geographical indications (e.g. for wines and spirits) by January 1997.

3.1.5. *Notifications*

TRIPS requires all WTO members to notify the TRIPS Council of relevant national laws and regulations (Article 63.2) so that other members can review their legislation and pose questions regarding its conformity with TRIPS. Members subsequently established several procedures to facilitate this process.[26] Upon expiration of the transition period, countries in each category were required to submit two documents: one that explained how national laws met TRIPS commitments (an Article 63.2 notification), and another that responded to a checklist of issues regarding enforcement. Each country was then subject to a process of scrutiny in which all WTO members were able to ask additional questions regarding TRIPS conformity. These TRIPS Council reviews were conducted in 1996–7 in the case of developed countries and then in 2000 and 2001 in the case of those developing countries with a year 2000 deadline for TRIPS implementation. Newly acceding WTO members are required to also submit their legislation, which can then be discussed by members during TRIPS Council meetings.

3.2. Variation in the Timing of TRIPS Implementation

The timeframe in which developing countries acted to implement TRIPS varied widely, as did their use of the transition periods available to them. To fulfil

Table 3.2. Examples of variation in timing of TRIPS legislative reforms

Developing country members with most major TRIPS-related legislative reforms completed in advance of their year 2000 deadline for implementation	Argentina, Bolivia, Brazil, Brunei Darussalam, Cameroon, Chile, Colombia, Congo, Costa Rica, Côte d'Ivoire, Dominica, Dominican Republic, El Salvador, Gabon, Guatemala, Honduras, India, Indonesia, Malaysia, Mexico, Morocco, Peru, Singapore, South Korea, Thailand, Trinidad & Tobago
Developing country members with significant legislative reforms outstanding when their deadlines for TRIPS implementation expired in 2000	Antigua and Barbuda, Barbados, Bahrain, Belize, Egypt, Ghana, Grenada, Guyana, Jamaica, Kenya, Namibia, Nigeria, Pakistan, Papua New Guinea, Paraguay, Philippines, Saint Lucia, Sri Lanka, Surinam, Tunisia, Turkey, United Arab Emirates
LDC members which implemented major legislative reforms in advance of their general mid-2013 TRIPS deadline	Benin, Burkina Faso, Cambodia, Central African Republic, Chad, Guinea, Guinea Bissau, Mali, Mauritania, Nepal, Senegal, Togo

Source: Compiled by author based on WTO Trade Policy Review reports.

TRIPS obligations, most countries needed to undertake a series of legislative reforms at the national level, followed by executive action. Table 3.2 provides an overview of variation in the timing of TRIPS implementation drawing on evidence compiled in the WTO Secretariat's Trade Policy Review reports for each country.[27] The table focuses on major legislative reforms related to copyright, patent, trademark, and plant variety protection. Where a developing country did not have TRIPS reforms in one of these areas in place by the year 2000, they are categorized as having missed their 2000 deadline. Importantly, the table does not address the legal intricacies of whether each of the laws passed did in fact fully meet TRIPS requirements nor whether these laws were given any practical effect through administration or enforcement.

Several broad trends in the timing of TRIPS implementation are notable. There was rarely a single decision or piece of legislation through which governments implemented their TRIPS commitments.[28] In practice, TRIPS implementation in most developing countries combined the adoption of five or more discrete pieces of legislation as well as amendments to existing laws to address different aspects of the Agreement (e.g. copyright, plant variety protection, industrial property, or trade secrets). In India, for example, some ten different national laws have a bearing on its implementation of TRIPS.[29]

While some developing countries passed the various pieces of legislation more or less concurrently, in most countries the separate pieces of legislation advanced at independent times and speeds. In some instances, countries updated laws aware that further amendments might be needed to address outstanding issues (sometimes minor, sometimes significant). In other cases, further amendments were undertaken at the behest of international pressures (discussed in Chapters 4 and 5).

Of seventy-three developing countries with a year 2000 deadline for TRIPS implementation, over half passed various pieces of TRIPS-related legislation

only weeks before the deadline. Notwithstanding these efforts, over half of these seventy-three countries still had not implemented at least four of the major legislative reforms necessary for them to meet TRIPS commitments by 1 January 2000. Instead, most countries had at least one of their laws for TRIPS implementation still pending approval in their legislatures or had yet to draft or submit all the necessary laws for consideration. Of the four aspects of TRIPS covered in Table 3.2, plant variety protection was the area in which most countries missed TRIPS deadlines. In addition, most countries had not passed new or updated legislation related to the protection of integrated circuits. A snapshot taken in early 2000 would thus have depicted these countries as TRIPS-minus with regard to one or more aspects of the Agreement. In statements to the TRIPS Council and in WTO Trade Policy Reviews, each of the members that had missed deadlines drew attention to political and administrative constraints, and emphasized their commitment to TRIPS implementation and plans to approve reforms swiftly. In neither fora did any developing country express any purposeful intention to flout TRIPS deadlines or renounce its commitment to implementing the Agreement. Nonetheless, as of the end of 2007, at least a dozen developing countries with a year 2000 deadline still had not passed the legislative reforms necessary to meet all aspects of their TRIPS obligations.

On the other hand, some developing countries had legislation in place to meet the core TRIPS obligations well in advance of the 2000 deadline. At least half a dozen developing countries, including Chile, Mexico, and South Korea, had already implemented legislative reforms that brought them closely in line with TRIPS either before or during the TRIPS negotiations, leaving them with only a few further amendments to make.[30]

A further aspect of variation in timing is that some developing countries changed their laws more than once in the period under study. In some cases, countries initially adopted IP laws that took advantage of TRIPS flexibilities, but later amended them in ways that reduced the effect of these flexibilities. Kenya, for instance, altered the way its patent law addresses issues related to compulsory licences several times.[31] Chile is another example of a country that made a series of changes to its IP laws. Chile had adopted a series of IP laws in 1991 (before TRIPS was concluded) that did not take advantage of many TRIPS flexibilities, and which met or exceeded many of the minimum TRIPS requirements. To meet IP commitments contained in 2003 FTA with the United States, Chile further strengthened a range of its IP standards. In 2007, however, Chile undertook a series of reforms to refine its laws in ways that would take greater advantage of available safeguards and options, including by expanding the range of possible grounds for compulsory licensing.[32]

The variation in the timing of TRIPS implementation by LDCs was also striking. While some LDCs still have no IP legislation in place, others had IP standards consistent with TRIPS in some key areas even before the Agreement

came into force. At the time of the TRIPS negotiations, for instance, Rwanda already offered patent protection for pharmaceutical products and a twenty-year term of patent protection. Further, of the WTO's thirty-two LDC members, many significantly reformed their IP laws to meet TRIPS obligations well in advance of their original 2006 deadline for implementation and far in advance of their extended deadline of mid-2013. Specifically, twelve francophone African LDCs brought their legislative standards substantially in line with TRIPS by 2002 when their new regional law, the revised Bangui Agreement, came into force.[33] In addition, when Cambodia and Nepal acceded to the WTO, each adopted commitments to comply with TRIPS in advance of the 2013 deadline available to the thirty founding LDC members of WTO. Moreover, in so doing, they sometimes exceeded TRIPS standards.[34] The remaining LDCs are yet to undertake most of the legislative reforms necessary to make their laws consistent with TRIPS, but several do have draft laws under consideration or have passed new legislation in one particular area covered by TRIPS. In 2000, for instance, Bangladesh replaced its 1962 Copyright Ordinance (last amended in 1978) with a new TRIPS-plus copyright law (which offers a 60-year term of protection and provides for optical disc protection) but most aspects of its IP legislation date have not changed since the pre-independence era.[35]

There was also variation in the extent to which countries used transition periods regarding patent protection for pharmaceutical and chemical products. By the time TRIPS was signed, most developing countries were already offering patent protection for pharmaceutical products. Further, when the 2001 Doha Declaration granted LDCs an extension until 2016 for pharmaceutical product patents, all but three (Angola, Ghana, and Malawi) of the WTO's twenty-five African members already had laws that authorized such patents (or in practice approved such patents).[36] That is, as a practical matter, these countries had pharmaceutical product protection not only before their general 2006 TRIPS implementation deadline, but also far in advance of the pharmaceutical-specific 2016 extension granted in the Doha Declaration. Further, with the revision of their Bangui Agreement in 2002, twelve francophone African LDCs adopted patent protection for pharmaceutical products some fourteen years in advance of the Doha Declaration deadline, which they had joined the international fight to extend just one year earlier. To date, Cambodia and Nepal appear to be the only LDCs to have incorporated the 2016 extension for the protection of pharmaceutical products into their patent laws despite having otherwise adopted a range of TRIPS-plus standards.[37]

In total, only twenty developing countries with a year 2000 TRIPS deadline lacked patent protection for pharmaceutical or chemical products when TRIPS came into effect. Of this group, thirteen notified the TRIPS Council of their intention to use the flexibility.[38] Argentina, Brazil, and Turkey proceeded to adopt protection in advance of their deadline for so doing, while

others waited until much nearer the end of that transition period. Brazil, for instance, introduced pharmaceutical product patent protection in 1996, including wide-ranging 'pipeline' protection, despite having had the option to wait until 1 January 2005.[39] By contrast, India took full advantage of the ten-year transition period; its relevant law came into effect in early 2005, several months after the deadline.

3.3. Variation in IP Standards and Use of TRIPS Flexibilities

This section provides evidence of the variation in the extent to which developing countries took advantage of TRIPS options and safeguards, focusing on some of the most contentious flexibilities in the area of patents, copyright, and plant variety protection. In each instance, I note the purpose and significance of the flexibility, detail the options it provides, and summarize key aspects of variation in how developing countries made use of this flexibility. I also highlight instances where countries exceeded TRIPS requirements. As information was not always available for all 106 developing countries surveyed, I have indicated the number of countries surveyed for the particular flexibility under discussion.

As with my review of the timing of TRIPS implementation, the purpose here is to illustrate the scope of variation between countries. I do not attempt an exhaustive legal assessment or evaluation of all national laws or the use of flexibilities. For each country, the subtleties of law and legal interpretation make the precise nature of provisions challenging to assess. A further consideration is that regulatory and administrative decisions and actions taken after laws are revised may be more important to determining the actual scope of the flexibilities that countries provide than a formal reading of the statutes.

In some countries, national constitutions provide that international treaties, such as TRIPS, have 'direct' effect (i.e. treaties are self-executing and automatically become part of the domestic system of laws). Even in these cases, however, governments usually needed to promulgate accompanying regulations. More generally, the nature of legislative reforms does not provide any information about the extent to which the laws acquired the regulatory, administrative, or enforcement measures necessary to give them practical effect. In some instances, for example, legislative reforms require regulatory acts by the executive branch of government to give them tangible force (and which may also modify their effect). In the area of enforcement, any given piece of IP legislation may require complementary decisions ensuring the commitment of adequate resources.

To paint a more complete picture of the variation in effort developing countries made to tailor IP laws to national needs, this section includes a review of legislative action by developing countries in several areas not covered by

TRIPS, namely utility models, disclosure of origin of genetic resources, and folklore and traditional knowledge.

3.3.1. *Exhaustion of Rights and Parallel Importation*

TRIPS grants WTO members the flexibility to determine the point at which IP rights have been exhausted (Article 6).[40] The choice of an IP exhaustion regime has a direct bearing on a country's options with respect to parallel importation. Parallel importation can be a useful tool to save money by importing IP-protected products (such as patented medicines) from countries where they may be sold at a lower price than on the domestic market. Preserving options with respect to the choice of exhaustion regime was one of the key negotiating priorities of developing countries active in the TRIPS negotiations, which were generally in favour of international exhaustion.[41] Under TRIPS, countries may establish whichever exhaustion regime best fits their domestic policy objectives. In 2001, the Doha Declaration affirmed the freedom of WTO members 'to establish its own regime for such exhaustion without challenge, subject to the MFN and national treatment provisions of Articles 3 and 4'.[42]

Countries have three options with respect to the exhaustion of rights on a product or work: (*a*) a national regime where IP rights are said to be exhausted when the protected product has been put on the market with the consent of, or by, the right-holder in the country where the right was issued; (*b*) a regional system that extends the principle of national exhaustion to other countries within a region[43]; or (*c*) or an international regime where rights of a protected product are exhausted in respect of those products put on the market anywhere in the world. If a country chooses a national or regional exhaustion regime, IP right-holders can take action against parallel imports from outside those borders. Under an international exhaustion regime, IP right-holders cannot take such action.

A 2006 survey of the exhaustion regimes in a sample of fifty-four developing countries illustrated the variation in the choice of exhaustion regime for industrial property[44] (see Table 3.3). There were thirty-three countries that opted for an international exhaustion regime (e.g. Chile, the Dominican Republic, Honduras, and South Africa), thirteen for a national regime (e.g. Brazil, Morocco, and the Philippines), and sixteen for a regional exhaustion regime (e.g. the francophone African members of OAPI).[45] In some countries, the initial choice of exhaustion regime was subsequently reviewed. The Philippines, for example, originally adopted a national exhaustion regime. In 2005, the incumbent trade minister raised concerns that this approach would constrain the scope for parallel imports and a parliamentary debate ensued.[46] In January 2007, the parliament passed a bill amending the Philippine Intellectual Property Code to put in place the principle of international

Table 3.3. Examples of variation in choice of exhaustion regime for industrial property

National/regional	Barbados, Belize, Benin, Brazil, Botswana, Burkina Faso, Cameroon, Central African Republic, Chad, China, Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Guinea, Guinea-Bissau, Mali, Mauritania, Morocco, Niger, Nigeria, Philippines, Senegal, Sri Lanka, Tanzania, Thailand, Trinidad and Tobago, Togo, Zimbabwe (Total 29)
International	Argentina, Bolivia, Brunei, Cambodia, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Egypt, Ghana, Guatemala, Honduras, India, Indonesia (no explicit provision), Kenya, Malawi, Malaysia, Mauritius, Nicaragua, Pakistan, Paraguay, Peru, Singapore, South Africa, Uganda, Uruguay, Tunisia, Vietnam, Venezuela, Zambia (no explicit provision), Zimbabwe (Total 33)

Source: Musungu and Oh (2006).
NB: Survey sample was limited to sixty-two countries.

exhaustion. In addition, some countries implemented different regimes in the areas of industrial property (patents and trademarks) and copyright. That is, they opted for international exhaustion in the first and national exhaustion in the latter, or vice versa.[47]

A second option available to countries is to include explicit provisions in their laws regarding parallel imports. Most national laws neither specify whether parallel imports are permitted or restrict parallel imports to specific circumstances. In the absence of specific rules allowing parallel imports, the exclusive rights of the IP-holders are likely to prevail.[48] Among developing countries, Kenya's 2001 Industrial Property Act (Article 8) appears to be the law that explicitly permits parallel imports on the broadest terms. A number of other countries that explicitly allow parallel imports add specific limiting conditions on such imports (e.g. the Andean Group, Argentina, Brazil, and South Africa).[49]

A third option that countries have with respect to exhaustion of IP rights concerns the definition of the meaning of 'consent'. In most countries, laws require express consent by the right-holder authorizing a third party to market their product. In some instances, however, countries simply allow for implied consent. Argentina appears to have the most permissive regime in this respect.[50] Argentina's patent law suggests that there is implied consent for others to freely and legitimately enter the market from the moment that products are put on the market by the patentee or with their consent, as well as in cases where a compulsory licence is in effect or where a prospective patentee chooses not to take out a patent in a particular country.

3.3.2. *Patents*

A core developing country priority during the TRIPS negotiations was to retain options with respect to the term and scope of patent rights. TRIPS flexibilities in the patent area include options to make specific exclusions to the scope of patentability and also limited exceptions to patent rights,

such as for use without the rights holder's authorization. In addition, open-ended and ambiguous drafting of TRIPS provisions on some issues provides countries options to tailor TRIPS-related IP reforms to advance national public policy goals, such as ensuring access to technologies at affordable prices and promoting local industry development.[51] Several of these flexibilities were further clarified and developed through the Doha Declaration on TRIPS and Public Health and the paragraph 6 system (described below). The following discussion reviews the extent to which countries took advantage of some of the core patent-related flexibilities in TRIPS.

3.3.2.1. SCOPE OF PATENTABILITY AND OPTIONAL EXCLUSIONS

TRIPS incorporates a range of optional exclusions related to the scope of patentability. Countries can, for instance, deny patents where prohibition of the commercial exploitation of a particular invention is deemed necessary to protect *ordre public*. Argentina, for example, excludes inventions from patentability where it deems that their commercial exploitation must be prevented to protect *ordre public*, human and animal life, health, plants or the environment. The interpretation of the term *ordre public*, or public morality, is left to the discretion of member states and need not be otherwise elaborated upon in national law.

TRIPS also permits countries to reject applications for diagnostic, therapeutic, and surgical methods for the treatment of humans or animals (Article 27.3 (a)). In its 2001 report, the UK Commission on Intellectual Property Rights (CIPR) recommended that 'most developing countries, particularly those without research capabilities, should strictly exclude' such methods from patentability.[52] Such exclusions are common in many developed country patent laws (such as in Article 52 (4) of the European Patent Convention).[53] Before TRIPS, the IP laws of many developing countries were silent on this issue. All developing countries that upgraded IP legislation to respond to TRIPS implemented standard exclusions in respect of the non-patentability of diagnostic, therapeutic, and surgical methods for the treatment of humans or animals. Countries without such exemptions are mostly those which have yet to revise patent laws to conform with TRIPS.[54]

TRIPS also enables countries to exclude plants, animals, and 'essentially biological processes' for the production of plants and animals from patentability (but mandates patentability for non-biological and microbiological processes for the production of plants or animals) (Article 27.3 (b)). TRIPS also requires patent protection for micro-organisms (such as genes and cells), but does not advocate any particular system for so doing so. In practice, the specific provisions of developing country laws on these matters varied widely. Only the members of the Andean Community formally provided for legal exclusions from patentability for *all* animals and plants as existing in nature. South Africa excluded any variety of plants and animals from patentability, while Egypt,

Costa Rica, and Nicaragua had specific exclusions for all genetic material.[55] Argentina also explicitly excluded the possibility of patents for plants, animals, and for biological and genetic materials existing in nature. At the other extreme was Guatemala, one of a few of developing countries that provided patent protection for new plant varieties.[56] Guatemala's law did, however, provide a specific exception enabling farmers to save second-generation seed and livestock produced through the use of the protected variety. (In 2006, a draft law proposing a *sui generis* plant variety protection regime was circulated but remains under debate. (*Sui generis* approaches are discussed in Section 3.2.4 below.)[57] Article 57 of this draft law aimed to repeal the provisions of the existing law that allowed for patents on plant varieties). A growing number of developing countries have bilateral agreements with developed countries that remove the possibility of making such exclusions from patentability (e.g., Jordan, Mongolia, Nicaragua, Sri Lanka, and Vietnam). In each instance, the legal approach is the omission of a provision excluding plants and animals from patentability.

Countries can interpret TRIPS obligations on micro-organisms to apply only to micro-organisms that have been genetically modified (i.e. not as they occur in nature).[58] TRIPS does not have any provisions on the patentability of inventions consisting of genetic material such as DNA sequences. Only a few countries adopted specific measures to take advantage of the flexibility to explicitly exclude such genetic material from patentability.[59] Relatedly, as of December 2007, eighteen developing country WTO members were contracting parties to WIPO's Budapest Treaty,[60] an administrative agreement through which parties agree to recognize the physical deposit of a sample of a micro-organism with any 'international depositary authority' for the purposes of domestic patent procedures in lieu of full written disclosure of an invention.[61] While TRIPS makes no reference to the Budapest Treaty, several developing countries made bilateral commitments to the European Union to join the Budapest system by particular dates (including Egypt, Chile, Korea, Mexico, Morocco, and Tunisia). In addition, Jordan and Singapore made commitments in FTAs with the United States to implement Budapest-like provisions. Further, while TRIPS does not specifically require countries to provide patent protection for 'biotechnology' or 'biotechnology inventions', South Africa was one of the first developing countries to implement such provisions (to fulfil the requirements of a trade agreement with the European Union).[62]

TRIPS gives no guidance on the issue of new uses for known substances, thereby enabling WTO members to exclude new or second uses of patents by its silence on the matter. In 2002, the CIPR recommended that developing countries should exclude new uses of known products from patentability.[63] Of 106 developing countries surveyed, Table 3.4 shows information on the use of this flexibility for fifty-seven countries. Of these countries, three explicitly allowed for patents on new medical uses of known products in their legislation

Table 3.4. Examples of variation in use of exclusions and exceptions to patent rights

Incorporation of Bolar provision for 'early working'	
Specifically provided	Jordan, Thailand, China, India, Malaysia, Costa Rica, Dominican Republic, Paraguay,[a] Argentina, Brazil, Nigeria, Egypt, Kenya, Tunisia,[b] and Zimbabwe[c] (Total 15)
No provision or not allowed	OAPI members, Philippines, Vietnam, Pakistan, Brunei, Cambodia, Indonesia, Guatemala, Honduras, Nicaragua, Barbados, Belize, Chile, Trinidad & Tobago, Mauritius, Morocco, South Africa, Sudan, Botswana, Ghana, Malawi, Tanzania, Uganda, and Zambia (Total 39)
Exclusions for second (new uses) of known products	
Further use allowed either specifically, through practice, or not specifically excluded	OAPI members, Egypt, Kenya, Malawi,[d] Mauritius, Morocco, Nigeria, South Africa,[e] Sudan, Tanzania, Uganda, Zambia,[f] Zimbabwe, Philippines,[g] Sri Lanka, Vietnam, Thailand, Pakistan, Cambodia, Indonesia, Costa Rica,[h] Guatemala, Honduras, Nicaragua, Paraguay, Trinidad & Tobago, Argentina,[i] Barbados, Belize, and Brazil (Total 45)
Further use specifically excluded	Andean Community, Argentina, China, India, Malaysia, Dominican Republic, Chile,[j] and Uruguay (Total 12)

Source: Musungu and Oh (2006).

NB: Survey sample of seventy-three countries. As full data is not readily available for each TRIPS flexibility for all countries, the breakdown into categories does not add to seventy-three.

[a] Early working is allowed but only within 30 days before patent expiry.

[b] Early working is allowed, but only for 'acts necessary for the manufacture of generic drugs.

[c] Yes, 'test batches' of a product may be produced, but not put on the market, six months prior to patent expiry.

[d] Inventions 'capable of being used as food or medicine' which are 'a mixture of known ingredients possessing only the aggregate of known properties of the ingredients' are specifically excluded.

[e] Second medical use is specifically allowed.

[f] Same conditions as in the case of Malawi in [d].

[g] Specifically permitted for certain new medical applications.

[h] Combinations of known inventions or mixtures of known products are excluded unless non-obvious.

[i] Same conditions as in [h].

[j] New use excluded except where the qualities of the subject matter are essentially altered or where it solves a technical problem that did not previously have a known solution.

(either as product patents, process patents, or as a separate category of patents), while a further twenty-eight countries did not explicitly exclude this possibility. In many developing countries, second-use patents were routinely granted whether or not this possibility was formally provided in their laws.[64] Only twelve countries explicitly excluded the patentability of new or second uses of patents. The members of the Andean Community provided a particularly broad exemption, stating that 'products or processes already patented and included in the state of the art [. . .] may not be the subject of new patents on the sole ground of having been put to a use different from that originally contemplated by the initial patent' (Article 21, Decision 486). Beyond the Andean region, the grounds for denial of new use patents varied. In some countries, new use patents were denied due to lack of novelty, inventiveness, or industrial applicability.[65] The novelty requirement for patentability would, for instance, normally prevent a patent being issued in respect of an invention relating to a known product for which a new use had been found. Some countries also considered purported new uses to be mere discoveries related to a known product and therefore not real inventions. (In such cases, some such

uses were still eligible for protection through a 'method' or 'use'-type patent claim.)[66] In several instances, patents on new uses were denied on the grounds that the proposed new use was in fact a method of medical treatment (which TRIPS allows countries to exclude from patentability, as noted above).[67]

Beyond standards in national IP laws, the regulatory and administrative measures taken by governments after laws were in place significantly impacted the degree to which flexibilities were exercised. In their administration of the IP system, patent offices can individually discern how to define important legal concepts such as novelty, inventive step, industrial applicability, and prior art. TRIPS stipulates that patent laws must require that all patent applicants disclose the invention in a manner that is sufficiently clear and complete for one skilled in the art to carry it out. This 'social contract' is a mandatory requirement that forms part of the balance of rights and obligations in TRIPS. Countries have the choice, however, of whether to require applicants also to indicate the best mode for carrying out the invention and to provide information on corresponding foreign applications and patent grants.

Further, at least nine countries have broadly worded provisions that limit the scope of patentability to 'acts done for industrial or commercial purposes', thereby excluding all non-commercial acts from patentability.[68] TRIPS does not define criteria for the assessment of the novelty of an invention or what constitutes the prior art on which such an assessment would rely. The Agreement merely requires that patents that are sought should be new. In practice, the criteria countries use to assess novelty vary. Argentina's law specifies that 'any living material and substance pre-existing in nature' will not be considered an invention. India's patent law contains a provision (Article 3d) that limits the scope for 'new uses', or new forms of existing inventions, to fulfil the criteria of novelty and inventiveness and thus to be patentable subject matter (see Chapter 5, section 5.1.7 for discussion of legal debate in India on this Article). Regarding prior art, almost all developing countries provide that any public disclosure whether written, oral, or by use anywhere in the world can be taken into account. One notable exception is Sri Lanka, which only recognizes written disclosure beyond its borders.

3.3.2.2. EXCEPTIONS TO PATENT RIGHTS

TRIPS includes a general exceptions clause that enables WTO members to provide 'limited exceptions to the exclusive rights conferred by a patent' under certain conditions (Article 30). Broadly speaking, exceptions are possible where they are limited and where they do not unreasonably conflict with normal exploitation of patent or prejudice the legitimate interests of the patent owner, taking into account the legitimate interests of third parties.

Examples of exceptions found in national legislation in developing countries include exceptions to allow for public and non-commercial uses or experimental purposes. During the TRIPS negotiations, the latter exception

was considered especially important in that it allows researchers to understand and invent around patented inventions, thereby promoting further innovation. As of December 2007, the majority of developing country WTO members had specific provisions allowing third parties to use a patented invention for research, experimental, or scientific use. A further twenty developing countries specifically provided exceptions for education and teaching. The notable exceptions were South Africa and the sixteen francophone African members of the Bangui Agreement which did not provide for general research or experimental-use exceptions.

Some countries also provided exceptions that enable the use of patented materials during the patent term where the purpose is to obtain marketing approval and registration of a generic product before the patent expires. (Such exceptions are widely referred to either as regulatory or "Bolar" exceptions.[69]) The use of a Bolar exception can help countries facilitate the rapid entry into the marketplace of cheaper competitors to brand-name products. In the absence of a Bolar exception, such use of patented materials would be unlawful until the expiry of the patent in question. While TRIPS makes no express mention of Bolar exceptions, Article 30 provides countries with the flexibility to implement such a provision if they wish. In a 2000 ruling on a dispute between the European Commission and Canada on the patent protection of pharmaceutical patents, the WTO Dispute Settlement Body (DSB) affirmed this possibility.[70]

Of 106 developing countries surveyed, less than ten expressly included a Bolar provision in their laws (see Table 3.4 above). Jordan's national patent law states that 'all types of scientific research and development, and filing of applications for obtaining marketing permits carried out before the elapse of the patent protection period shall not be regarded as infringement neither civil nor criminal' (Article 21 (c)). The Dominican Republic's patent law also explicitly states that its provision on patent exceptions applies to 'those uses which are necessary to obtain sanitary approval and to market a product after the patent protecting it has expired'. Further, Argentina's patent law states that any third party may use a product or process protected by patent prior to its expiration 'to obtain the information required for the approval of a product or process by the competent authority so that it may be marketed following the patent expiration' (Article 8). Bolar-type activities are also sometimes permissible under the 'general exceptions' provisions of laws, such as in Uruguay, the Andean Community, and francophone Africa.[71] Uruguay's patent law provides, for example, that patent rights shall not extend to those actions undertaken exclusively for experimental purposes, even those taken in preparation for future commercial exploitation, carried out within the year before the patent expires (Article 39 (d)).

TRIPS also includes provisions regarding the use of inventions without authorization by the rights holder, namely for government use (i.e. public,

non-commercial use) and for use by third parties (i.e. compulsory licences). Under TRIPS, the grounds on which a licence can be awarded without the right-holder's consent are essentially left to the discretion of the member.[72] Some of these grounds may only be invoked after three years from grant or four years from filing of the patent (e.g., failure to exploit and/or failure to work domestically). Further, a licence can only be granted if certain conditions are met, including prior efforts to obtain a voluntary licence within in a reasonable time and on reasonable terms (this condition does not apply in the case of public, non-commercial use or in the case of a national emergency) and payment of adequate remuneration to the patent holder. No such requirements for prior negotiation exists where the motivation for the licence is to remedy anti-competitive behaviour.[73] The licence must also be predominantly for the supply of the domestic market (Article 31).[74] Suppliers of the product under the compulsory licence may include any third party or government entity authorized by the government to sell on the commercial market. The 2001 Doha Declaration on TRIPS and Public Health affirmed the right of WTO members to issue compulsory licences and to determine for themselves the grounds warranting such action. The Declaration specifically noted that situations of national emergency could include public health challenges. In Paragraph 6 of the Declaration, WTO members committed to addressing the fact that TRIPS Article 31(f) (which specifies that products manufactured under compulsory licence must be 'predominantly' for the domestic market) might limit the ability of countries with insufficient manufacturing capacity to import cheaper generic medicines made under compulsory licence. In 2003, the so-called '30 August Decision' by WTO members put in place a waiver that enables any member country to export pharmaceutical products made under compulsory licence within the terms of the decision.[75]

While most developing countries provided for compulsory licensing in their laws, the grounds for granting a compulsory licence varied (see Table 3.5). Some countries, such as Pakistan and Cambodia, provided a narrower set of grounds than those available to them. In addition, some developing countries, such as Jordan, imposed TRIPS-plus procedural requirements and other limitations on the issuance of compulsory licences, including restricting the use of compulsory licences to emergencies or epidemics. On the other hand, Argentina and Brazil are notable for the broad range of grounds for compulsory licensing included in their laws.

Some developing countries took distinctive approaches to the procedures related to government use and carefully specified the grounds for such licences. According to Article 51 of the Thai Patent Act (as amended), any Thai ministry, bureau, or department may exercise a patentee's rights '[i]n order to carry out any service for public consumption or which is of vital importance to the defense of the country or for the preservation or realization of natural resources or the environment or to prevent or relieve a severe shortage of food,

Table 3.5. Examples of variation in grounds for granting compulsory licences

Grounds for granting compulsory licences	Number of countries providing these grounds
Failure to work or exploit (supply, meet public demand) on reasonable terms after 3–4 years	39
Public interest/public non-commercial use	33
National security, emergency, health emergency, or development of vital economic sector	22
Remedy anti-competitive practices, unfair competition	24
Failure to obtain licence under reasonable terms	22
Dependent patents	29
No apparent provisions	2

Source: Author's compilation based on Musungu and Oh (2006), WTO Trade Policy Reviews, and TRIPS Council Reviews of Legislation.

NB: Survey sample of forty-one developing countries.

drugs or other consumption items or for any other public service'. In 2001, Kenya passed an Industrial Property Act which provided that government use of a patented product may proceed without payment of any remuneration to the patent holder in some circumstances.[76]

As of December 2007, at least twelve developing countries issued compulsory licences (i.e. Brazil, Ghana, Guinea, Indonesia, Malaysia (three times), Mozambique, Rwanda, Swaziland, Taiwan, Thailand (four times), Zambia, and Zimbabwe). (For further discussion, see Chapter 6, Section 6.4.4.[77]) In most cases, the licences were for government use and public health-related. In 2005, Rwanda was the first government to notify the WTO of its intention to take advantage of the 2005 amendment to TRIPS that resulted from the 30 August decision.[78] Canada subsequently notified the WTO of its intention to export to Rwanda using the same system.[79]

In addition, several developing countries used the threat of compulsory licensing to gain leverage in negotiations with patent holders and suppliers of medicines to lower the prices of the medicines in question (see discussion in Chapter 6, Section 6.4.4). Importantly, the impact of compulsory licences once issued has varied. In both Malaysia and Indonesia, compulsory licences were harnessed by local producers and importers who then supplied drugs at lower costs than before the licence was issued.[80] In Mozambique and Zambia, it remains unclear whether any local production or import of medicines under compulsory licence took place.[81] (To date, no comprehensive cross-national survey or assessment of the impact of non-voluntary licences on access to medicines has been undertaken).

3.3.3. *Protection of Undisclosed Information and Data Protection*

TRIPS calls on states to help prevent the unauthorized disclosure or acquisition of information, such as trade secrets, in a manner contrary to honest

commercial practices. Examples of dishonest or 'unfair' commercial practices include breach of contract or confidence, and inducement to breach or acquisition by third parties who knew or should have known such practices were involved.) TRIPS also requires WTO members to protect against 'unfair commercial use' of undisclosed test or other data (that has required considerable efforts to produce) that is submitted to a regulatory body as a condition for marketing approval of pharmaceuticals and agricultural chemicals using new chemical entities (Article 39.3). An exception to this obligation arises if disclosure is necessary to protect the public and steps have been taken to protect the data against unfair commercial use.

The practical relevance of the protection of test data is that it can impact the speed and ease with which competitors to IP holders, such as generic producers of medicines, can enter a given market. For instance, laws that specify particular periods of data protection can limit the ability of a generic competitor to rely on the patent holder's test data to approve a bio-equivalent generic product during this period. If no generic suppliers can obtain marketing approval without repeating time-consuming and costly tests on their products (which would be impossible during an emergency situation due to time constraints), the possibility for governments to make use of compulsory licensing may be constrained. In recognition of these challenges, the 2001 Doha Declaration on TRIPS and Public Health extended the LDC deadline for conformity with this provision until 2016.

TRIPS does not detail how WTO members must fulfil the obligations in Article 39.3. It also grants countries the scope to determine for themselves what constitutes 'unfair commercial use'. In addition, countries can chose whether information provided to a pharmaceutical regulatory authority can be relied on by a subsequent applicant seeking to obtain approval for a bio-equivalent product, and also whether further applicants must provide similar data, such as clinical trial data.

In a 2006 study that surveyed national provisions on data protection in forty-nine developing countries, twenty-eight had a provision for data protection in their laws, while eighteen did not.[82] (See Table 3.6.) Only Argentina had a specific provision explicitly allowing a second applicant to rely on previously submitted data.[83] In forty-one countries, the ability of second applicants to rely on previously submitted data was curtailed either in patent or other national laws (such as trade secrets laws), though the conditions varied widely. At least ten developing countries either explicitly forbade or severely curtailed the opportunity for the second applicant to rely on such data. Further, some of these developing countries had TRIPS-plus data exclusivity provisions that restrict the use of original test data for a specified period of time. In some cases, governments provided data exclusively for five, seven, or ten years. In the case of Antigua and Barbuda, for example, second users were prevented

Table 3.6. Examples of variation in provisions on data protection for new chemical entities in developing countries

Data protection	
No specific provision on data protection for new chemical entities	Antigua and Barbuda, Belize, India, Indonesia, Malaysia, Cambodia, Malawi, and Tanzania (Total 8)
Ability of second applicant to rely on previously submitted data curtailed either in patent or other national laws, sometimes for a specific period of time (such as Trade Secrets Acts)	Andean Community, Bahrain, China,[a] Pakistan, Philippines,[b] Thailand, Vietnam, Barbados, Nicaragua, Trinidad & Tobago, Uruguay, Brazil, Chile, Costa Rica, Guatemala, Honduras, Dominican Republic, OAPI members, Egypt, Ghana, Kenya, Mauritius and Tunisia (Total 41)

Source: Thorpe (2002).

NB: Survey sample of forty-nine countries.

[a] Provides data exclusivity for six years under the Implementation Provisions of the 2002 Drug Administration Law from the date a manufacturer or distributor was granted marketing approval for a pharmaceutical product utilizing new chemical entities.

[b] For agricultural chemical products, the Pesticide Regulation provides data exclusivity for eight years from date of approval. Data protection is also provided under the Food, Drugs and Cosmetic Act and general business confidentiality regulations.

from relying on that data for a period determined by national courts, but not normally less than five years. In Nicaragua, test data was protected and could not be supplied to second user (though there are exceptions in relation to the protection of public health). In eight countries, later applicants were obliged to supply 'new' data.[84] On the other hand, several countries, such as Argentina and Saint Lucia, simply incorporated the language of Article 39.3 directly. In at least eleven countries, such as Jamaica, no specific protection was available, such that later applicants may rely on previous data.[85]

In many cases, the terms of data exclusivity were difficult to ascertain, particularly as the relevant provisions were frequently not found in patent laws, but in laws related to medicines, food, or pesticides, or in the confidentiality clauses of general business laws. In Chile, for example, when third parties apply for marketing approval, the Public Health Institute can accept the information supplied by the original producer (the owner of the patent) as the basis on which to make its authorization (provided that the therapeutic molecule in question has the same qualitative and quantitative formula as the original product), thus obviating the need for applicants to furnish further background information.[86]

Finally, fifteen countries that completed FTAs with the United States committed to implementing data exclusivity laws that provide from five to ten years of 'non-reliance' on test data of IP holders. Further, some FTAs, notably CAFTA, require TRIPS-plus data exclusivity to be linked to patent protection so as to prevent generic producers from obtaining marketing approval at any time during the patent period, even when a compulsory licence is issued, and even in preparation to enter the market upon patent expiry, both of which are otherwise allowed under TRIPS.

3.3.4. *Plant Variety Protection*

TRIPS calls on WTO members to protect breeders' rights with respect to plant varieties. It gives members three different options for meeting this obligation: patents, a *sui generis* system of protection, or a combination of both (Article 27.3 (b)).[87] Most developing countries did not previously provide any form of IP protection for plant varieties. Indeed, many developing countries explicitly excluded plant varieties and essentially biological processes (such as breeding methods) from patentability.[88] Developing countries defended the *sui generis* option in the TRIPS negotiations, arguing that their farming systems differ to those of developed countries and that they often had no tradition of plant breeders' rights or patents with respect to plant varieties.[89]

In devising their own *sui generis* system, countries have the freedom to determine the scope and content of rights granted. Countries can, for example, grant exceptions to the exclusive rights of breeders with respect to the propagating materials of new varieties in order to enable farmers to reuse and/or sell seeds. They can also permit research exceptions for the use of protected varieties by a third party in order to develop a new variety, allow compulsory licences for reasons of public interest, and recognize the contributions and rights of traditional farmers that have provided breeding materials (this could include provisions for remuneration). The only requirement that TRIPS stipulates is that the *sui generis* system be 'effective'. TRIPS does not define any criteria for determining whether that objective has been achieved.

In practice, countries had two options with respect to *sui generis* protection: (*a*) adopt the standards advanced by the International Convention for the Protection of New Varieties of Plants (UPOV), or (*b*) devise an alternative, independent *sui generis* approach. At the time TRIPS was signed, the members of UPOV had just updated its 1978 Act, replacing it with a 1991 Act.[90] Critics of the 1991 Act noted several undesirable aspects of the new Act compared to the earlier 1978 version. Developing countries fought successfully to ensure that TRIPS made no mention of UPOV 1991 as the only, or even the preferable, system for plant variety protection.[91] Thus, in devising an 'effective *sui generis* system' for plant varieties, developing countries that had not yet adopted legislation had considerable flexibility.[92] (Table 3.7 sets out some of the core differences between UPOV 1978, UPOV 1991, and patent protection for plant varieties.)

Implementation of Article 27.3 (b) was one of the areas where developing countries most widely missed their TRIPS deadlines. When seventy-three developing countries reached their year 2000 TRIPS deadline, less than half had passed relevant legislation in the area of plant variety protection.[93] As noted above, only a few developing countries, notably Guateuala, introduced

Table 3.7. Comparison of plant variety protection under UPOV and patent law

UPOV 1978	UPOV 1991	Patent Law
Protection coverage		
Scope of rights extends to varieties of nationally defined plant species	Expands scope of rights to plant varieties of all genera and species	Inventions
Requirements		
Novelty	Novelty	Novelty
Distinctness	Distinctness	Inventive step (or non-obviousness)
Uniformity	Uniformity	Industrial application
Stability	Stability	Disclosure of the invention
Variety denomination	Variety denomination	—
Protection scope		
Minimum scope: Producing for purposes of commercial marketing, offering for sale, and marketing of propagating material of the variety	*Minimum scope*: Producing, conditioning, offering for sale, selling or other marketing, exporting, importing, stocking for above purposes of propagating material of the variety Some acts in relation to harvested material if obtained through an unauthorized use of propagating material and if the breeder has had no reasonable opportunity to exercise his right in relation to the propagating material	*In respect of the product*: Making, importing, offering for sale, selling, and using the product; stocking for purposes of offering for sale, etc. *In respect of a process*: Using the process and doing any of the above-mentioned acts in respect of a product obtained directly by means of the process
Protection term		
Min. 15 years	Min. 20 years	Min. 20 years from filing
Breeders' exemption		
Yes. However, hybrids (and like varieties) cannot be exploited without permission from holder of rights in the protected inbred line(s)	Yes. However, hybrids (and like varieties) cannot be exploited without permission from holder of rights in the protected inbred line(s) *Essentially derived* varieties cannot be exploited in some circumstances without permission of holder of rights in the protected initial variety	No provision
Farmers' exemption		
Includes farmers' exemption	Status of farmers' exemption changed from a general principle to an exception that members may establish through national laws	No provision
Double protection		
Prohibition of patents for any species eligible for plant breeders rights	Removes prohibition on double protection	Up to national laws

Source: Adaptation of table presented in Dutfield (2003: 190–1). Modified version of table in van Wijk et al. (1993).

patent protection for plant varieties. Other countries with legislation in place adopted a sui generis approach to the implementation of Article 27.3(b).

Table 3.8 illustrates the diversity of sui generis approaches pursued. It highlights that a striking number of countries followed the UPOV 1991 approach, eschewing the possibility to tailor-make an alternative sui generis system of protection.

After the entry into force of TRIPS, the developing country membership of UPOV 1978 system grew from three to twelve as countries moved to sign that version of the Agreement before the door closed (Bolivia, China, Kenya, Brazil, and Panama all joined in April 1999).[94] In addition, many countries passed plant variety protection laws based on UPOV 1978 or UPOV 1991 but did not actually join either convention. As of early 2008, several members of UPOV 1978 had laws that met UPOV 1991 standards and were expected to shift from UPOV 1978 to UPOV 1991.[95] Further, over twenty non-member developing countries already had UPOV 1991 consistent laws in place and were in a position to accede at any time.[96] Some sixteen members of OAPI in francophone Africa, for instance, had a regional framework for plant variety protection derived from the UPOV 1991 model law and were committed to joining UPOV 1991. In addition, a further ten developing countries had initiated procedures for becoming a member of the Union, namely Costa Rica, Egypt, Guatemala, Honduras, India, Malaysia, Mauritius, the Philippines, Venezuela, and Zimbabwe (i.e., Submission of laws or draft laws to the UPOV Council to evaluate compliance with UPOV 1991).[97]

Among those countries with UPOV-like plant variety protection, the term of protection varies, sometimes according to the subject matter. In Argentina, for instance, the length of protection varies from 15 to 20 years, depending on the species, whereas Belize provides protection for 20 to 25 years depending on the species. The francophone African members of OAPI, on the other hand, provide 25 years protection for the range of different plant varieties.

There are also important differences among the alternative *sui generis* approaches taken by developing countries. Many of those laws designated in Table 3.8 as 'other' *sui generis* approaches still drew substantially from either the UPOV 1978 or 1991 regimes. They usually provided for plant breeders' rights but supplemented these with provisions for farmers' rights. The Andean Community's regional Decision 345, for instance, provided a *sui generis* approach that simultaneously met UPOV 1978 requirements. Irrespective of which *sui generis* approach countries took, it is notable that some thirteen developing countries incorporated exceptions to the rights of plant breeders in their laws allowing farmers to save, exchange, and sell (in a limited way) seeds produced from a protected variety (including Ecuador, India, and Pakistan).[98]

The number of countries with a non UPOV-style *sui generis* regime is difficult to determine. While there are many proposals and draft laws under discussion,

Table 3.8. Examples of variation in approaches to plant variety protection

Member of UPOV 1978 and ratification date	Member of UPOV 1991 and ratification date	UPOV 1991-style or equivalent	Combination of UPOV (1991 or 1978)-style plant breeder's rights and farmers' rights	Other *sui generis* approach to plant variety protection
South Africa (1977)	Korea (2002)	Cambodia (2005)	Andean Community (2000)[a]	Bangladesh (draft)
Argentina (1994)	Tunisia (2003)	OAPI region (1999)	Barbados (2001)	Guatemala (draft)
Uruguay (1994)	Jordan (2004)	Philippines (2002)	Egypt (2002)	Namibia (draft)
Chile (1996)	Singapore (2004)	Taiwan (2004)	India (2001)	SADC (draft)
Colombia (1996)	Tunisia (2005)	South Africa (1996)	Mexico (1997)[a]	Thailand (1999)
Ecuador (1997)	Morocco (2006)	Saudi Arabia (2004)	Pakistan (2000)	Zambia (draft)
Mexico (1997)	Vietnam (2006)	Costa Rica (2008)	Panama (2002)[a]	Zimbabwe (1974)
Brazil (1999)	Dominican Republic (2007)		Sri Lanka (2001)	Costa Rica
Bolivia (1999)	Turkey (2007)		Uruguay (1981)	(1998-Biodiversity Law)
China (1999)				
Kenya (1999)				
Panama (1999)				
Trinidad & Tobago (1998)				
Nicaragua (2001)				

Source: Compiled by author using UPOV website and texts of national laws and draft laws.

[a] Countries that are members of UPOV 1978 may also have provisions in their laws that supplement those required for UPOV membership.

only a handful of such regimes are in force. Costa Rica's 1998 Biodiversity Law included provisions regarding the protection of the traditional knowledge of local and indigenous communities (including their development of new plant varieties). Thailand's 1999 Plant Varieties Protection Act adopted a distinctive approach, distinguishing three different categories of protection available for plant varieties.[99] In Bangladesh, two complementary laws were drafted in the late 1990s, a Biodiversity and Community Knowledge Protection Act and a Plant Varieties Act (which continue to be debated by experts and various government committees).[100] In Africa, Namibia's draft access to Biological Resources and Associated Traditional Knowledge Act and the Zambia's draft Plant Variety and Seeds Act were based on the African Model Law for the Protection of the Rights of Local Communities, Farmers, and Breeders, and for the Regulation of Access to Biological Resources.[101]

3.3.5. *Copyright and Related Rights*

In the area of copyright, TRIPS requires most developing countries to strengthen existing rights and adopt new standards. Many of the Agreement's provisions do, however, provide options and flexibilities as to the scope and degree of protection offered.[102] Countries have the opportunity, for example, to specify certain limitations and exceptions to the rights of copyright holders.[103] (Table 3.9 presents a sample of the limitations and exceptions possible in TRIPS, noting that many of these derive from its incorporation by reference of provisions in the Berne Convention.)

Table 3.9. Examples of copyright limitations and exceptions available in TRIPS/Berne

Personal use	The most universally accepted limitation to the reproduction right. This may include time-shifting
Criticism and review	Available in most countries. Article 10 of the Berne Convention allows for short quotations
Educational purposes	Allows teachers to use extracts of copyrighted works for illustration purposes and on a variety of media, so long as the use is compatible with fair practices.
Reproduction by the press	Countries may determine the circumstances under which copyrighted works, incidental to the reporting of current events, are reproduced (Article 10bis and 10bis (2))
Ephemeral recordings	Broadcasting organizations may record broadcasts for an official archive (Article 11bis)
Libraries	Reproductions for preservation and replacement and other limited uses. This exception falls under the broad heading of teaching and the role libraries play in this respect
People with disabilities	There is no explicit limitation in the Berne Convention, but countries can implement limitations to facilitate access by disabled persons
Computer programs and interoperability	There is no explicit limitation in the Berne Convention, but countries can provide provisions that allow computer programs to be copied for the purposes of interoperability

Source: Author's adaption of text in Okediji (2006: 10–12).

TRIPS incorporates, by reference, several provisions of the Berne Convention that provide the basis for what is commonly known as 'fair dealing' or 'fair use' with respect to copyrighted works. The Berne Convention provides, for instance, that governments can permit use (to the extent justified by the purpose) of literary or artistic works by way of illustration in publications, broadcasts, or sound or visual recordings for teaching, provided such use is compatible with fair practice (Article 10(2)). It also permits governments to allow the reproduction of literary and artistic works in certain specified cases, provided this does not conflict with the normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author (Article 9(2)).[104] By reference to the Berne Convention, TRIPS also incorporates the Berne Appendix, which permits developing countries under certain circumstances to use compulsory licensing to purchase or reproduce imports to promote access to literary and artistic works published abroad (such as where the royalties or fees that copyright holders might otherwise demand in return for authorization would be unaffordable).

Most developing countries did not take full advantage of the copyright limitations and exceptions in TRIPS, including those specifically available to them through the incorporation of the Appendix to the Berne Convention.[105] The majority of developing countries provided only a limited range of limitations and exceptions to copyright, particularly those with older copyright laws (though many had shorter terms of protection). Perhaps most surprising was that countries made little use of TRIPS flexibilities that might have helped improve access to education and distance learning. Moreover, many developing countries adopted additional TRIPS-plus copyright protections.

The most common limitations and exceptions were those that allowed the incorporation of short extracts of works in teaching material or the performance of a copyrighted work for educational purposes. Argentina, for example, only provided copyright exceptions for educational and scientific purposes, and only then for a limited number of words.[106] Of nine countries reviewed in the Asia-Pacific region, only the Philippines and Mongolia took full advantage compulsory licensing options for translation, reproduction, and publication of copyright works such as textbooks in their laws (see Appendix 4).[107] Indonesia was the sole country that incorporated powers to deal with anti-competitive practices into its copyright legislation. Only the Philippines adopted a general 'fair use' provision in its law,[108] and was also the only country in the region to make full use of exceptions related to teaching and quotation. The area in which the nine countries made greatest use of TRIPS flexibilities was in the exclusion of official texts and their translations from copyright protection. Beyond the Asia-Pacific region, the variation was also considerable. Belize, for instance, had a broad exception to copyright specifying that the use of a work for the purpose of research, private

study, criticism, review, reporting, education, and parliamentary or judicial proceeding would not be considered an infringement. In other instances, the exceptions and limitations countries provided had conditions attached. Nigeria, for example, allowed any use by approved educational institutions, but required that such copies must subsequently be destroyed.

Some developing countries had specific provisions in their copyright laws related to translation (the dates of relevant laws follow in brackets). For example, Jordan provided for authorization to translate into Arabic (1999) and Malaysia for translation into the national language (1987). In addition, Vietnam provided exceptions for translation to and from ethnic languages of original Vietnamese works (1996) and Cambodia provided for translation to and from ethnic languages of original Khmer works (2002). India allowed for compulsory licensing for Indian works or for translations not available in India (1999). Indonesia's law also indicated that the government may authorize translation (2002). Nigeria's 1999 law provided exceptions for reproduction for the disabled while Brazil (1998), Dominican Republic (2000), Malaysia (1987), and Mongolia (1999), among others, specifically mentioned translation into Braille.

TRIPS requires the protection of software as literary works but is silent on matters regarding the permissibility of reverse engineering of software, and activities undertaken to make different software interoperable. From a development perspective, reverse engineering can be a useful way to promote innovation and competition in the software industry.[110] Most developing countries took advantage of TRIPS' silence on the matter and made no explicit mention of reverse engineering one way or the other. Some countries, namely India and Sri Lanka, specifically allowed reverse engineering to adapt software to 'enable use with a computer'. In addition, the Philippines' copyright law provided that de-compilation of computer programs to achieve interoperability 'may constitute fair use'.[111] In 2005, Morocco's copyright law allowed for both the copying and adaptation of computer programs, as did Thailand's 1994 law. In francophone Africa, the members of OAPI also provided for the free use and adaptation of computer programs in their regional law. Indonesia's law, on the other hand, expressly omitted any exceptions for the copying of computer programs. South Africa's 1995 copyright law specifically prohibited reverse engineering of software (but did allow back-up copies of computer programs). In addition, some developing countries committed to prohibiting such reverse engineering of software in bilateral FTAs with the United States (see Appendix 6).

Beyond the generally weak use of TRIPS flexibilities, copyright is the area of IP protection in which developing countries demonstrated a particularly strong collective propensity for TRIPS-plus standards. Table 3.10 shows that many developing countries adopted laws that extended the term of copyright protection beyond that required by TRIPS (i.e. life of the author plus

Table 3.10. Variation in copyright term among developing country WTO members

General copyright term (in years)	Country and date of laws stipulating this term of protection
Life of author + 100	Mexico (2003)
Life of author + 99	Côte d'Ivoire[OAPI] (1996)
Life of author + 80	Colombia (1982), Guinea (1980)
Life of author + 75	Guatemala (2000), Honduras (1999), St. Vincent & the Grenadines (2003)
Life of author + 70	Argentina (1997), Bahrain (2006), Brazil (1998), Burkina Faso[OAPI] (1999), Chad[OAPI], Costa Rica (2000), Dominica (2003), Ecuador (1998), Ghana (2005), Madagascar (1994), Morocco (2006), Mozambique (2001), Nicaragua (1999), Nigeria (1990), Paraguay (1998), Peru (1996), Singapore (2004), Turkey (1995), OAPI (1999), DR-CAFTA (2004)
Life of author + 60	Bangladesh (2000), India (1999), Venezuela (1993)
Life of author + 50 (TRIPS minimum)	Angola (1990), Antigua & Barbuda (2002), Barbados (1998), Belize (2000), Benin[OAPI] (1984), Bolivia (1992), Botswana (2000), Brunei (1999), Burma (1948), Burundi (1978), Cambodia (2003), Cameroon[OAPI] (2000), Central African Republic[OAPI] (1985), Chile (1970), China (2001), Chinese Taipei (1992), Congo[OAPI] (1982), Cuba (1994), Dominican Republic (2000), Egypt (2002), El Salvador (1993), Fiji (1999), Gabon[OAPI] (1987), Gambia (1956), Guyana (1956), Indonesia (2002), Jamaica (1993), Jordan (1992), Kenya (2001), Kuwait (1999), Lesotho (1956), Macao (1999), Malawi (1989), Malaysia (1987), Mali[OAPI] (1977), Mauritius (1997), Mongolia (1993), Namibia (1997), Nepal (2002), Niger[OAPI] (1993), Oman (2000), Pakistan (2000), Panama (1994), Papua New Guinea (2000), Philippines (1997), Qatar (2002), Rwanda (1983), Saint Kitts and Nevis (1956), Saint Lucia (1995), Saudi Arabia (2003), Senegal[OAPI] (1973), Sierra Leone (1965), Solomon Islands (1996), South Africa (1992), South Korea (1989), Sri Lanka (2000), Suriname (1913), Swaziland (1912), Tanzania (1999), Thailand (1994), Togo[OAPI] (1991), Tonga (1988), Trinidad & Tobago (1997), Tunisia (1994), Uganda (1964), United Arab Emirates (2002), Uruguay (2003), Vietnam (2005), Zaire (1986), Zambia (1994), Zimbabwe (1981), Andean Community (1993),[a] NAFTA (1994)[a]
Less than life of author + 50	Djibouti (1996), Haiti (1985)
Law, but unknown duration	Grenada (1989)
No law or draft law under consideration	Guinea-Bissau, Maldives, Mauritania (2002)[OAPI]

Source: Compiled by author based on national IP laws available from WIPO, WTO, and WTO Trade Policy Review Secretariat Reports.

[OAPI] Designates that this country is a member of OAPI.

[a] Represents the minimum term of protection under the regional arrangement. Some members have subsequently adopted longer terms of protection.

fifty years). Of the 106 developing countries surveyed, over sixty-five provided a copyright term that extended to or beyond the TRIPS requirement. At the extreme end of the spectrum, countries such as Côte d'Ivoire, Colombia, Guinea, and Mexico all provided life plus eighty years or more copyright protection. The African region has the greatest incidence of TRIPS-plus terms of protection for copyright. Many, but not all, the countries that implemented TRIPS-plus copyright terms were obliged to do so in bilateral trade agreements. By contrast, a number of LDCs had not yet updated copyright laws and

the terms of protection were far shorter. In Haiti, for example, the term of protection of copyright was the life of the author plus twenty-five years.[109]

Finally, it is notable that several developing countries enacted TRIPS-plus provisions in their laws to address challenges that copyright holders experience with unauthorized copying due to the possibilities afforded by changes in digital technologies and the Internet. Examples of such measures included laws that authorized the use of technological protection measures (TPMs) by copyright holders to prevent duplication of their works and made circumvention of such measures a criminal act.[112] In addition, a growing number of countries added provisions to their copyright laws or new laws to combat 'optical disc piracy'. As of December 2007, some thirty-six developing countries were members of each of the WIPO Copyright Treaty (WCT) and the WIPO Performance and Phonograms Treaty (WPPT) (neither of which is referred to in TRIPS). The options available to countries to meet their obligations under these treaties have been hotly debated in the United States and Europe, but a growing number of developing countries have followed their lead by implementing laws regarding TPMs and their circumvention.[113]

3.3.6. *Anti-competitive Practices*

Article 8.2 of TRIPS states that WTO members may adopt appropriate measures to prevent the abuse of intellectual property rights by IP right-holders or the resort by them to practices that unreasonably restrain trade or adversely affect the international transfer of technology. Further, Article 40 of TRIPS recognizes the potential link between IP laws and competition policy and laws.[114] TRIPS recognizes the right of countries to specify in their national laws those licensing practices or conditions that may constitute an abuse of IP rights and have an adverse effect on competition. The Agreement also allows countries to take appropriate measures to prevent or control practices, such as exclusive grant-back clauses, clauses that preclude challenges to validity of the patent, and coercive package licensing.[115] In such cases, the Agreement demands that countries conduct consultations with the relevant holders of IP rights.

To date, there has been limited analysis of the extent to which developing countries have taken advantage of the possibility to specify offending licensing practices and conditions.[116] Countries could take such decisions either by adding provisions to national IP laws or through separate laws specifically on the question of restrictive licensing practices and conditions. A further option is for countries to bolster national competition laws to cover these issues and to empower competition authorities to pursue them.

The Andean Community specifically took up the issue of licensing conditions in contracts related to the transfer of technology, trademarks, and patents in its Decision 291. In so doing, the members of the Community

set out a series of clauses that contracts should not contain (e.g. such as restrictions on the volume and structure of production or on the use of competing technologies, or clauses that require the technology buyer to transfer to the supplier inventions or improvements generated through use of the technology).

While most developed countries balance their IP laws with competition policies that can be used to address monopolistic practices, the process of drafting and implementing competition laws falls behind the implementation of IP laws in developing countries. Some developing countries have competition laws, but no competition authorities to implement them. Other countries have established competition authorities but are yet to promulgate associated laws. Developing countries which do have competition laws in place include Brazil, India, Kenya, Peru, South Africa, and Thailand.[117] Peru is the country with the most integrated regime in this respect. Its national IP office, INDECOPI, is also the national authority charged with competition issues.[118] To date, there have been only two developing countries where national competition laws were applied to IP issues, namely South Africa (in 2003 and 2007) and Thailand (in late 2007) (see Section 6.3.1).

3.3.7. *Enforcement*

While TRIPS sets forth a range of legal and administrative obligations to improve enforcement, it leaves considerable scope for interpretation of these provisions. TRIPS does not establish any obligation to establish a distinct judicial system to enforce IP rights. Further, many of the key terms in the Agreement, such as 'effective action', 'expeditious remedies', or 'adequate remuneration' are left undefined. This ambiguity, combined with Article 1 of TRIPS, which enables members to implement TRIPS in accordance with their own legal system and practice, leaves countries room for discretion in the area of enforcement.[119] As noted by one leading legal authority on TRIPS, '[w]hat is effective, expeditious or adequate in one context may not be so in another'.[120] Further, TRIPS does not specify the level of resources that should be dedicated to IP enforcement or set out any obligations relating to distribution of resources for enforcement of IP laws versus law in general.

Among developing countries, there was considerable variation in the specifics of laws implemented to meet TRIPS enforcement requirements and in how such laws are administered and applied in practice.[121] Notably, several developing countries have introduced some TRIPS-plus enforcement measures, such as border-control measures relating to exports or goods in transit (which are not required by TRIPS but are often conditions of bilateral FTAs with the United States). While a detailed exploration of IP enforcement is beyond the scope of this book, see Chapters 6 and 8 for some related discussion.

3.3.8. *Other Aspects of Variation in IP Legislation Not Covered by TRIPS*

In the period under study, many developing countries proactively implemented or updated IP legislation in several areas not covered by TRIPS. These warrant attention because they help provide a more complete picture of the variation in efforts undertaken by developing countries to tailor IP reforms to national development objectives.

3.3.8.1. UTILITY MODELS

Any WTO member can adopt legislation to protect 'utility models' or 'petty patent' titles. Advocates of utility model titles argue that they can help protect and promote the 'minor' innovations that prevail in developing countries. They can, for instance, provide incentives for creativity in small and medium enterprises, as well as changes in the design of tools or machinery which improve their functionality.[122] Over thirty developing countries have implemented utility model legislation, either as part of their broader industrial property law(s) or as a stand-alone law, including Argentina, Belize, Brazil, and the Andean countries.[123]

3.3.8.2. DISCLOSURE OF ORIGIN OF GENETIC MATERIAL AND PRIOR INFORMED CONSENT (PIC)

TRIPS provides that patent applicants may be required to disclose the best mode for carrying out the invention as well as information concerning corresponding applications and grants (Article 29). Developing countries have called for international IP laws to require further disclosure commitments. Specifically, they have argued that the patent system should be more supportive of the Convention on Biological Diversity as well as the rights of countries and communities supplying biological resources. (Since 2006, this culminated in their submission to the WTO of proposals for an amendment to TRIPS requiring disclosure of the origin of genetic materials in patent applications.)

Putting this principle into practice, at least ten developing countries required patent applicants to disclose the source of origin of any biological material or associated traditional knowledge used in, or used to develop, the invention (e.g. Brazil, Bolivia, China, Costa Rica, Dominican Republic, Egypt, India, the Philippines, and the Andean Community).[124] In several of these countries, failure to disclose could result in refusal of a patent application or the declaration of existing patent rights as void or unenforceable. Costa Rica's Biodiversity Law, for instance, required patent applicants to present a certificate of access to show that the genetic resources on which the invention was based were acquired with the approval of the relevant communities (e.g. implementing the principle of prior informed consent). In accordance with its Common Regime on Access to Genetic Resources (Decision 391), the Andean Community's regional intellectual property regime (Decision 486)

required disclosure of the right to use genetic resources. Decision 486 states that applications for patents shall contain a copy of the contract for access if the products or processes for which a patent application is being filed were obtained or developed from genetic resources or by products originating in one of the member countries. Further, if applicable, the patent applicant must provide a copy of a document that certifies the licence or authorization to use the traditional knowledge of indigenous, African American, or local communities in the member countries where the products or processes were obtained or developed on the basis of the knowledge originating in any one of the member countries.

3.3.8.3. TRADITIONAL KNOWLEDGE, FOLKLORE, AND CULTURAL HERITAGE

A number of developing countries provide protections for traditional knowledge (TK), folklore, and/or cultural heritage. In the African region, Angola, Namibia, South Africa, and sixteen francophone countries all included some protections for cultural heritage and folklore in their laws, sometimes within IP laws and sometimes in stand-alone national laws (such as laws on cultural heritage).[125] A number of countries, such as Antigua and Barbuda, have included positive protections for folklore within their copyright laws. In francophone Africa, countries also agreed to protections for cultural heritage in their regional IP framework and many incorporate such protection in their parallel national copyright laws as well.[126]

Some countries have also promulgated stand-alone TK laws. In 2006, the African Regional Intellectual Property Organization (ARIPO) concluded a draft legal instrument to safeguard, foster, and promote African TK and folklore, which was also shared for discussion with countries in francophone Africa.[127] In other countries, a *sui generis* approach to TK was pursued through provisions in laws on biodiversity and genetic resources. In such cases, the focus of the protections was often 'defensive'. That is, rather than providing positive IP protections for folklore, cultural heritage, or TK-related genetic resources, countries adopted laws that defend these against unauthorized or unfairly compensated use, or other misuse. Such laws included a variety of different provisions, including those designed to control access to genetic resources (see section 3.3.8.2), ensure prior-informed consent as a condition of the use of TK, ensure the sharing of any benefits that arise therefrom, and promote deference to customary laws.[128]

3.4. A Typology of Variation

In addition to variation in the use of specific TRIPS flexibilities, there was also diversity in the overall extent to which countries took advantage of TRIPS

flexibilities. Three general categories of countries emerge. Countries in Group 1 are those that made the least use of TRIPS flexibilities and included a broad range of TRIPS-plus provisions in their national laws. Significantly, some thirty developing countries fall in this TRIPS-plus group and half of them are LDCs – the countries that conventional wisdom leads us expect would exhibit the lowest IP standards, the greatest use of TRIPS flexibilities, and the fullest use of transition periods. Group 2 comprises a diverse group of countries with a combination of TRIPS-plus, -minimum, and/or -minus IP standards and that made mixed use of TRIPS flexibilities. Group 3 comprises countries that either offered no IP protection or fell short of TRIPS standards across a broad range of topics. This category mostly comprises LDCs, which have not yet reached their deadlines for TRIPS implementation, but also includes several developing countries with 2000 deadlines.

To illustrate the variation between developing countries in their approach to TRIPS implementation, Table 3.11 provides examples of countries that fall into each of these categories. The table is intentionally illustrative, not exhaustive. The challenge of devising a broader index of the strength of TRIPS implementation by developing countries is beyond the scope of this study. The purpose here is simply to show that in addition to diversity in the extent to which particular TRIPS flexibilities were used, there was also variation by country in IP standards and their overall use of TRIPS flexibilities.

Table 3.11. A typology of overall variation in IP standards by country

	Least developed countries	Developing countries
Group 1		
Countries that implemented a broad range of TRIPS-plus standards	Benin, Burkina Faso, Cambodia, Central African Republic, Congo, Equatorial Guinea, Guinea, Guinea-Bissau, Mali, Mauritania, Nepal, Niger, Senegal, Togo	Bahrain, Cameroon, Chad, Chile, Côte d'Ivoire, Colombia, Dominican Republic, Gabon, Guatemala, Honduras, Jordan, Mexico, Mongolia, Morocco, Oman, Peru, South Korea, Tonga, Singapore
Group 2		
Countries with a mixed approach to TRIPS flexibilities	Bangladesh, Malawi, Tanzania, Uganda, Zambia	Malaysia, Pakistan, Philippines, Argentina, Brazil, Bolivia, China, Cuba, Ecuador, Egypt, Ghana, India, Indonesia, Kenya, Korea, Nigeria, Pakistan, South Africa, Thailand, Venezuela
Group 3		
Countries yet to complete TRIPS-related IP reforms in most areas	Angola, Burundi, Djibouti, Gambia, Haiti, Lesotho, Madagascar, Maldives, Mozambique, Myanmar, Rwanda, Sierra Leone, Solomon Islands, Sudan	Zimbabwe, Papua New Guinea, Grenada, Namibia, Suriname

Source: Compiled by author based on a sample of WTO Trade Policy Review reports up to 2007.

3.5. An Economic Explanation?

Can the variation in legislative reforms developing countries undertook to implement TRIPS be explained by reference to their respective economic and social circumstances?

To aid such an analysis, it would be helpful to have benchmarks of the levels of IP protection that development economists deem appropriate for a country given its overall economic profile, specific endowments, and social priorities. While no such benchmarks currently exist,[129] the economic literature on IP and development does put forward several general propositions about the relative degree of IP protection one would expect to see in developing countries based on a range of socio-economic variables.

In this section, I test the general propositions that the economic literature offers against the evidence of IP protection in developing countries and on TRIPS implementation in particular. In so doing, I find that national socio-economic variables may well be part, and sometimes a large part, of the TRIPS implementation story for particular countries, but they are not sufficient to explain the range of outcomes or variation that we see. In making this assessment, I am aware of a vast technical and theoretical literature by economists debating the links between IP and development, appropriate methodologies, and possible measurements. This literature generally focuses on levels of IP protection rather than specific issues of TRIPS implementation or the use of its flexibilities. These constraints so acknowledged, even a rudimentary set of comparisons yield findings that economists' models and propositions are ill-equipped to explain the variation in TRIPS implementation.

The core proposition advanced in the economic literature on IP and development is that national interests with respect to IP will change over time as countries develop economically and their technological capacity increases. That is, economists expect to see a positive correlation between the strength of IP protection and the level of development (measured by GDP per capita). Conversely, one would expect to see weaker, more flexible standards of protection in the poorest developing countries.[130] IP protection is not expected to be the driver of stronger innovation or technological capacity in the world's poorest countries. Instead, the evidence suggests that long-term investments in education, scientific research, technological training, and infrastructure are more important first steps.[131] A review of the evidence on the ground, however, reveals a more complex relationship between the strength of IP protection and development.

Figure 3.1 and Table 3.12 each show that there is a broad set of developing countries for which there is *not* a clear positive correlation between the strength of IP protection and their GDP per capita. Figure 3.1 compares GDP per capita in a sample of developing countries with the degree of IP protection, using the World Economic Forum's (WEF) Global IP Protection

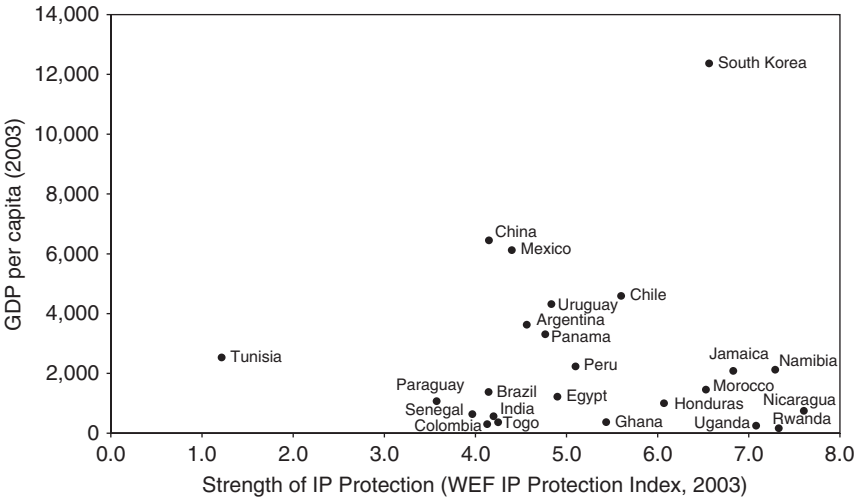

Figure 3.1. Variation in IP protection among selected developing countries by GDP per capita

Index as a proxy measure for IP protection.[133] The Index combines the results of a qualitative survey of business executives regarding the perceived degree of IP protection in developing countries and measures of patent strength, copyright piracy, and trademark protection. The index focuses on the degree of actual IP protection, not just the strength of IP laws. The 'inputs' of IP protection include IP laws, but also the administrative and judicial institutions and practices for enforcing these.[132] The majority of developing countries – with vastly different levels of development – fall in a middle range of IP protection (from three to six on the WEF IP Protection Index).

Table 3.12 compares the GDP per capita of developing countries to the degree to which they used the core TRIPS flexibilities according to the typology of variation in the overall use of TRIPS flexibilities presented in Table 3.11 above. Like Figure 3.1, Table 3.12 reveals that a large and economically diverse group of developing countries fell in the middle, making mixed use of TRIPS flexibilities, and were flanked on either side by a group of countries made markedly stronger or weaker use of those flexibilities.

Both Figure 3.1 and Table 3.12 affirm economists' expectations regarding a high correlation between strong levels of development and IP protection in countries such as South Korea (and also Singapore, which is not shown in Figure 3.1.) In addition, Table 3.12 shows that Group 3 countries, which were yet to undertake TRIPS consistent IP reforms in key areas, were also the poorest (notwithstanding that some LDCs did have high IP standards in some areas

Table 3.12. Comparison of approach to TRIPS implementation and GDP per capita for selected developing country WTO members

Per capita GDP (2006)	<US$1,000	US$1,000–2,500	US$2,500–4,000	>US$4,000
Group 1 (broad range of TRIPS-plus standards)	Benin, Burkina Faso, Cambodia, Cameroon, Central African Republic, Chad, Congo, Guinea, Guinea-Bissau, Mali, Mauritania, Nepal, Niger, Togo	Cameroon, Côte d'Ivoire, Gabon, Senegal	Colombia, Dominican Republic, Guatemala, Honduras, Jordan, Morocco, Peru	Mexico, Chile, South Korea, Bahrain, Oman, Singapore
Group 2 (mixed use of TRIPS flexibilities)	Bangladesh, Namibia, Tanzania, Uganda, Zambia	Belize, Botswana, India, Indonesia, Bolivia, Ecuador, Kenya, Egypt, El Salvador, Jamaica, Mauritius, Nicaragua, Paraguay, Sri Lanka, Tunisia	Argentina, Brazil, China, Costa Rica, Nigeria, Pakistan, Panama, Thailand, South Africa, Uruguay, Venezuela	Malaysia
Group 3 (yet to complete TRIPS reforms)	Angola, Burundi, Djibouti, Gambia, Haiti, Madagascar, Malawi, Maldives, Mozambique, Rwanda, Sierra Leone, Solomon Islands, Lesotho	Zimbabwe, Suriname, Papua New Guinea, Namibia, Grenada		

Source: Compiled by author using UNDP (2007) and information provided in WTO Trade Policy Review reports up to 2007.

arising from laws adopted in the early days after independence, as noted in Chapter 2). Most of the countries in Group 3 have yet to reach their deadlines for TRIPS implementation. Figure 3.1 also shows that some of the countries with the highest IP protection were among the world's poorest. Table 3.12 similarly shows that a range of African LDCs are in Group 1 (the group of countries with TRIPS-plus standards), rather than Group 3 as one might have expected. That is, many of the poorest WTO members (such as those in francophone Africa) opted for some of the world's highest IP standards and made limited use of TRIPS flexibilities that might have helped them address social challenges in the areas of public health, education, and agriculture.

A comparison of Figure 3.1 and Table 3.12 reveals several further distinctive aspects of the ranking of some LDCs. In Figure 3.1, several LDCs were among those providing relatively high IP protection. Rwanda, for example, appears at the high end of overall IP protection. One explanation for such a high ranking for some LDCs is that the level of economic activity in such countries is so low that piracy is also low, which in turn generates relatively positive perceptions of the actual protection that industry receives. Moreover, the case of Rwanda is interesting because its formal standards of patent protection were relatively high even before TRIPS came into force. (The WEF includes the term of patent protection as one the components of its IP Protection Index.) In many developing countries that retain laws largely left in place at the end of the colonial era, it was only TRIPS implementation that spurred an overhaul of IP laws and efforts to make use of IP safeguards and options, such as those that exist in TRIPS.

The economic literature offers a series of additional propositions and measures regarding the expected relationship between IP protection and development that draw attention to how economic structures and social profiles of developing countries differ, even where overall indicators of development may be similar. The following cursory review of the evidence illustrates how the sheer diversity of developing countries and the complexity of their economic structures challenge the effort to devise useful generalizations regarding the correlation between particular economic variables and IP protection.

First, economists expect IP protection to increase as countries develop technological capacity. Table 3.12 and Figure 3.1 show that this expectation was realized in the case of South Korea and Singapore. But the correlation was less clear for countries deemed 'moderate technology performers' by analysts of technological capacity (such as Brazil, Argentina, Chile, Mexico, Costa Rica, Venezuela, Uruguay, Malaysia, South Africa, and Turkey). Several of these countries were not in Group 1, but rather had a mixed approach to IP protection, with strong standards in some areas and weaker ones elsewhere.[134] Second, economists predict a positive correlation between IP protection and the technological content of trade. The degree of IP protection is predicted

to be higher in countries engaged in high-technology exports (because IP protections can protect the value of their exports) than in countries that rely heavily on technological imports (because IP protection increases the costs of inputs, knowledge, and technology vital for national development).[135] Again, however, reality is more complex. A country's interests in IP protection may vary depending on the product or sector at hand. A single country may rely heavily on imports of technological products (giving it an interest in lower patent protections), but also depend heavily on the export of cultural products such as music recordings (giving it interests in stronger copyright protections). (Note that many developing countries are far more interested in ensuring that their music exports are protected in foreign countries than in the less lucrative home market.)[136]

The changing organization of production in the global economy also challenges some of the long-standing assumptions about the drivers of higher IP protection. For countries keen to build technological capacity, the conventional wisdom leads one to expect weaker IP rights. Increasingly, however, the greatest economic opportunities for some companies in developing countries may arise from licensing foreign IP (from foreign companies keen to take advantage of cheaper R&D or manufacturing services in developing countries) rather than copying foreign technologies for local sale. In these cases, effective IP protection may be a necessary prerequisite to securing licences to use or produce a particular technology. Anecdotal evidence suggests that in some countries IP protection is one of a range of factors that contributes to their international reputation for having a conducive business environment, which in turn may be critical to their ability to attract foreign investment for local industry. For the poorest developing countries, on the other hand there are questions regarding the degree to which IP laws are relevant at all. Studies of the relationship between IP laws in LDCs and innovation, technology transfer, and foreign direct investment highlight that contract law, business confidence in the legal and political system, the absence of political unrest, and factor endowments, such as the availability of skilled workers, are far more important than IP laws in determining the extent to which foreign companies invest and transfer technology.[137] Some African countries, for instance, have some of the world's strongest IP laws, but the poorest records of FDI. Indeed African countries with the strongest FDI flows (e.g. in the oil and mineral extraction sectors) are those that do the least to protect IP.

Another challenge to explaining TRIPS implementation by reference to socio-economic factors is that governments sometimes make policies based on what they believe or what they *hope* to create, rather than on their current circumstances. That is, governments with very low technological capacity may believe that it is precisely the lack of strong IP legislation that has hindered the development of technological capacity. Some governments may believe that stronger IP protection is the best way to build that capacity.

Other governments may believe that tailored IP protection and strategic use of TRIPS flexibilities, combined with a proactive industrial strategy, is the better option.

Stepping back from the many debates and empirical challenges at hand, the core point for this study is that the economic literature on the relationship between levels of IP protection and national economic factors does not readily provide us with a clear explanation for the range of observable variation in how developing countries responded to TRIPS. Indeed, in several cases there are stark contrasts between what socio-economic circumstances lead us to expect and the actual approach countries took to TRIPS implementation, particularly in terms of the use of TRIPS flexibilities.

3.6. The Case for Political Analysis

Developing countries have exhibited striking diversity in their approaches to TRIPS implementation. The timing of TRIPS implementation and the use of TRIPS flexibilities varied significantly. Some developing countries took far more advantage of the available flexibilities than others. Further, many developing countries made additional international commitments to implement TRIPS-plus standards, thereby sacrificing their opportunity to use many of the flexibilities available under TRIPS. In some instances, the way countries responded to TRIPS contrasted with the concerns they expressed about the Agreement both during and after its negotiation.

What explains the divergence between the approach to TRIPS implementation in some developing countries and their apparent economic interests? Why did so many countries undertake IP reforms that exceeded TRIPS-minimum requirements? Why did some of the poorest countries adopt some of the highest IP standards? What explains why countries used TRIPS flexibilities in some areas but not in others? Why were some TRIPS flexibilities so much more popular than others? Why was there greater diversity in some areas of IP protection than others? While domestic economic factors help account for some aspects of the diversity in TRIPS implementation, political analysis is required to explain the range of variation that emerged. The following three chapters offer a political framework for explaining that variation.

Notes

1. The analysis of the various TRIPS flexibilities described in this section draws extensively from South Centre (1997), Musungu and Oh (2006), Correa (2000*a*), and Thorpe (2002).

2. Combined with the requirement that 'procedures shall be applied in such a manner as to avoid the creation of barriers to legitimate trade', the MFN and National Treatment principles aim to ensure that the protection of IP (or lack thereof) should not be used to disrupt or distort trade flows. If, for example, a state only offered IP protection for its own nationals, this would present a barrier to trade for non-nationals, who would receive no protection for the IP elements of goods or services they wished to export to that jurisdiction. While the Berne Convention also included an MFN requirement, it was not always observed. Some commentators also read an MFN principle into the National Treatment obligation of the Paris Convention on the basis of the history and general purposes of the Convention. See Reichman (1989).
3. In other GATT agreements, WTO members can challenge a law or action of another country on the basis *not* of a failure to comply with an *agreed obligation*, but rather for impeding the attainment of the Agreement's objectives or impairing a potential benefit 'due to the application by another country of *any* measure, whether or not it conflicts with the provisions of the Agreement, or the existence of *any other situation*'. See Abbott (2003*b*).
4. Abbott (2003*b*) and Stilwell and Tuerk (2000).
5. Exceptions include protection for utility models. In such instances, however, countries are still bound by some TRIPS provisions in the way they formulate and implement national laws. While not generally described as a category of IP, it is also notable that TRIPS did not specifically address the issue of protection of traditional knowledge. See South Centre (1997) and Correa (1997).
6. TRIPS incorporates most of the provisions of the Berne Convention, but notably not its provisions concerning moral rights which enable authors to control certain uses of their works to protect their reputation as artists and to ensure recognition of their authorship.
7. Rental rights enable IP-holders to prevent the commercial rental of relevant works even after the first sale of a copy.
8. TRIPS also expanded the applicability of the Berne Convention's three-step test and introduced an idea–expression dichotomy that was not in Berne. Whereas the copyright term in Berne was already the life of the author plus fifty years, TRIPS made several clarifications regarding how the fifty-year term should be computed in the case of non-natural persons.
9. The U.S. argument for such extensions is that the effective period of patent protection for inventions of new chemical entities may otherwise be less than the full twenty years required by TRIPS because a part of that period may have expired before marketing approval is obtained from the relevant public health or safety regulatory bodies.
10. See Watal (2001).
11. The right of members to use the flexibilities in the TRIPS Agreement was also recognized by the WTO Appellate Body in the so-called *India-Mailbox* case. See Abbott (2007: 8).
12. Correa (2000*a*).
13. The most well known of such exceptions is the fair-use doctrine in the United States which permits any use of copyright for free and without permission

provided it is *fair*. For a discussion of the definition and scope of this doctrine and debates about its application, see Okediji (2000). For developing countries, greater use of copyright limitations and exceptions could help to increase access to copyright material by students, researchers, teachers, and librarians are considered one of the mechanisms for improving literacy and education. See IFLA (2002).

14. The term *sui generis* means 'of its own kind'. In the TRIPS context, *sui generis* refers to a system that protects plant varieties that is not a patent system, though it may draw from patents or from other kinds of models and laws.
15. UNCTAD-ICTSD (2005).
16. Correa (2007*a*) and UNCTAD (2008).
17. If found to be patentable, a patent must be granted for the remainder of the patent term calculated from the date of filing.
18. Notwithstanding proposals from industry during the TRIPS negotiations, the Agreement does not require countries to provide patent protection to applications that were in the 'pipeline' in these countries at the time of its entry into force.
19. WTO (2001*a*).
20. See WTO (2005*b*, 2005*c*). The Maldives also separately made a request. See Chapter 4, Section 4.2.6.
21. Gerhardsen (2005*a*). Also see related discussion in Chapter 4, Section 4.2.6.
22. WTO (2003*a*).
23. WTO (2005*a*, 2005*d*). The waiver will remain in force until two-thirds of WTO members ratify the amendment. By December 2007, only twenty-eight member states had ratified the decision, prompting WTO members to extend the deadline until December 2009.
24. Correa (2000*a*). The mandatory nature of this provision was confirmed in the text of the August 30 decision. See WTO (2003*a*).
25. A summary of the work of the TRIPS Council is made in an Annual Report of the Council each year. For summaries of TRIPS Council sessions, see http://www.wto.org/english/tratop_e/trips_e/intel6_e.htm.
26. Detailed information on the notification procedures can be found on the WTO website at: http://www.wto.org. For a discussion of the origins and use of these procedures, see Otten and Wager (1996) and Matthews (2002).
27. In each report, the status of various laws is detailed by the Secretariat drawing on evidence provided by the country in question or by independent research conducted by the WTO Secretariat staff.
28. Implementation of TRIPS is thus a more detailed procedure than compliance with market access-related WTO Agreements where governments can generally make a single decision that automatically gives effect to their obligations (i.e. a change in the tariff schedule).
29. These include the Biological Diversity Act (2002), the Copyright Act (1957), the Design Act (2000), the Geographical Indications of Goods (Registration and Protection) Act (1999), the 2005 amendments to the Patents Act (1970), the Protection of Plant Varieties and Farmers' Rights Act (2001), the Semiconductor Integrated Circuit Layout Design Act (2000), and the Trade Marks Act (1999). IP is also dealt with under trade secrets laws and the Indian Contract Act.

30. Correa (2000*a*: xi, 33)
31. See Bass (2002) and Lewis-Lettington and Munyi (2004).
32. Author's interview with Pedro Roffe, ICTSD, Dec. 2007.
33. One of the revised Bangui Agreement's Annexes (on integrated circuits) is not yet in force and most OAPI countries have not yet made complementary changes to their national copyright legislation. See Chapter 7.
34. See discussion in Chapter 5.
35. In 2007, Bangladesh's prevailing IP laws included a 1911 Patent and Designs Act, a 1933 Patents and Designs Rule, a 1940 Trade Marks Act, and a 1963 Trade Marks Rule.
36. IIPI (2000).
37. Musungu and Oh (2006: 8).
38. These countries were Argentina, Brazil, Cuba, Egypt, India, Kuwait, Morocco, Pakistan, Paraguay, Tunisia, Turkey, United Arab Emirates, and Uruguay. It is probable that there were also other WTO members that ought to have notified the WTO that they did not grant pharmaceutical product protection. In addition, some countries that were not yet WTO members also did not provide such protection. Jordan, for example, did not provide patent protection for pharmaceutical products until it joined the WTO in 2000.
39. Abbott (2007: 8) and Bermudez et al. (2000). Brazil also agreed to grant patents for products that had not previously been introduced onto the Brazilian market, even if patents for those products would not ordinarily have been available. Several commentators reject the constitutionality of this action, and in early 2008 national NGOs launched a legal case in Brazil on this matter. See New (2008*a*).
40. TRIPS states that: 'for the purposes of dispute settlement under this Agreement, subject to the provisions of Articles 3 and 4, nothing in this Agreement shall be used to address the issue of the exhaustion of intellectual property rights'. While TRIPS Article 28 is very specific on the rights that a patent should confer on its holder, including the right to prevent third parties from importation of the patent product or a product produced by a patented process without the patent holder's consent, TRIPS Article 6 makes it clear that the practices of WTO members in regard to the exhaustion of IP rights cannot be challenged under the WTO dispute settlement system, provided that they do not discriminate on the grounds of the nationality of right holders.
41. UNCTAD-ICTSD (2005).
42. WTO (2001*a*).
43. In the European Union, for example, a French patent holder is unable to use the rights in her French patent to prevent the import of products that she has already marketed in Spain.
44. Musungu and Oh (2006: 99).
45. Musungu and Oh (2006).
46. Gerhardsen (2006*d*).
47. Correa (2007*c*).
48. This opinion is advanced by Correa (2007*c*: 87).
49. See Correa (2007*c*: 87).
50. Ibid.

51. For a discussion of the exceptions to patent rights in developing countries, see Garrison (2006).
52. Watal (2001: 104). See also Correa (2000*a*) and CIPR (2002).
53. In order to effectively circumvent the 'method' exception in the medical field, patent laws in a number of countries, most notably within Europe, have modified the concept of novelty and developed new ways of constructing patent claims to allow new and second uses to be protected.
54. Musungu and Oh (2006).
55. Thorpe (2002).
56. See Industrial Property Law of 18 September 2000, Articles 93, 97–9.
57. The draft law is available at: http://www.grain.org/brl/?docid=82010&lawid=2925.
58. Correa (2000*a*: 30).
59. A member seeking to exclude such inventions would most likely rely on the morality exception of Article 27(2) or the general novelty, inventiveness, and industrial applicability requirement applying to all inventions.
60. As of December 2007, these eighteen developing country WTO members were China, Cuba, South Korea, Dominican Republic, El Salvador, Guatemala, Honduras, India, Mexico, Nicaragua, Oman, the Philippines, Senegal, Singapore, South Africa, Trinidad and Tobago, Tunisia, and Turkey. At that time, the Agreement had sixty-eight contracting parties.
61. The treaty relies on a network of recognized international depository authorities (IDAs) which manage access to the biological samples to avert potential patent infringement. In 2007, there were thirty-one IDAs in nineteen countries, only two of which were in developing countries. The aim of the treaty is reduce the duplication of costs and to streamline the process for obtaining protection of biopatents across several jurisdictions.
62. Cloetea et al. (2006).
63. CIPR (2002: 116).
64. Musungu and Oh (2006).
65. Ibid.
66. Ibid.
67. Ibid.
68. Musungu and Oh (2006: 99).
69. The use of the term 'Bolar exception' has its origins in a 1984 ruling by the U.S. Federal Circuit in *Roche Pharmaceuticals v. Bolar.* As a consequence of this ruling, U.S. legislators introduced the Hatch–Waxman Act, which provides that 'it shall not be an act of infringement to make, use, offer to sell, or sell within the United State or import into the United States a patented invention [. . .] solely for uses reasonably related to the development and submission of information for regulatory purposes'. The interpretation of this law was later tested in the courts. In 2005, the U.S. Supreme Court decided in *Merck v. Integra Life Sciences* that the law covered acts that are reasonably related to the making of submissions for the purposes of obtaining regulatory approval for generic medicines.
70. At issue in the case was the legality of a provision of Canadian law that allows generic producers to use patented products, without authorization and prior to the expiry of the patent term, for the purposes of seeking regulatory approval from

public health authorities to market their generic version as soon as the patent expires. This case also confirmed that while limited production prior to patent expiry is permissible, production for stockpiling is not allowed under TRIPS. See WTO (2000*a*).

71. Musungu and Oh (2006).
72. For an elaboration of the available flexibility and model options for developing countries, see Love (2001).
73. Note that TRIPS incorporates the Paris Convention by reference, with the result that the grounds for compulsory licensing may include those related to the prevention of abuses of patent rights (which were included in the Paris treaty).
74. Correa (1999*b*).
75. For an overview of this agreement, see WTO (2005*d*).
76. Concerns have been raised in Kenya that this provision may be contrary to Section 75 of the Kenyan Constitution (regarding the right of persons to property). The Kenya Industrial Property Office (KIPI) subsequently led efforts to change the patent law, thus far without success. See Garwood (2007), Gerhardsen (2006*b*), and Lewis-Lettington and Munyi (2004).
77. Khor (2007) and Yoke Ling (2006).
78. ICTSD (2007*b*).
79. ICTSD (2007*a*).
80. Oh (2006) and Khor (2007). On Malaysia specifically, see Yoke Ling (2006). This observation also draws from the author's interview with Sangeeta Sashrikant, Third World Network, February 2008.
81. Ibid.
82. Musungu and Oh (2006: 102).
83. Garrison (2006). These provisions became the subject of WTO dispute settlement proceedings in 1999 between the United States and Argentina. A mutually agreed solution was found. The DSB thus did not provided any further clarity on the appropriate interpretation of the rules. This case is discussed further in Chapter 5, Section 5.1.4.
84. Musungu and Oh (2006: 102).
85. Ibid.
86. Chile does not however grant sanitary authorizations to third parties for products protected by a patent. Only those products with patents that have expired may be replaced by similar products produced by third parties who apply for market authorization from the Public Health Institute. See Roffe (2004).
87. The term 'plant varieties' refer to plants that have been improved by breeding techniques in order to make them stable and uniform.
88. Dutfield (2004).
89. This position has been supported by a range of legal scholars and civil society organizations, see Correa (1999*a*), GRAIN (2000*a*), GRAIN/GAIA (1998), Leskien and Flitner (1997), and South Centre (1997: 42).
90. The 1978 Act of UPOV was closed for signature from 1998, when the 1991 Act entered into force. Zimbabwe, Nicaragua, and India were granted exceptions to the deadline and thus the 1978 Act remains open to them on the grounds that they were in the process of revising laws at the time the 1991 Act was approved.

The decision was taken in part with an eye to attracting India to the UPOV system.

91. The incorporation of the option to choose the system for plant variety protection also resulted in part from disagreements between developed and developing countries and among developed countries. In 1986, the United States had allowed the first patent for a plant while at the time TRIPS negotiations, Europe maintained a ban on patents for plant varieties. See South Centre (1997: 42).
92. See GRAIN (1999*d*: 4) and South Centre (1997: 78).
93. UPOV's membership grew from only twenty members in the early 1990s to sixty-five in December 2007.
94. Taking advantage of the exception described in note 90, Nicaragua acceded to UPOV 1978 in September 2001. Note that despite the 1998 deadline, several further countries joined the Convention up until April 1999.
95. Cullet (2001, 2004).
96. UPOV (2005) and author's email communication from Yolanda Huerta, Senior Legal Officer, UPOV Secretariat, February 2008.
97. UPOV (2007: 2).
98. See Dhar (2002). Breeders' rights have typically allowed control over the commercialization of propagating materials, such as seeds based on the criteria of distinctiveness, novelty, uniformity, and stability without prejudice to the use by farmers on their own land of seeds saved ('farmers' privilege') or to the development of new varieties by a third party that uses a protected variety as a starting point ('breeders' exemption'). See Correa (1998).
99. The text of the law is available at http://www.grain.org/brl_files/thailand-pvp-1999-en.pdf, accessed on 1 May 2007.
100. Robinson (2007), Cullet (2001, 2004), and GRAIN (1999*a*, 2002*c*).
101. Ekpere (2002) and GRAIN (1999*a*).
102. Correa (1994) and Okediji (2006).
103. TRIPS also provides countries a choice as to whether or not to comply with Article 6(b) of the Berne Convention, which provides for the protection of 'moral rights', such as the author's right to be credited with the authorship of a work that is cited, or to maintain the integrity of the work.
104. For a study of the evolution and contents of the Berne Convention, see Ricketson (1987).
105. Correa (1994) and Okediji (2000, 2004*a*).
106. Chon (2007).
107. This information and the following examples from the region are drawn from Consumers International (2006).
108. See note 13.
109. WTO (1999*b*).
110. Reverse engineering can be necessary to understand a software program and to develop other programs that may interoperate with it or replace it. Correa (1997: 44) argues that: '[i]f reproduction (including de-compilation or reverse engineering) of protected software is forbidden and interfaces can be protected through copyright, the development of competitive products would be drastically limited'.
111. Thorpe (2002).

112. TPMs include measures to inhibit buyers from making a backup copy of a videotape or CD they have purchased, installing and using computer software on multiple computers, and uploading music directly from a computer to a digital audio player without purchasing the particular software associated with that player. The use of such technological measures does not require national legislation. 'Click and wrap' end-user licences are, for instances, measures that all users of proprietary software must accept to install such software. In some cases, national legislation may facilitate the use of TPM by, for example, requiring the addition of holograms to CDs or of 'zone' specifications to DVDs.
113. The U.S. advanced its own national Digital Millennium Copyright Act (DMCA) as the 'model' approach to the implementation of the WIPO Internet Treaties. The impact of DMCA-style provisions on TPMs and anti-circumvention on the traditional limitations and exceptions to copyright continue to be subsequently hotly debated. See EFF (2003).
114. On the relationship between TRIPS and competition policy, see Correa (2007*b*) and Maskus (2002*b*).
115. For a critical discussion of these provisions, see Abbott (2003*a*).
116. Correa (2007*b*).
117. Maskus and Lahouel (2000).
118. See www.indecopi.pe (accessed 1 May 2007).
119. This flexibility is likely to be significant in the event that a country faces a WTO dispute alleging inadequate enforcement. In addition, any evaluation of a country's enforcement of IP laws would need to take into account the general effectiveness of the legal systems in the country concerned. See Watal (2001).
120. Watal (2001).
121. These sources include the reports associated with the WTO Trade Policy Reviews, U.S. Special 301 Annual Reports, and National Trade Estimate Reports as well as industry reports on IP protection in developing countries. See Shadlen et al. (2005) and Endeshaw (2005).
122. Correa (2000*a*: 76).
123. Suthersanen (2006).
124. de Carvalho (2000).
125. Kongolo (2000*a*: 268) and Blavin (2003).
126. Ibid.
127. ARIPO (2006). This law was subsequently taken up for discussion at the OAPI Secretariat. Author's interview with Christopher Kiige, Chief Patent Examiner, ARIPO Secretariat, May 2007.
128. See WIPO (1999*b*) and Dutfield (2004).
129. Several efforts to develop such benchmarks are underway, including Pugatch (2006) and doctoral research by Sisule Musungu at the World Trade Institute in Berne. For preliminary work on development impact assessments, see Dutfield (2006).
130. Maskus (2000*a*).
131. Fink and Maskus (2005) and UNCTAD (2007).
132. Shadlen et al. (2005: 154) emphasize that a focus on 'inputs' to IP protection may offer 'only a rough predictor of the output' of IP protection (IPP). They highlight

that it is possible, for example, that in any given year 'a country may provide different levels of protection to IP without any change in laws and formal rights'.

133. The WEF's 2003 IP Protection Index ranks IP protection by countries and was published in Lopez-Claros et al. (2005). The data used by the WEF for Mexico in the index were from the year 2000.
134. There are also some countries with technological activity that is large and impressive in absolute terms, such as India and China, but low relative to their economic size. See Lall (2001: 12).
135. Fink and Maskus (2005).
136. OECD (2004).
137. Fink and Maskus (2005).

4

Post-TRIPS Tensions and Global IP Debates

Explaining variation in how developing countries implemented TRIPS demands a solid grasp of the global political context. The contested nature of TRIPS spurred a dynamic interaction between efforts to implement the Agreement and ongoing international IP negotiations. Debates between developed and developing countries about the terms of the Agreement spurred competing struggles to revise both the TRIPS deal and global IP regulation more broadly. Developing country decisions on national IP reforms fed into post-agreement negotiations on TRIPS and fuelled global IP debates that had emerged on a range of topics, from the affordability of medicines to access to knowledge and piracy.

On the one hand, developed countries wanted to ensure that the IP reforms developing countries pursued were as strong as possible. Urged on by the alliance of multinational companies that had fought for TRIPS, they wanted to ensure that efforts by countries to use TRIPS flexibilities were not seen as a precedent for others to follow and to prevent any further unwelcome interpretations of options contained in TRIPS. In global IP debates, developed countries fought to maintain and bolster a 'compliance-plus' agenda—one that favoured a swift and narrow, compliance-oriented approach to TRIPS implementation, and also TRIPS-plus standards. Further, dissatisfaction with the scope of TRIPS and the pace of IP reforms on the ground drove them to push for even stronger IP protection, using whatever means available, including stronger TRIPS rules and new global treaties.

Developing countries, on the other hand, fought to revise the terms of TRIPS to defend and expand their options to pursue national development objectives. Some developing countries used their implementation actions as a basis for insisting upon particular interpretations of TRIPS and its flexibilities in international negotiations. As the post-TRIPS decade advanced, a core group of developing countries became increasingly assertive in global IP debates across a number of international fora in their quest to secure a more balanced global IP system.

A key result of post-TRIPS tensions was the deepening complexity of the global IP system. The range of non-state actors involved in global IP debates became broader and many NGOs, industry groups, international organizations (lOs) and academic experts deepened their degree of engagement. At the same time, WIPO reasserted its role as the main UN agency on IP and a powerful pro-IP advocate.

To date, no study offers a comprehensive overview or chronology of the TRIPS-related IP debates post-1994, nor do I attempt such a significant task here.[1] Rather, this chapter aims to provide a sketch of the political backdrop necessary to set the scene for explaining variation in TRIPS implementation. In the following sections, I disentangle four core dynamics that characterized unfolding global IP debates. In so doing, I introduce the main threads of debate and the range of players that were part of the TRIPS implementation game, as well as their objectives and incentives.

4.1. The Push for TRIPS-Plus

When TRIPS came into force in January 1995, debate on its provisions was far from over. Even as the TRIPS negotiations drew to a close, industry lobbyists in developed countries argued that the Agreement was too weak and too easily circumventable.[2] They complained that the Agreement's transition periods for developing countries were too long and that TRIPS offered inadequate protections for some products.

From 1995, representatives of leading multinational pharmaceutical, agrochemical, seed, entertainment, manufacturing, and software companies called on their respective governments in the United States, European Union, and Japan to ensure swift and full implementation of TRIPS, to eliminate the loopholes and ambiguities in the Agreement, and to ensure that its interpretation by developing countries protected their interests. Industry representatives worried that actions in one developing country might influence others. In 1991, a PhRMA Special 301 submission to USTR clearly articulated this fear:

> From the recent remarks and actions, the apparent intent of the Government of South Africa is to not only defend its diminishment of the effectiveness of patent protection in South Africa, but to urge other countries to similarly weaken patent protection for pharmaceutical products. Such a posture is plainly antagonistic to the concept of effective patent protection for pharmaceuticals, and is likely to give rise to a substantial diminishment of the effectiveness in protection not only in South Africa but elsewhere.[3]

The major economic powers shared many objectives. Both the United States and the European Union wanted, for instance, to extend TRIPS patent

protection to plant biotechnology, plants, and animals. But the major powers also had some distinct priorities. While the European Union favoured the extension of protection for geographical indications beyond wines and spirits, the United States and Australia opposed this agenda.[4] Further, Canada, which like developing countries was a net importer of IP, was the only developed country that actively intervened to defend some particular TRIPS flexibilities (i.e. the moratorium on non-violation complaints in TRIPS).[5]

At the urging of industry groups with vested interests in higher IP protection, the major powers also pushed for TRIPS-plus rules. In both Europe and the United States, well-financed and consistent lobbying efforts in major capitals and direct financial support for key politicians enhanced the influence of individual companies and industry associations.[6] As the scope of industry's agenda for strengthened international IP regulation expanded, so too did the range of their respective government's demands on developing countries. The direct access of many industry groups to relevant government officials amplified their influence. In both the United States and the European Union, trade officials were mandated by their respective legislatures to consult with industry advisory committees on trade policy generally and IP policy specifically. The U.S. Trade Act, for instance, required USTR to consult with an Industry Functional Advisory Committee on Intellectual Property Rights for Trade Policy Matters (IFAC-3) (comprised of twenty members from industry sector advisory committees and twenty from other private sector areas).[7] This Committee played a central role in the preparation of USTR's annual Special 301 reports.[8] Through the Committee, IFAC members and other industry associations with IP interests submitted lengthy reports to USTR on the state of IP protection in developing countries, which included specific recommendations for the Special 301 listings of various countries. The close correlation between the recommendations of industry and the final rankings that USTR made each year are well documented.[9] In addition, the U.S. Trade Act required IFAC-3 to provide the President, USTR, and Congress with reports and advisory opinions on whether and to what extent proposed trade agreements would promote the economic interests of the United States.

At least five types of pro-IP business-related actors were active in global IP debates[10]: (*a*) multi-sectoral business associations, such as the International Chamber of Commerce (ICC) and the Union of Industrial and Employers' Federations of Europe (UNICE); (*b*) sectoral or multi-sectoral business associations dedicated specifically to promoting IP protection, such as the International Intellectual Property Alliance (IIPA) and the International Anticounterfeiting Coalition (IACC); (*c*) sectoral business associations, such as the Pharmaceutical and Research Manufacturers Association of America (PhRMA), the Business Software Alliance (BSA), the International Federation of Pharmaceutical Manufacturers and Associations (IFPMA), and the Biotechnology Industry Organization (BIO), which have issue-specific interests in IP;[11] (*d*) expert

associations that brought together IP attorneys, patent agents, IP law firms and lawyers such as L'Association Internationale pour la Protection de la Propriété Industrielle (AIPPI);[12] and (*e*) industry-backed think tanks and research centres, such as the U.S.-based International Intellectual Property Institute (IIPI), the Creative and Innovative Economy Center (CEIC), the Institute for Policy Innovation (IPI), and the Munich-based Max Planck Institute for Intellectual Property, Competition and Tax Law. Within these organizations, several key individuals played a prominent personal role in debates, including Harvey Bale (the former head of IFPMA), Susan Finston (a lobbyist for PhRMA, then the American BioIndustry Alliance (ABIA)), and Bruce Lehman (former head of the USPTO and then Executive Director of IIPI).[13] In addition, many individuals who were active in the TRIPS negotiations, either as government many officials or industry lobbyists, remained active and influential afterward, sometimes switching between government and industry employers. Industry lobbyists Eric Smith and Jacques Gorlin, for instance, worked during the Uruguay Round to promote TRIPS and subsequently became strong advocates of compliance-plus implementation of the Agreement. Indeed, TRIPS is characterized by one commentator as the 'house that Jacques Built'.[14]

In terms of target countries, industry groups focused most on those that posed the greatest threats to their commercial interests. At that behest of industry groups, the Ukraine, Russia, and Poland each emerged as priority countries of concern to developed nations. In the developing world, Korea, Brazil, China, India, and Argentina were consistently highlighted as key threats to industry interests. Industry groups also targeted countries that served as a transit point for infringing goods, such as Mexico and Thailand. Even LDCs that mattered little from a commercial viewpoint attracted some interest. By securing strong IP laws in small countries, the larger, more competitive and less-malleable developing countries were isolated. Further, with strong IP laws already in place, the smaller and weaker developing countries would be less likely to resist new TRIPS-plus multilateral agreements and their vote could help close deals. Potential opposition to new international copyright protections at wipo was neutralized, for instance, by securing TRIPS-plus terms of copyright protection at the national level in numerous commercially marginal countries.

Key industry objectives were to extend the scope of IP protection to new areas, to increase protection for copyright industries in the context of the Internet, and to strengthen enforcement. Delays in patent examination and approval also drove developed countries to push for longer terms of protection in developing countries and for supplementary protection such as through exclusive marketing rights. Mounting concerns about growth in the manufacture of pirate and counterfeit products, and their export to key world markets, prompted calls for stronger trademark rules and stronger customs controls in developing countries. In each case, governments aimed where possible to

integrate higher standards into TRIPS[15] and to advance their priorities in other bilateral and multilateral fora, wherever they deemed their chances of success greatest.[16]

Once the 2000 TRIPS deadlines had passed, pro-IP companies stepped up their push for strengthened IP enforcement in developing countries.[17] In 2004, the United States announced a new STOP! Initiative designed to fight global piracy by 'systematically dismantling piracy networks, blocking counterfeits at our borders, helping American businesses secure and enforce their rights around the world, and collaborating with our trading partners to ensure the fight against fakes is global'.[18] In 2005, the European Union announced its own new strategy for stronger enforcement.[19] The same year, the European Union, supported by the United States, Switzerland, and Japan among others called for greater attention to enforcement at the TRIPS Council.[20] In June 2006, a European Union–U.S. Joint Action Strategy for Enforcement was launched.[21] Later that year, the European Union submitted a follow-up proposal to the TRIPS Council for an in-depth discussion on the application of border measures to all types of IP, with respect to export and in transit goods.[22] (The TRIPS rules on border measures currently apply only to trademarked and copyrighted goods, and only with respect to the importation of those goods.) Several related European Union documents put forward the possibility of amending TRIPS to this effect.[23] Meanwhile, developed countries advanced IP enforcement issues as a priority item for discussion at the World Customs Organization (WCO), Interpol, WIPO, and at the annual Group of 8 (G-8) Summit.[24] In 2007, the major developed countries, joined by Korea and Mexico, announced a new Anti-Counterfeiting Trade Agreement (ACTA) to further boost the fight against counterfeiting and piracy.[25] The U.S. government described the initiative as a 'complement to the Administration's work to encourage other countries to meet TRIPS enforcement standards'.[26] In lieu of seeking changes to TRIPS, the stated goal of the initiative was to set a new, higher benchmark for enforcement that countries could join on a voluntary basis (thus avoiding the challenge of negotiating a treaty on this subject through an international organization).[27]

Internal politics within the United States and the European Union played an important role in global IP debates. There were tensions within the European Commission and the European Parliament, and between them, and also among European Union members about the appropriate EU perspective on global IP negotiations and IP protection in developing countries. In addition, European NGOs put pressure on national and European policymakers to desist from pushing TRIPS-'plus' reforms in developing countries.[28] Within developed countries, a range of ministries, government offices, and agencies were involved in global IP debates, frequently communicating directly with counterparts in foreign governments. In the United States, the departments of commerce, state, and health as well as USTR, the U.S. International Trade

Commission (USITC), the U.S. Patent and Trademark Office (USPTO), both houses of the U.S. Congress, and the Office of the President all intervened in global IP debates. As industries lobbied U.S. Congress and the Administration for tighter IP protection, public-interest activists called for restraint. In 2000, for instance, an extensive campaign by NGOs, bolstered by the support of a group of members of U.S. Congress, yielded an Executive Order by President Clinton directing the U.S. government to:

> refrain from seeking, through negotiation or otherwise, the revocation or revision of any law or policy imposed by a beneficiary sub-Saharan government that promotes access to HIV/AIDS pharmaceuticals and medical technologies [. . .] and that provides adequate and effective intellectual property protection consistent with [TRIPS].[29]

Throughout global IP debates, the IP offices of developed countries were particularly important. Formal collaboration among the IP offices of the United States, Japan, and the European Union began in the 1980s and included the launching of a 'Trilateral Cooperation' initiative.[30] An example of the activities spawned by the trilateral group was the submission of a joint proposal to WIPO's Standing Committee on the Law of Patents (SCP) in 2004 for strengthened global patent rules.[31]

4.2. The Resurgence of Developing Country Confidence

When TRIPS came into force, it was denounced by NGO critics in developing countries and beyond,[32] who portrayed it as an overwhelmingly, asymmetric deal foisted upon under-informed and ill-prepared developing countries through coercive negotiations.[33] Those developing countries that had most resisted TRIPS during the negotiations were also most vocal about their dissatisfaction with the outcome.[34] Throughout the post-TRIPS decade, they advanced a consistent discourse that TRIPS fails to address their distinct needs and circumstances.[35] They were joined by critics who presented TRIPS as evidence that the Uruguay Round's 'grand bargain'[36] was an 'unbalanced outcome' for developing countries.[37] A summary of their concerns follows.

The market-access concessions that developing countries were promised in exchange for TRIPS were far weaker than anticipated.[38] Moreover, the regulatory changes that TRIPS demands of developing countries would impose long-term dynamic costs on their economies, whereas the impact on developed countries of tariff concessions would be one-off and temporary.[39] Several prominent international economists characterized TRIPS as an essentially protectionist agreement, questioned its place in a regime that purports to advance a more open, competitive, and liberalized global economy, and joined NGOs in calling for its removal. Jagdish Bhagwati stated, for instance, that TRIPS:

does not belong to the WTO because it does not pass the test of mutual advantage . . . it facilitates, even enforces with the aid of trade sanctions, what is in the main a payment by the poor countries (which consume intellectual property) to the rich countries (which produce it). By putting TRIPS into the WTO, in essence we legitimated the use of the WTO to extract royalty payments.[40]

Critics further argued that the binding 'one size fits all' provisions contained in TRIPS would impose immediate costs, while the Agreement's purported benefits (i.e. innovation by or for developing countries and increased foreign direct investment) were nebulous, uncertain, and would vary widely by country.[41] They also highlighted the arbitrariness of TRIPS deadlines, arguing that transition periods should have been based on realistic estimates of the time and resources required for implementation, not offered in lieu of more flexible or development-oriented obligations as a 'second prize in the negotiations'.[42] Economists estimated that the implementation of TRIPS would lead developing countries to pay an estimated US$40 billion in rents annually to the United States alone.[43]

In official statements issued by the Group of 77 (G-77) each year from 1998 to 2007, developing countries expressed a joint commitment to clarifying, defending, and, where possible, expanding TRIPS flexibilities, such as their right to grant compulsory licences and to take full advantage of the transition periods for implementing the Agreement.[44] When regional groupings of developing countries' trade ministers met (e.g. at meetings of African Trade Ministers and LDC Trade Ministers), their discussions also frequently highlighted concerns about TRIPS. In informal meetings and public conferences, some of the more outspoken developing countries (i.e. Brazil, the Philippines, and India) publicly questioned the place of TRIPS in the WTO.[45]

While no developing country formally challenged the need to comply with TRIPS, when the year 2000 implementation deadlines for developing countries approached, many governments became fully aware for the first time of the implications of their obligations under TRIPS. In 2000 and 2001, all countries with a year 2000 deadline faced external scrutiny in the TRIPS Council of their TRIPS implementing legislation.[46] As criticism from developed countries intensified, many developing countries recognized the need to assert their views on the scope of their TRIPS obligations and the options available to them. Thereafter, they began concrete efforts to push for revisions to TRIPS, for affirmation of the flexibilities available to them, and for more time, assistance, and resources to implement the Agreement. Developing country proposals for attention to 'implementation issues' highlighted the challenges they faced across the suite of WTO Agreements, including TRIPS.[47] Developing countries also started to submit specific proposals for reform of TRIPS to better reflect their different levels of development, and became more active participants in global IP debates. This growing assertiveness was particularly

visible at the TRIPS Council, but also emerged in a range of other international fora (see Section 4.3).

From 1995 to 2007, there were some 143 TRIPS-related submissions to the WTO by individual developing countries or groups of countries on substantive matters being discussed or negotiated within the Council.[48] (See Table 4.1.) While most of these submissions were made to the TRIPS Council, some submissions were also directed to the General Council, Ministerial Conferences, or the WTO Working Group on Technology Transfer (WGTT).[49] In addition, over the same period, developing countries made over 1,000 submissions related to the requirements to notify the TRIPS Council on their implementation of various aspects of the Agreement, and to the TRIPS Council's checklist on enforcement and Reviews of Legislation.

The negotiating objectives of developing countries from 1995 to 2007 were both defensive and offensive. On the defensive side, they hoped to resist pressures to further strengthen TRIPS obligations and in particular to protect TRIPS flexibilities against developed country efforts to tighten the loopholes in TRIPS. On the offensive side, they sought to clarify and expand the flexibilities in TRIPS in ways that would better address their needs and to eliminate ambiguities that might render them vulnerable to bilateral pressures. In some instances, they sought to roll back TRIPS obligations and to acquire longer transition periods. These overarching objectives were exemplified by developing country views on the TRIPS Article 71.1 Review, which called for a general review of the implementation of TRIPS after 2000. In 2000, the G-77 argued that the TRIPS Review should be used as an opportunity to make TRIPS 'more responsive to the needs of the South and to ensure access of developing countries to knowledge and technology on preferential terms', and that 'WTO Agreements should be implemented taking into consideration the need to extend the implementation period of particular Agreements that pose problems to developing countries'.[50] The push for the Doha Declaration on TRIPS and Public Health, which affirmed the existence of the TRIPS flexibilities, was a further example. For developing countries, this Declaration was politically important because they were otherwise unsure of how 'these flexibilities would be interpreted and how far their right to use them would be respected'.[51] The Doha Declaration was thus 'motivated more by the fact that certain WTO Members were preventing others from using the existing flexibilities, than the lack of clarity about the TRIPS provisions'.[52]

The degree of engagement by individual developing countries in TRIPS debates varied by issue and fluctuated over time. Throughout the post-TRIPS decade, most developing countries had too few professional staff in Geneva to participate actively in TRIPS discussions. The majority of developing country missions in Geneva had just two or three staff to monitor the entire range of WTO issues. Further, fifteen of the smallest and poorest WTO members

Table 4.1. Developing country TRIPS-related WTO submissions by country and topic (1995–2007)

Country	Public health	Article 27.3(b) TK & CBD	Development, technical assistance, & transition	Technology transfer	GIs general	GIs review	Implementation Articles 70.8 & 70.9	Total
Africa								
Kenya		1		3	4			8
Nigeria		1			5			6
Egypt		1			4		1	6
African Group	11	2	1				3	17
Asia								
Turkey					9	1		10
India	3	20	1	4	8		1	37
Indonesia	3	1		3	1			8
Pakistan	3	7		3	6			19
Philippines	2			1	3			6
Sri Lanka		2		2	8			12
Thailand		12						12
Latin America and the Caribbean								
Argentina					6		1	7
Bolivia	3	11					1	15
Brazil	3	14					2	19
Chile					6			6
Colombia		7			2		1	10
Cuba	5	1		4	7	1		18
Dominican Rep.	3	8		2	4			17
Ecuador	3	12			4	1	1	21
Honduras	2	1		2	2	1		8
Paraguay	2	1			4		1	8
Peru		20				2	1	23
Venezuela	3	12		1	2	1		19
LDC Group		1	1					2

Source: WTO website; compiled by author.

had no permanent representation to the WTO in Geneva. Even among the more active countries, the intensity of engagement in TRIPS discussions varied according to the initiative, leadership skills, personal conviction, and entrepreneurial spirit of particular diplomats based in Geneva.[53] Staff of developing country permanent missions notable for their active engagement in IP negotiations included Leonardo de Athayde (Brazil), Johanes Bernabe (Philippines), Betty Berendson (Peru), Francisco Cannabrava (Brazil), Amb. Boniface Chidyausiku (Zimbabwe, Chair, TRIPS Council), Carmen Dominguez (Chile), Marta Gabrieloni (Argentina), Amb. Faizel Ismail (South Africa), Alec Irwin (Minister of Trade, South Africa), Mohan Kumar (India), Ahmed Abdel Latif (Egypt), Amb. Munir Akram (Pakistan), Amb. Eduardo Perez Motta (Mexico, Chair, TRIPS Council), Nelson Ndirangu (Kenya), Alejandro Neyra (Peru), Patrick Krappie (South Africa), Amb. Vanu Gopala Menon (Singapore, Chair, TRIPS Council), and Guilherme Patriota (Brazil).

In the absence of clear substantive instructions and oversight from national capitals, several Geneva-based diplomats took the lead and filled the void by devising and advancing a national position. In many cases, communication between Geneva and national capitals was very weak, even within the same ministries, and the prospects of consultation with a broader range of ministries back home was limited. Not surprisingly then, the positions of many developing country governments were sometimes not consistent over time and in some cases the positions and perspectives offered varied across issues and international fora.[54]

In Geneva, the same developing countries that had been most involved during the TRIPS negotiations (i.e. India, Brazil, and Argentina) remained those most engaged in debates post-1994 and were consistently represented by highly capable, technically expert, and active negotiators. In addition, Egypt, Kenya, Peru, the Philippines, Senegal, South Africa, and Zimbabwe were active in making IP-related submissions to the WTO. Table 4.1 presents a summary of the countries that were most active in making submissions and notes the topics they addressed. In TRIPS Council meetings, participation also varied by issue. As was the case with most WTO committees, the TRIPS Council meetings rarely attracted participation by the full WTO membership. Records of TRIPS Council debates between 1995 and 2007 reveal that the most active countries included Argentina, Brazil, Cuba, Ecuador, India, Peru, the Philippines, South Africa, Thailand, and Taiwan. China also became an active member after its accession. The engagement of delegates from Africa and LDCs was generally limited to meetings covering topics of particular interest to them, such as public health, technology transfer, and technical assistance. Only in very few cases did developing countries send delegations that included capital-based staff to TRIPS Council meetings (such as in the case of Uganda's submission of its needs assessment in relation to technical assistance in 2007).

To address issues of limited individual capacity, developing countries often worked collectively. The African Group, for instance, was involved in some fifteen IP-related submissions to the WTO (nine of which were on public health, five on Article 27.3(b)-related issues, and one on issues related to development and technical assistance).[55] Two of these proposals were submitted in collaboration with other developing countries. The African, Caribbean, and Pacific (ACP) Group[56] and the Group of Commonwealth Countries each submitted one proposal related to TRIPS and public health. In addition, the Asia-Pacific Economic Cooperation (APEC) countries and the LDC group[57] submitted one proposal each in respect of development, technical assistance, and transitional arrangements. In some cases, countries later added their names to the original list of sponsors of particular proposals and communications. In 2006 and 2007, for instance, almost eighty developing countries co-sponsored the submission of a draft text for an amendment to TRIPS to incorporate disclosure of origin requirements in patent applications.[58] (See Section 4.2.1.)

The greatest number of developing country IP submissions to the WTO came in the period between 2000 and 2003. The increase was in large part due to the negotiations related to the 2001 Doha Declaration on TRIPS and Public Health and to the launch of the Doha Work Programme (commonly known as the Doha Round), which included a mandate for further discussion of the relationship between TRIPS and the Convention on Biological Diversity (CBD), the protection of traditional knowledge and folklore, and the reviews of Article 27.3(b) and under Article 71.1. In addition the Doha Agenda included a mandate for negotiations on geographical indications (supported by a subgroup of developing countries). At Doha, developing countries also achieved the establishment of a Working Group on Technology Transfer (WGTT) and, with Canada, an extension of the moratorium on 'non-violation and situation' complaints. Further, TRIPS issues were incorporated into the post-Doha agenda for discussions of 'Implementation Issues' and 'Special and Differential Treatment', where developing countries argued forcefully for special consideration of the many challenges they faced in attempting to implement TRIPS. The period 2000–2001 marked the time when debate on TRIPS and public health reached its height.

Table 4.2 presents a chronological overview of IP-related developing country submissions to the WTO by and further highlights that developing countries concentrated on specific topics of debate. The issues that attracted the highest engagement by individual developing countries and country groupings were (in order of the greatest number of submissions) public health, Article 27.3(b), geographical indications, technology transfer, disclosure of origin, and the LDC extension. The participation by developing countries on these specific matters was aided and spurred by technical and political support from critics of TRIPS. The involvement of NGOs was particularly notable in the case of public health, food security, biopiracy, and other issues,

Table 4.2. Developing country TRIPS-related WTO submissions by year and topic (1995–2007)

Year	Public health	Article 27.3(b) TK & CBD	Development, technical assistance & transition	Technology Transfer	GIs general	GIs review	Article 27.3(b) review	Implementation Articles 70.8 & 70.9	Non-violation & dispute settlement	Total
1995	0	0	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0	1	1
1999	0	12	2	0	3	5	7	5	3	37
2000	0	4	3	2	2	1	2	0	1	15
2001	3	1	1	2	5	1	2	0	0	15
2002	4	2	0	0	7	2	0	0	1	16
2003	3	1	0	2	1	1	1	0	0	9
2004	1	6	1	0	2	2	0	0	0	12
2005	5	9	1	2	2	0	0	0	0	19
2006	0	6	0	0	2	0	0	0	0	8
2007	1	6	2	0	0	1	0	0	0	10
Total	17	47	10	8	24	13	12	5	6	142

Source: WTO website; compiled by author.

and significantly influenced the timing, nature, and intensity of developing country engagement in debates (discussed in Section 4.4 below).

As developing countries grew more confident, their strategy at the TRIPS Council evolved. At the outset, key governments and NGOs were cautious about the idea of seeking amendments to TRIPS, fearing that developed countries might use the opportunity to also incorporate into TRIPS new obligations, such as those contained in the WIPO Internet Treaties. As global IP debates moved forward, however, developing countries did advance several formal proposals to amend TRIPS (discussed below).

While a full account of developing country activities in post-TRIPS debates is beyond the scope of this book, the following examples highlight those areas where the strongest North–South debates emerged and where specific intersections between implementation and ongoing discussions on TRIPS issues at the WTO arose.

4.2.1. *Article 27.3(b)*

Starting in 1999, developing countries sought to use the review of Article 27.3(b), mandated by TRIPS, as an opportunity to clarify their options regarding *sui generis* systems of plant variety protection, narrow the scope of patentability, and add provisions that would require disclosure of the origin of genetic materials used in inventions and more thorough searches of prior art. Debate on this Article formally began with an African Group submission that advanced an ethical and cultural opposition to the patentability of life forms, asserted their right under TRIPS to adopt a *sui generis* approach to plant variety protection,[59] and called for stronger protection of their traditional knowledge from unauthorized use.[60] In the following years, developing countries highlighted tensions between TRIPS provisions that relate to biological and genetic resources, and the approach taken by the 1992 UN Convention on Biological Diversity (CBD). The CBD affirms that states have sovereign rights over their own biological and genetic resources (hitherto regarded as the common heritage of humankind) and calls for prior consent for access to them. The CBD also requires signatories to protect and support the rights of communities, farmers, and indigenous peoples over their biological resources and systems of knowledge, and requires equitable sharing of any benefits arising from their use.[61] Developing country determination to address concerns related to Article 27.3(b) was reinforced by several high-profile instances when developed country IP offices issued patents on products such as basmati rice, maca, neem, hoodia, turmeric, and ayuhuasca.[62] From 1998, amidst cries of biopiracy and theft from civil society groups, indigenous communities, and international NGOs, the governments of India and Peru intensified their push for attention to the issue at the WTO and also at WIPO. WIPO began a fact-finding process, and in 2000, an Intergovernmental

Committee (IGC) on Intellectual Property and Genetic Resources, Traditional Knowledge, and Folklore was established.[63] At the WTO, developing country efforts culminated in mid-2006, when a group of nine countries led by India submitted a proposal for a new amendment to TRIPS that would require all WTO members to ensure that all patent applicants disclosed the origin of genetic materials and traditional knowledge used in their inventions.[64] A further five individual developing countries plus the entire African and LDC groups later co-sponsored the original proposal.[65]

4.2.2. *Technology Transfer*

In 1999, the G-77 developing countries called for greater efforts by developed countries to make operational a series of TRIPS provisions related to the 'transfer of technology' and also its 'General Principles and Objectives', which include promoting 'the mutual advantage of producers and users of technological knowledge'.[66] While developing countries achieved the establishment of the WGTT in 2001, the work of the group remained limited; members failed to agree on either its scope or work programme. Further, LDCs preferred to discuss the issue of technology transfer in the context of the TRIPS council, not the Working Group, as TRIPS includes a specific legal obligation on developed countries regarding technology transfer to LDCs (Article 66.2).

4.2.3. *Non-violation Complaints*

From 1998, developing countries, led first by Cuba, submitted several proposals to the TRIPS Council on non-violation, nullification or impairment complaints under TRIPS. Combined with efforts from Canada and the European Union, they convinced WTO members in Doha in 2001 to mandate the TRIPS Council to make recommendations on this matter at the Cancún Ministerial.[67] In the meantime, members agreed not to initiate non-violation complaints under TRIPS. Given the collapse of the Hong Kong Ministerial, no further action has been taken and the moratorium continues de facto.

4.2.4. *Public Health*

From 1999, amidst pressures to strengthen national patent laws to implement (and exceed) TRIPS requirements, growing civil society campaigns on the HIV/AIDS crisis prompted developing country efforts to clarify and defend TRIPS flexibilities relevant to access to medicines. Aided by the post 11 September 2001 political environment, mounting public concern about fairness in the global economy, and the public backlash against multinational pharmaceutical companies (which had launched a hugely unpopular lawsuit against the South African government), developing countries achieved the 2001 'Doha Declaration on the TRIPS Agreement and Public Health' at the

WTO's Doha Ministerial Conference, which affirmed their rights under TRIPS to take measures to protect public health.[68] The Declaration confirms several key flexibilities available in TRIPS, including the right of countries to use compulsory licences and to determine the grounds on which to grant them; the right of countries to determine what constitutes a national emergency or urgency (which can ease the granting of compulsory licences); the right of countries to determine their own parallel import regimes. It also adds the right of LDCs to postpone providing patents and exclusive marketing rights on pharmaceutical and chemical products until 2016, and possibly longer.[69] The Doha Declaration launched an intense international debate on how to interpret and apply its various provisions. This included debate on how to address Paragraph 6 of the Doha Declaration concerning how countries with no manufacturing capacity could make use of compulsory licensing. As the United States and the European Union sought to divide their opponents, differences arose among developing countries on a range of technical issues and between civil society groups. Ultimately, on 30 August 2003, WTO members agreed on a system for implementing Paragraph 6, which then became a protocol amending TRIPS in November 2005. As debate on the efficacy of the ultimate decisions continued,[71] only Rwanda and Canada declared their intention to use the system (as importers and exporters respectively). By the end of 2007, lacking the ratifications required for the amendment to come into force, the deadline was extended (in the interim, the waiver remains in place).[72] Meanwhile, efforts by developing countries to issue compulsory licences elicited sharp rebukes and trade threats from the United States and outcries from industry.[70] (See Chapter 6, Section 6.4.4.)

4.2.5. *Geographical Indications*

The Doha Ministerial mandated two tracks of work within the area of geographical indications: (*a*) negotiation of the establishment of a multilateral system of notification and registration of geographical indications for wines and spirits by the next ministerial conference; and (*b*) discussion of the possible extension of the protection of geographical indications to include products other than wines and spirits. The positions of countries on the question of the extension cut across the developed and developing country divide. Among developing countries, the main proponents of extending the protection of geographical indications were Bangladesh, Cuba, India, Jamaica, Kenya, Nigeria, Pakistan, Sri Lanka, Thailand, and Turkey. Some developing countries also actively opposed the extension, including Argentina, Chile, the Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Paraguay, and the Philippines. The debate of geographical indications was the only TRIPS issue on which developing countries expressed substantially different points of view, on the need for reform.

4.2.6. *LDC Extension*

In late 2005, as their general deadline for TRIPS implementation approached, LDCs collectively exercised their rights under Article 66.1 of TRIPS to request an extension.[73] (The Maldives had made an independent request in 2004.[74]) While their initial request for fifteen years failed, LDCs did achieve a seven-and-a-half-year extension of their deadline (until mid-2013), with the possibility of further extensions.[75] In reality this extension came after many LDCs (including twelve in francophone Africa) had already upgraded their IP standards to meet TRIPS standards, but the decision remains one that such countries can use to defend themselves against potential of litigation related to IP enforcement.

4.2.7. *Enforcement*

Developing countries also actively resisted developed country proposals at the TRIPS Council for deeper discussion on enforcement. Developing countries argued that the proposed discussion was beyond the mandate of the Council and would threaten to upset the balance in TRIPS, duplicate work done by other international organizations, and deviate attention from issues for which there was a mandate to negotiate.[76]

4.2.8. *A New Development Agenda*

While their efforts were uneven and fluctuated over time, developing countries sustained a greater active participation in global IP debates in the post-TRIPS decade than during the TRIPS negotiations. The growing activism of a core group of developing countries was exemplified in 2004 when fourteen developing countries known as the 'Friends of Development', led by Argentina and Brazil, submitted a proposal to the WIPO General Assembly requesting the establishment of a new Development Agenda for WIPO. The proposal was co-sponsored by Bolivia, Cuba, the Dominican Republic, Ecuador, Egypt, Iran, Kenya, Peru, Sierra Leone, South Africa, Tanzania, and Venezuela. Supported by technical inputs and campaigning by NGOs, this Development Agenda represented a call for restraint on the part of developed countries in their crusade for ever-stronger IP protection and signalled the determination of the proposal's co-sponsors to ensure that the global IP system addressed their needs.[77] In the face of mounting bilateral pressures, the push for new multilateral IP norms, and new demands regarding enforcement, developing countries sought to use the Development Agenda as a way to slow the tide and assert greater control over the activities of WIPO, particularly its technical assistance (discussed in Section 4.3 below).

4.3. Growing Complexity in the Global IP System

From 1995 to 2007, the global IP system became increasingly complex. This complexity arose from the competing efforts of various stakeholders to harness particular IOs and agreements to help them achieve their respective objectives regarding the revision of TRIPS and global IP reform.

Both developed and developing country governments (and their non-state supporters) used 'forum-shifting' techniques.[78] In response to the growing effectiveness of developing country opposition to their efforts to strengthen TRIPS, the United States and Europe calculated that their push for stronger international IP regulation and enforcement would succeed most swiftly where the potential for collective action among developing countries was weakest. Together with Japan, and the countries of the European Free Trade Area (EFTA) (Iceland, Lichtenstein, Norway, and Switzerland), they turned to bilateral and regional trade, investment, and IP agreements with developing countries, with the goal of supplementing their existing commitments in TRIPS and other international IP treaties. One result was that a growing number of developing countries signed new bilateral trade agreements with the European Union and United States through which they committed to TRIPS-plus standards in exchange for greater access to their markets.[79] (For further details, see Chapter 5, section 5.1.)

Developed countries also pushed their agenda across a range of multilateral organizations. The United States led the push for the 1994 WIPO Internet Treaties, which aim to improve the protection of copyrighted works, performances, and sound recordings in the digital environment.[80] The U.S. government then encouraged developing countries to sign, ratify, and implement these treaties through trade negotiations, speeches, WIPO meetings, the Special 301 process, TRIPS Council discussions, and the activities of U.S. embassies in host countries.[81] Developed countries (which work together as Group B in the WIPO context) also worked with the WIPO Secretariat to advance what became known as the 2001 WIPO Patent Agenda. This Agenda had three components, namely promoting the ratification of the Patent Law Treaty (PLT), reform of the Patent Cooperation Treaty (PCT), and negotiations on a new Substantive Patent Law Treaty (SPLT) to supplement the substantive obligations contained in TRIPS.[82]

Frustrated by lack of progress at WIPO, the U.S., European, and Japanese patent offices intensified their trilateral effort towards substantive patent harmonization (to serve as a default option if the multilateral SPLT track failed).[83] In 2005 and 2006, they worked with the WIPO secretariat to reassert the SPLT agenda by going directly to developing country capitals. The effort to bypass more politically informed and better-coordinated developing country representatives in Geneva provoked critics to charge that multilateral approaches to IP were under threat.[84] Further, the Group B countries were accused of

co-opting influential developing country experts and institutes to advance their cause.[85] When Group B and WIPO collaborated with a prominent former Indian government official to host an informal meeting in Casablanca on matters related to the SPLT and the Development Agenda, the controversy that erupted prompted India and Brazil to each formally dissociate themselves from the outcomes and to issue formal objections to WIPO.[86] As noted in Section 4.1, developed countries also shifted to the WCO in search of stronger enforcement.[87] By late 2007, developed countries had pushed the WCO regarding the preparation of a voluntary 'model law' to provide guidance on the enforcement of IP rights by customs authorities, including standards for customs authorities that go beyond TRIPS requirements.[88]

Developing countries also looked beyond the WTO for allies and processes that might help them to resist compliance-oriented and TRIPS-plus pressures, and to aid their effort to balance the international IP system. Facilitated and sometimes led by the activism of NGOs, developing countries advanced initiatives in a broad range of IOs, including WIPO, the World Health Organization (WHO), UNCTAD the UN Educational Scientific and Cultural Organization, (UNESCO), and the UN High Commission on Human Rights (UNHCHR). At WIPO, for instance, India, Peru and the Group of Latin America and Caribbean Countries (GRULAC) for WIPO to take up issues related to the protection of traditional knowledge and genetic resources, resulting in the establishment of an Intergovernmental Committee (IGC) in 2000.

As IP surfaced as an item for discussion and negotiation in a growing number of international fora, tense debates arose within each. IP debates emerged during efforts to finalize a new treaty on the management of plant genetic resources at the UN Food and Agriculture Organization (FAO) (which had been underway since 1993).[89] And IP was a controversial topic during diplomatic negotiations at UNESCO for a new legal instrument on cultural diversity.[90] From 1998, the international human rights community began to take greater interest in IP issues, led by a speech by Mary Robinson, the UN's High Commissioner for Human Rights.[91] By 2000, human rights NGOs were pushing for debate on IP issues in the UN human rights system. That year, a consortium of human rights NGOs submitted a statement to the Sub-Commission on Promotion and Protection of Human Rights underscoring conflicts between TRIPS and human rights.[92] In November, the UN Committee on Economic, Social and Cultural Rights (CESCR) held a day-long meeting on IP, which resulted in the adoption of a statement setting out a normative framework for consideration of IP matters.[93] In 2001, the High Commissioner issued a report on the impact of TRIPS on human rights, with a focus on access to medicines.[94] This was followed by further reports by a Special Rapporteur on the Right to Health and also a general comment on the relationship between IP and human rights.[95] Between 2003 and 2007, NGO campaigns prompted attention to TRIPS issues in a number of UN human rights treaty

bodies.[96] The UN Committee on the Rights of the Child (CRC), for instance, issued recommendations regarding FTAs and the use of the TRIPS flexibilities for public health, to a series of developing countries that were subjects of review, including Botswana, Chile, Ecuador, EI Salvador, Nicaragua, Peru, the Philippines, Thailand, and Uganda.[97]

As debates on the relationships between TRIPS and the Convention on Biological Diversity (CBD) advanced, they fuelled debates at CBD meetings and also in discussions on the FAO's 2001 International Treaty on Plant Genetic Resources (ITPGRFA). Both treaties had rationales that differed considerably from the objectives of TRIPS. The ITPGRFA emerged from concerns about agricultural production and food security. The CBD emerged from an environmental initiative by the World Conservation Union (IUCN), and was first negotiated under the auspices of the United Nations Environment Programme (UNEP).[98] From 2002, as preparations began for the World Summit on the Information Society (WSIS), tense debates again erupted when developing countries and civil society groups sought to bring concerns about the IP system and access to knowledge to the negotiations.[99] Similarly, debates on IP and TRIPS flexibilities emerged in negotiations for the final 2002 Declaration and Implementation Plan of the World Summit Sustainable Development (WSSD).

From the year 2001, WIPO resurfaced as a key site for global IP debates and also became a subject of debate in its own right.[100] From 2001 to 2003, Brazil and the African Group raised questions in WIPO's Permanent Committee for International Cooperation on Development (PCIPD) about the agency's technical assistance, calling on the Secretariat to better incorporate advice regarding the TRIPS flexibilities in their capacity-building activities. Critical attention to WIPO's activities soon came to be considered central to the political agenda of protecting TRIPS flexibilities. Describing WIPO as an institution beholden to the interests of developed countries and IP right-holders, some developing countries criticized WIPO for giving narrow compliance-oriented and TRIPS-plus advice regarding options for implementing TRIPS. Some critics of the WIPO Secretariat complained of a 'faith-based' drive for ever-stronger IP protection and a relentlessly pro-IP perspective driven by the powerful special interests, namely those of IP right-holders.[101] Critics also alleged that WIPO acted 'not as a servant of the whole international community but as an institution with its own agenda'.[102]

In 2004, the call for a WIPO Development Agenda drew together a suite of concerns in a single political platform (see Section 4.2.8). The Development Agenda proposal detailed a range of complaints about WIPO's capacity building, and was supplemented by assessments from NGOs and experts highlighting inadequate oversight of recruitment of IP technical cooperation providers, revolving door problems, conflicts of interest, low-quality seminars, and biased content in training programmes.[103] The Development Agenda

also focused on slowing efforts to advance TRIPS-plus multilateral rules by highlighting deficiencies in the norm-setting process at WIPO.[104] NGO critics also expressed growing concern about the WIPO Patent Agenda and the push for a new Broadcasting Treaty.[105] In 2007, after six years of heated debate, the WIPO General Assembly adopted a series of recommendations related to the WIPO Development Agenda and the push for a new SPLT was suspended, representing two victories for those keen to promote a more balanced international IP regime.[106]

Meanwhile, the WHO had been called on by its member states to launch an independent Commission on Intellectual Property, Innovation and Public Health (CIPIH). The Commission emerged as a new arena for debate between NGOs and the pharmaceutical industry.[107] Amidst allegations of undue industry influence the Commission placed the WHO squarely at the heart of debates on the interpretation of TRIPS and its implications for public health.[108] As a follow-up to the Commission, the WHO members asked the agency in 2006 to establish an Intergovernmental Working Group on Public Health, Innovation, and Intellectual Property (IGWG) to prepare a global strategy and plan of action on essential health research to address conditions affecting developing countries disproportionately.[109]

The proliferation of international processes where IP was discussed had several implications for developing countries. Most notably, the growing complexity of the IP system stretched their capacity to advance consistent positions across the full range of international organizations and fora where IP issues emerged.[110] In addition, developing countries faced difficulties forging and maintaining effective collaborations with each other.[111] (These two challenges are discussed in detail in Chapter 6.)

The challenges of coordination and weak technical capacity prompted many developing countries to turn to IOs and NGOs for support. Indeed, in some cases, it was these actors that prompted and aided developing country governments to take positions and action. The activities of UNCTAD, the South Centre, and several international NGOs helped inform and support the efforts of developing countries to participate and coordinate in international IP discussions, sometimes aiding them in drafting submissions to the WTO. In Geneva, for instance, collaboration between the South Centre and the Centre for International Environmental Law (CIEL) yielded the first meeting of a group of developing country TRIPS delegates to discuss their WTO negotiating strategy. From outside Geneva, several key NGO representatives and academic experts became frequent visitors and active advisors to developing country delegations. Developing country NGOs, namely Third World Network and the African Trade Network also actively supported the Aftican Group's effort to devise several WTO submissions. The alignment between NGO and developing country objectives was striking. In 2000, for instance, the environmental

NGO CIEL argued for a full review of TRIPS that addresses its impact on development.[112]

From 2002, the push for greater developing countries' engagement in WIPO was also facilitated by the South Centre, which arranged a first set of joint, informal consultations among both WIPO and TRIPS delegates in its offices, many of whom had never met (even those from the same governments). In most cases, WIPO delegates hailed from foreign affairs ministries or were flown in from national IP offices for WIPO meetings, while TRIPS delegates were often from trade ministries. The fact that so many developing countries allocated the task of monitoring WIPO to officials from national IP offices meant that the degree of coordination among WIPO delegates was considerably weaker than among TRIPS delegates posted in Geneva. (Only a few countries, such as Brazil and Egypt, allocated responsibility for both WIPO and TRIPS to the same delegate). Developing countries were most successful where they acted in solidarity on international IP issues, forming either regional or cross-regional blocs[113] to promote their views on TRIPS, public health, and biodiversity and associated traditional knowledge. Still, as noted by Cecilia Oh, a former campaigner for TWN, '[t]he strength-in-numbers approach is not foolproof; a sizable number of developing countries stay quiet or indifferent at multilateral negotiations, either from fear of repercussions, limited substantial expertise on an issue, or political sway to accept developed countries' stance.'[114]

As the legal complexity of the global IP system grew, so did the range and scope of international IP commitments that developing countries had to consider when undertaking TRIPS-related reforms. Many developing countries faced the challenge of implementing supplementary international IP commitments made bilaterally or multilaterally,[115] and uncertainty about the relationship between TRIPS and international laws in other areas (such as the relationship between commitments made under the CBD and TRIPS).[116]

4.4. Expanding Teams of Players

Throughout the first decade of TRIPS, debates about IP regulation attracted a growing number of players, including a diverse set of industry groups, NGOs, academics, and IOs. From within these, a number of activists played a critical individual role as powerful opinion leaders and catalysts for action.

4.4.1. *A Growing Range of Industry Players*

As global IP debates evolved, the original industry coalition in favour of TRIPS began to splinter and a more diverse set of industry players than those described above (Section 4.1) were active. In key developed and developing

countries, lobbyists from groups such as the U.S. Generic Pharmaceutical Association actively opposed the agenda of their brand name counterparts. Again, specific individuals, such as María Fabiana Jorge, representing the Latin American generic drug industry, and William Haddad, the CEO of a U.S. generic producer, were prominent in this effort.[117] Concerned about rising health care costs, some of the U.S. companies that had been part of the original pro-TRIPS industry alliance, joined a coalition called Business for Affordable Medicines. Moreover, as technology and economic dynamics altered the production process and business opportunities in many sectors, a number of developed country companies in the software, Internet, and telecommunications sectors (such as Google and Intel) began to raise questions about the push for stronger IP protection. In Europe, the scope of database protection and the push for patent protection for software generated a backlash from some industry groups (as well as public interest networks). In addition, scientific leaders from within and outside industry raised questions about the relationship between IP protection and innovation. In the United States, for instance, the American Academy for the Advancement of Science (AAAS) and the National Academies for Science (NAS) each hosted conferences and panels that alerted policymakers to the ways in which too much IP protection might stifle creativity and economic dynamism. On the European side, prestigious research centres such as the Wellcome Trust revised their IP strategies to promote more open, collaborative research and an open source approach to scientific publishing. In several developing countries, such as Argentina and India, companies that relied on copying and reverse engineering opposed the push for stronger IP protection, while some of those companies newly involved in R&D supported it. (See Chapter 6, Section 6.2.)

4.4.2. *NGOs, Civil Society, and Think Tanks*

The participation of NGOs in global debates on TRIPS began in the late stages of the Uruguay Round.[118] From 1993 to 1995, NGOs such as TWN, Health Action International (HAI), and GRAIN published concerns about the implications of TRIPS for development, public health, and farmers.[119] In 1994, the Crucible Group, an initiative of the International Development Research Centre (IDRC), brought together experts and NGO representatives to discuss the implications of TRIPS for rural societies and plant varieties.[120]

In the immediate aftermath of the TRIPS negotiations, the most vocal campaigners against the Agreement were NGOs concerned about the its impacts on development, environment, and farmers' rights. In 1996, public health and consumers' rights activists began to forge collaboration on the issue of IP and access to medicines.[121] Between 1999 and 2002, clear international IP campaigns emerged on biopiracy and public health.[122] During this period, interest in IP debates also expanded to NGOs and civil society groups working

on issues related to public education and human rights.[123] Many of these groups focused on just one particular type of IP (e.g. copyright or patents) or one sectoral concern (e.g. health or agriculture). While many NGOs shared common overarching concerns about TRIPS, the particular campaigns, such as those on access to medicines and seeds, largely proceeded on parallel tracks with few linkages between them. Only a handful of NGOs, such as the Consumer Project on Technology (CPTech) (now known as Knowledge Ecology International (KEI)) and the International Centre for Trade and Sustainable Development (ICTSD), worked on the full range of international IP issues. From 2003, a multiplying range of international NGOs and civil society groups expressed views on international IP regulation. By 2005, a global social movement had emerged, galvanized by campaigns calling for a Development Agenda at WIPO[124] and a new treaty for 'Access to Knowledge (A2K)'.[125] These campaigns were complemented by initiatives to promote open source innovation, open access to educational materials, patent pools, and alternative licensing models such as humanitarian-use licenses, Creative Commons licences, CopyLeft, and the General Public Licence (GPL) (a free software licence).[126]

The political strategies of NGOs varied widely: they used an array of tools to advance their respective interests, including conferences, high-profile campaigns, appeals to the international media, and outreach through email list services such as IP-health. In Geneva, international NGOs, such as ActionAid, CPTech, CIEL, the Institute for Agriculture and Trade Policy (IATP), ICTSD, Médecins Sans Frontières (MSF), Oxfam International, the Quaker United Nations Office (QUNO), and TWN forged informal collaborations with developing country governments to advance shared goals regarding reform of the global IP system.[127] While there were early attempts to coordinate across issue-based campaigns by, for example, establishing a TRIPS Action Network (TAN), such formal campaigns or collaboration were set aside in favour of informal networking and cooperation across issues where possible, including through periodic meetings of the key NGOs working on IP issues in Geneva and collaboration through shared email lists. Several Geneva-based NGOs also worked alongside and in collaboration with IOs such as the Advisory Centre on WTO Law (ACWL), the South Centre, UNCTAD, and WHO. Over time, a 'pro-development' IP community of professionals emerged in Geneva. A core objective of their activities was to sustain a developing country perspective in global IP debates in the face of frequent turnover among developing country delegates. NGOs also forged collaborations with sympathetic academics, such as Frederick Abbot and Jerome Reichman from the United States, and Carlos Correa from Argentina, who themselves became influential players in the global IP debate.

International NGOs also reached out to colleagues in developed country capitals and in developing countries to galvanize global and regional

networks.[128] The NGOs mentioned above, as well as HAI, Consumers International, the Electronic Frontiers Foundation, the International Federation of Libraries Associations (IFLA), the International Rural Advancement Foundation (RAFI) (now known as Action Group on Erosion, Technology and Concentration (ETC)), and GRAIN worked to harness the support of local affiliates and partners, and to engage them in global IP debates, including by lobbying their own governments. Consumers International, for example, encouraged its network of national consumer organizations to become active in international and national IP debates. In several developing countries, new think tanks and research centres emerged as sympathetic allies for NGOs, such as the Fundação Getulio Vargas (FGV) School of Law's Centre for Technology and Society in Brazil. NGOs such as ICTSD, TWN, and Oxfam organized regional meetings to draw together local experts, NGOs, and policymakers to debate issues related to IP. Developing country NGOs, such as the African Trade Network (based in Ghana), CUTS International, the Treatment Action Campaign (TAC) (South Africa), the Indigenous Peoples' Biodiversity Network, Bio-Thai (Thailand), the Gene Campaign (India), and SEARICE (the Philippines) were all active at particular moments in global IP debates (for discussion of NGOs at the national level, see Chapter 5). By 2006, the A2K movement had succeeded in spurring the creation of local initiatives A2K initiatives in many countries including South Africa and Brazil.

To complement these efforts, some NGOs worked to lobby decision-makers in their own capitals. In the United States, for instance, public health advocates (such as ACTUP, Health Gap, and CPTech) lobbied the U.S. Congress and USTR to desist from putting TRIPS-plus demands on developing countries in bilateral trade negotiations. Similarly, groups such as Consumers International and ACTUP lobbied EU political parties, parliamentarians, and officials to stop TRIPS-plus pressures on developing countries. In 2003, the Greens in the European Parliament filed an urgent request asking the European Commission to explain why 'it pretends to uphold the so-called flexibilities of the TRIPS Agreement at the multilateral level while it simultaneously makes TRIPS-plus demands on developing countries at the bilateral level'.[129] Among the network of individuals who played a lead role in the NGOs active on TRIPS, a number of individuals stood out for their consistent influence on the strategic direction of campaigns, including Martin Khor (TWN), James Love (CPTech), Sisule Musungu (IQSensato) Pat Mooney (RAFI), and Ellen t'Hoen (MSF).

Some NGOs, such as Oxfam, MSF, and ActionAid financed their work on TRIPS through their own resources generated from membership fees or through fund-raising campaigns. Starting in 1999 with the Rockefeller Foundation, a number of private philanthropic foundations provided financial support to NGOs to conduct research, advocacy, and capacity-building that would advance development and public interest–oriented perspectives on IP

policy.[130] From 2002, the expanding engagement of NGOs from developing countries in global IP debates was in large part due to the launch of new grant-making initiatives by the Macarthur Foundation, the Open Society Institute, and the Ford Foundation. The strategic injection of funds spread activity far beyond the particular groups that were the direct recipients. In some cases, private foundations served as convenors and co-strategists with their grantees to advance a common public interest–oriented agenda at the international level.[131] In addition, several development agencies from developed countries such as the United Kingdom, Sweden, and the Netherlands, funded the work of several NGOs. The Swedish International Development Agency (SIDA) for instance, supported GRAIN and RAFI, the UK Department for International Development supported ICTSD, and the Dutch government provided support to QUNO.

4.4.3. *International Organizations as Players*

In addition to the role of IOs as sites of global IP debates, many IO secretariats became actors in their own right, developing and asserting distinct (and sometimes competing) perspectives on IP controversies and TRIPS implementation through publications, conferences, outreach, awareness-raising efforts, and capacity-building.[132] In so doing, IOs sometimes expressed indirectly the power and preferences of particular governments or interest groups. In other instances, distinct institutional agendas emerged from their mandates, institutional design, financing, historical momentum, or internal leadership.[133] In some cases, IOs became embroiled in internal debates.

In general, the staff of IOs insist upon the member-driven nature of their work, arguing that they implement work plans defined by members, defend the rules to which states have committed, and facilitate the efforts of states to meet their obligations. The challenges of member state control of IOs is well-documented in the international relations literature. There is significant evidence to show that IOs suffer 'principal–agent' problems due to the extended chain of delegation between citizens, diplomats, and the staff of IOs. Further, IOs may develop a vested interest in particular outcomes that national governments, parliaments, and supervisory boards find difficult to manage due to information costs and weak or distorted incentives.[134] Some scholars argue persuasively that IOs are best conceived an agents of a 'collective principal', where members of the collective must coordinate to direct the agent. In so doing, scholars specify a range of challenges that states confront in building coalitions to effectively control IOs.[135]

In the context of global IP debates, the responsiveness of IOs to particular member states, or groups of member states, varied over time. IOs were sometimes captured, partially or completely, by particular member states

that harnessed their institutional capacities, resources, or processes to serve as conduits for their interests.[136] While UNCTAD was generally considered a 'developing country' IO,[137] the WIPO Secretariat was perceived to favour the interests of developed countries. International organizations also liaised with particular ministries and agencies within national governments. The WHO had strong ties with health ministries at the national level whereas the WTO liaised most often with trade or foreign affairs ministries. WIPO's key interlocutors at the national level were national offices for industrial property and copyright for which it was often the core source of institutional support and staff training.

The different perspectives advanced by IO Secretariats reflected their distinctive mandates. In some instances, the interpretation by staff in IO secretariats of their mandate modified or expanded their influence on IP debates. Staff in the WTO commonly considered themselves as guardians of the Uruguay Round agreements. They favoured a compliance-oriented and sometimes TRIPS-plus approach to TRIPS implementation and generally shared a preference for not interfering with the Agreement. WIPO's staff viewed their mission as one of promoting stronger IP protection everywhere – a purpose the Secretariat has pursued with determination since the organization's inception.[138] Statements of this objective can be found across WIPO press releases, publications, and newsletters.[139]

By contrast, the mandates of IOs such as the WHO, UNAIDS, UNCTAD, UNDP, and UNAIDS emphasized public policy goals related to health, industrial development, human development, and the AIDS crisis. The interventions of their secretariats in international IP debates were informed by these goals, and aimed in the large part at promoting and defending the TRIPS flexibilities and securing a more balanced global IP regime. UNCTAD's activities, for instance, primarily served the interests of developing countries and promoted the use of TRIPS flexibilities.[140] At UNDP, Secretariat staff harnessed the moral authority of the annual Human Development Report to draw attention to the imbalances of the international IP regime (i.e., in its 2001 report on technology and in a 2001 book on *Making Global Trade Work for People*.)[141] The WHO used its technical authority to advocate a public health–sensitive approach to IP regulation.[142]

Most IO secretariats also had distinctive non-government constituencies that aided and influenced their work on IP. The WHO's natural constituency was the broader community of international public health advocates and experts. Each year, the WHO's Annual World Health Assembly (WHA) was preceded by a Peoples' Health Assembly, comprised of public health NGOs and civic organizations from around the world, which generated several recommendations on IP for consideration by the WHO Secretariat and member states. WIPO on the other hand had a distinctive relationship with industry. While member states formally approved WIPO's programme and budget each

year, the primary source of the Secretariat's funds were the private sector users, mostly multinational corporations, of the global IP system that it administers. This point was clearly articulated in 2004, when a broad civil society coalition issued their *Declaration on the Future of WIPO*, which drew together a diverse suite of concerns about the global IP system and called for a new focus on development, the public interest, and consumers rights.[143] (see Section 4.4.4. for discussion of WIPO).

Each of the IOs involved in global IP debates had a distinct institutional culture that informed its work. The concept of 'path dependence' alerts us to the ways that a particular organizational culture can permeate and prevail in an international bureaucracy over many years.[144] Further, the ascendance of a distinct set of ideas, beliefs, or assumptions can be reinforced over time by 'increasing returns' and 'lock in'. These insights help explain why the various international organizations expressed such distinct and competing views on IP issues. Moreover, they highlight that certain ideas can develop an apparent life of their own in institutions, even when the preferences of major stakeholders have moved on, internal debate emerges, or there is clear evidence to support the adoption of a different set of ideas, policies or actions.[145]

In some cases, internal IP debates erupted within IOs. Alongside NGO efforts to claim a seat at the table in many of the WHO's advisory committees, the global pharmaceutical industry (both brand and generic) also worked hard to influence the activities and policy recommendations of the organization on IP-related matters. NGOs and industry groups battled, for instance, to influence the outcomes of the WHO Commission on Intellectual Property Rights, Innovation, and Public Health (CIPIH) and the election of the WHO Director-General.[146] After numerous complaints from the pharmaceutical industry, the United States repeatedly called on the WHO to reign in secretariat staff such as German Velasquez, a key player in the organization's activities related to IP and access to essential medicines.

Alongside competition among IOs, there was also collaboration. WIPO, UPOV, and the WTO frequently co-sponsored events. UNDP, UNAIDS, and WHO also collaborated in public conferences and technical assistance activities. In 2002, as debates on TRIPS and public health were at their height, the WTO and WHO Secretariats combined to publish a joint study.[147] IOs also collaborated with non-government constituencies to produce publications and co-sponsor conferences. WHO, for instance, partnered with UNAIDS and MSF to publish a study on the patent status of essential medicines in developing countries[148] and with the South Centre on several matters related to TRIPS and public health.[149] UNCTAD also collaborated with ICTSD on a multi-year capacity-building project on intellectual property and sustainable development.[150]

Regional IOs were also involved in international debates, primarily through their roles as fora for regional coordination or cooperation. In East Africa, the

Common Market for Eastern and Southern Africa (COMESA) commissioned studies on issues related to IP and health.[151] The African Union and the Pan-American Health Organization (PAHO) also published reports on issues related to TRIPS implementation and global IP debates, and ASEAN held several meetings on TRIPS matters.[152] Staff of the secretariats of each of the regional IP organizations of African countries, published views and made statements that reflected particular perspectives on international IP debates. (In Chapter 5, I use the case of OAPI to demonstrate how such regional IOs acquired and used distinctive organizational capacities to advance reforms not clearly aligned with those of their members).

Across the spectrum of IOs, a number of individual international civil servants exerted particular influence on global IP debates, including Germán Velásquez (WHO), Pedro Roffe (UNCTAD), Adrian Otten and Jayashree Watal (WTO), Barry Greengrass (UPOV), Johnson Ekpere (OAU), and Kamil Idris (WIPO).

4.4.4. *WIPO as a Central Actor*

In the post-TRIPS global IP debates, WIPO emerged as a key forum and player. WIPO's significance derived in part from its status as the largest provider of IP-related capacity-building to developing countries for TRIPS implementation. In addition, the WIPO Secretariat was the key UN agency with a mandate on IP and a persistent voice in favour of stronger IP protection and a pro-IP culture globally.

To understand WIPO's role in global IP debates, a consideration of its leadership, mandate, institutional design, and history are essential. Since becoming part of the UN system, WIPO has had two Directors-General. Árpád Bogsch served as the first Deputy Director-General of WIPO from 1970 to 1973, and in 1974 became its first Director-General.[153] Throughout his tenure, he advanced WIPO's mission of promoting IP with zeal. Upon his retirement, he was replaced by Kamil Idris, who demonstrated similar pro-IP ardour. The pro-IP perspective of WIPO's two leaders was consistent with the objectives set out in the WIPO Convention, namely: (*a*) administrative cooperation among the various international agreements it oversees; and (*b*) promotion of the 'protection of intellectual property throughout the world'. The substantive functions set out in Article 4 of the WIPO Convention are to 'promote the development of measures designed to facilitate the efficient protection of intellectual property throughout the world and to harmonize national legislations in the field'; to 'encourage the conclusion of international agreements designed to promote the protection of intellectual property'; and to assemble and disseminate information concerning the protection of intellectual property, carry out, promote, and publish studies in this field. Throughout the period under examination, WIPO staff consistently proclaimed their goal as

one of 'facilitating or strengthening the protection of intellectual property at the international level'.[154] Importantly, however, since WIPO had joined the UN family in 1974, the organization's original mandate had been modified and complemented by a broader goal. Article 1 of the agreement establishing WIPO's relationship to the UN gave wipo a far broader purpose than either its leaders or staff have pursued, namely 'promoting creative intellectual activity and gave WIPO a far broader purpose than either its leaders or staff have pursued, namely . . . facilitating the transfer of technology related to industrial property to . . . the developing countries in order to accelerate economic, social and cultural development'.[155]

WIPO's prominence in global IP debates flowed from its role as administrator of some twenty-three IP treaties and their financial arrangements. These agreements fall into three main categories: IP protection treaties (i.e. which define international substantive standards on IP), global protection system treaties (i.e. which establish procedural rules mainly aimed at ensuring that one international registration or filling of an industrial property will have effect in all the countries signatory to the relevant treaties), and classification treaties (i.e. which create classification systems aimed at organizing information concerning inventions, trademarks, and industrial designs through an indexed system). Throughout its history, WIPO has raised most of its income through fees it collects from IP right-holders and applicants in exchange for services it provides in relation to several of these treaties.[156] Since 1995, over eighty per cent of WIPO's annual income came from fees paid for services related to the Patent Cooperation Treaty (PCT) (which provides a unified procedure for filing patent applications to protect inventions internationally) and the Madrid Treaty (which facilitates registration of trademarks), while less than ten per cent came from member state contributions.[157]

The status of IP right-holders as WIPO's core financiers and non-government constituency is openly proclaimed by the Secretariat.[158] In 1988, the WIPO Director-General established an Industry Advisory Commission (IAC) to ensure that 'the voice of the market sector is heard and that the organization is responsive to its needs'.[159] The Director-General emphasized that the IAC was designed to ensure 'a direct input of industry into the policy-making process in WIPO'.[160] Over ninety per cent of the NGOs accredited as permanent observers to WIPO's work are business associations of IP-holders and related industries.[161]

WIPO's pro-IP influence on global IP debates was facilated by its technical authority, extensive global network of IP professionals, close relationships with national IP offices, and the considerable budget it allocated to pro-IP outreach, training, and capacity-building. The technical process of the WIPO Secretariat was widely observed in diplomatic circles,[162] as was its pro-IP internal culture.[163] WIPO's staff generally shared pro-IP perspectives and legal expertise, and had the organizational and financial resources to project

these.[164] Further, the authority of the WIPO Secretariat vis-à-vis developing countries was consolidated by the perception among many national government officials that WIPO's advice was imbued with the neutrality anticipated of international organizations and their civil servants.[165]

From 2004, the push for the WIPO Development Agenda (described above) placed WIPO at the centre of the IP stand-off between developed and developing countries. From 2005, two independent reviews of WIPO's management added fuel to controversies on the mandate, accountability, and activities of WIPO. The United Nations Joint Inspection Unit raised concerns about corruption and mismanagement, including charges against the WIPO Director-General.[166] A further independent audit by PricewaterhouseCoopers revealed serious problems in human resources management.[167] In 2007, developed countries, which had long supported the incumbent Director-General, turned against his leadership. The ensuing debate generated an institutional crisis, resulting in a failure of governments to approve the organization's budget, and forced the early resignation of the Director-General.[168] In the process, tension emerged among developing countries, with the African Group stepping up to defend the Sudanese Director-General while some developing countries sided with developed countries determined to replace a leader who no longer enjoyed their confidence.[169]

4.5. Conclusion

This chapter has advanced an analytic account of the core political dynamics and players necessary for understanding how global IP politics set the context for TRIPS implementation and the variation that emerged. Implementation and post-Agreement negotiation were intricately intertwined in the global struggle to influence TRIPS negotiations, alter international IP regulation, and to shape the terms of global IP debates.

Building on this foundation, the following chapter shows how competing international pressures contributed to diversity in how developing countries implemented TRIPS. The subsequent chapter (Chapter 6) shows how domestic political factors, particularly institutional arrangements and changing priorities among domestic interest groups, interacted with international pressures to produce further variation.

Notes

1. Three key sources for periodic reporting on developing country engagement in IP debates post-TRIPS are the South Centre/Centre for International Environmental Law (CIEL) Intellectual Property Quarterly Update (from 2004), news reports by Intellectual Property Watch (from November 2004), and Third World Network's South–North Development Monitor (SUNS).

2. See *The Economist* (1994), Hill (1990, 1994), Schott (1994), and Umoren, (1995).
3. PhRMA (2001).
4. For a summary of discussions related to the extension of the protection of geographical indications, see WTO document WT/GC/W/546.
5. Abbott (2003*b*).
6. Mayne (2002).
7. For information on IFAC-3, see http://www.ita.doc.gov/td/icp/Charter-23.html. This Committee was previously known as the Industry Technical Advisory Committee (ITAC). For its Charter and membership, see: http://www.ita.doc.gov/itac, accessed on 8 January 2007.
8. See Sell (2003*b*) and Drahos (2002*a*). The 301 reports also draw on information obtained from a range of government agencies, the private sector, embassies and trading partners, and National Trade Estimates reports.
9. Sell (2003) and Mayne (2002).
10. This typology builds on one set forth in Dutfield (2000).
11. BIO, for instance, represents more than 1,100 biotechnology companies, academic institutions, state biotechnology centres, and related organizations in the United States and thirty-one other nations involved. Additional examples include the European Federation of Pharmaceutical Industries and Associations (EFPIA) the International Publisher's Association, the International Federation of the Phonographic Industry (IFPI), Intellectual Property Owners, Inc, and l'Association Internationale des Sélectionneurs pour la Protection des Obtentions Végétales (ASSINSEL).
12. A further example is the Fédération Internationale des Conseils en Propriété Industrielle (FICPI).
13. Several of these individuals were also active in the TRIPS negotiations. See Sell (2003).
14. Wadlow (2008).
15. ICC (2005).
16. Drahos (2004*a*) and Helfer (2004).
17. Biadgleng and Tellez (2008) and Drahos (2004*a*).
18. USTR (2007*b*).
19. EC (2003, 2004*c*, 2006).
20. See WTO document IP/C/W/448.
21. USPTO (2006).
22. Japan, Switzerland, and the United States also supported the inclusion of enforcement on the TRIPS Council agenda. See WTO document IP/C/W/471, Gerhardsen (2006*a*), and Santa Cruz (2006).
23. EC (2004*c*).
24. Biadgleng and Tellez (2008).
25. USTR (2007*a*).
26. Ibid.
27. USTR (2007*a*) and New (2007*d*).
28. The Greens in the European Parliament worked, for instance, to remove provisions from the EU's negotiating proposals for agreements with ACP countries that they argued would have facilitated biopiracy. See GRAIN (2000*b*).

29. In early 2000, two Senators sponsored an amendment designed to prevent the United States from challenging African countries' use of compulsory licensing and parallel importation of HIV/AIDS drug treatments as alternatives to more expensive U.S. pharmaceuticals. The amendment was dropped from the bill amid strong opposition from the U.S. pharmaceuticals industry. With some Senators threatening to block the bill, President Clinton issued Executive Order 13155 – Access to HIV/AIDS Pharmaceuticals and Medical Technologies.
30. See http://www.trilateral.net, accessed on 14 February 2008.
31. This proposal emerged from a meeting of the Trilateral Offices in November of 2003. For a summary of the 21st Trilateral Conference, Tokyo, see http://www.trilateral.net. The origins of the proposal can be traced to an October 2003 meeting of the Executive Committee of the International Association for the Protection of Intellectual Property (AIPPI) in Lucerne in October of 2003. See AIPPI's Resolution on Question 170 at http://www.aippi.org/splt/aippi_resolutons.pdf.
32. Kumar (1993), Raghavan (1990), *Economic and Political Weekly* (1989), Rao (1994), and Singh (1994).
33. Drahos (2001*a*), Khor and Raghavan (2001), and Oxfam (2004*a*).
34. For examples, see Das (1998) and Sell (1995, 1998).
35. To date, there is no general history of developing countries' engagement in international IP policymaking post-TRIPS. Examples of scholarly analyses which devote specific attention to the engagement of developing countries in global IP debates post-TRIPS include Drahos (2002*a*), May (2006*c*), Okediji (2003*a*), Sell (2006), and Tansey and Rajotte (2008).
36. Ostry (2002).
37. Finger and Schuler (2000).
38. Ibid. The final Marrakesh Agreement delayed benefits for developing countries by, for instance, deferring liberalization of textiles and clothing, and postponing negotiations to reduce agricultural export subsidies and domestic support measures.
39. Maskus (2000*a*).
40. Bhagwati (2002). Also see Stiglitz (2002).
41. Finger and Schuler (2001: 5), and Khor (2002: 22–3).
42. Finger and Schuler (2001: 12).
43. This figure combines an estimated US$21 billion income from copyrights and US$19 billion income from patents. Put another way, the economic gains TRIPS would generate for the United States economy were estimated to be thirteen times more valuable than the tariff liberalization commitments it secured through the Uruguay Round. See Finger (2002) and Maskus (2000*a*).
44. Group of 77 and China (1999, 2000, 2001, 2003*a*, 2003*b*).
45. Author's observation based on participation in informal meetings involving developing country IP delegates in Geneva between 1999 and 2007.
46. Matthews (2002: 78–107).
47. South Centre (2004).
48. This figure includes ten submissions from China regarding the Transitional Review Mechanism of China and one submission on the same subject by Taiwan. Note that some of these submissions are notifications by countries of their support or co-sponsorship of existing submissions to the TRIPS Council.

49. In 1999, for instance, nine submissions related to Article 27.3(b) and one submission on development, technical assistance, and transition arrangements were addressed to the General Council. The G-77 submitted a further statement on development-related issues to the 1999 WTO Ministerial Conference. In addition, four submissions on technology transfer were submitted to the WGTT between 2003 and 2005, and one to the General Council in preparation for the Ministerial Conference in 2001.
50. Group of 77 and China (2000).
51. WTO (2005).
52. Oh (2002) and Correa (2002).
53. For studies that detail how the performance of individual diplomats can make a decisive difference to international trade negotiations, see Croome (1999), Hoda (2001), and Preeg (1970). In trade and IP negotiations, the room for entrepreneurship by diplomats is enhanced by the highly technical nature of negotiations.
54. Abdel Latif (2005).
55. As of January 2008, the African Group comprised all forty-one African WTO members.
56. As of January 2008, the ACP Group comprised fifty-six members, namely Angola, Antigua and Barbuda, Barbados, Belize, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Cote d'Ivoire, Cuba, Democratic Republic of the Congo, Djibouti, Dominica, Dominican Republic, Fiji, Gabon, The Gambia, Ghana, Grenada, Guinea, Guinea-Bissau, Guyana, Haiti, Jamaica, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Papua New Guinea, Rwanda, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Senegal, Sierra Leone, Solomon Islands, South Africa, Suriname, Swaziland, Tanzania, Togo, Trinidad and Tobago, Uganda, Zambia, and Zimbabwe.
57. As of January 2008, the LDC Group comprised thirty-two WTO members, namely Angola, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Democratic Republic of Congo, Djibouti, Gambia, Guinea, Guinea Bissau, Haiti, Lesotho, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Senegal, Sierra Leone, Solomon Islands, Tanzania, Togo, Uganda, and Zambia.
58. WTO (2006).
59. WTO (1999*a*).
60. Ibid. Also see TWN (1999).
61. Dutfield (2000).
62. Kuanpoth (2006).
63. For the origins of this Committee and its activities, see http://www.wipo.int/tk/en.
64. WTO (2006).
65. For the Africa Group proposal, see WTO document IP/C/W/40). For interventions by Kenya, South Africa, and Nigeria in the TRIPS Council meetings in 2005 and 2006, see WTO documents IP/C/M/50, IP/C/M/51, IP/C/M/52, and IP/C/M/48.
66. Group of 77 (1999).
67. Gerhardsen (2005*b*) and Abbott (2003*b*).
68. Matthews (2004, 2005), Sell (2002), and Odell and Sell (2006).

69. For the decisions made by the TRIPS Council and General Council in 2002 to put the Declaration into effect, see http://www.wto.org/english/tratop_e/trips_e/pharmpatent_e.htm, accessed 5 November 2007.
70. Oh (2006).
71. For discussion of the politics of the Paragraph 6 decision, see Correa (2004*c*), Ismail (2003), Matthews (2004), and WTO (2003*b*). The system called on eligible countries intending to import to provide notifications to the WTO of their intention to make use of the system and supply information each time they use the system. The August 30 decision was transformed into a protocol amending TRIPS in 2005. See http://www.wto.org/english/tratop_e/trips_e/public_health_notif_import_e.htm.
72. See Chapter 3, note 23.
73. See WTO (2005*b*, 2005*c*).
74. In April 2004, the Maldives, which had no IP legislation at the time, made an individual request for an extension of its transition period until December 2007, the date at which the Maldives had separately agreed at the United Nations to graduate from its LDC status. In the wake of economic disruption following the 2004 tsunami however, the UN agreed in 2005 to defer the start of the Maldives three-year transition period for graduation until 2008.
75. Gerhardsen (2005*a*).
76. For minutes of the TRIPS Council meetings, see WTO documents IP/C/M/48, IP/C/M/49 and IP/C/M/50. Also see Santa Cruz (2006).
77. WIPO (2004*b*, 2004*c*).
78. On forum-shifting in international IP negotiations, see Braithwaite and Drahos (2000), Drahos (2002*a*), and Helfer (2004).
79. For an overview of the impacts of these Agreements on the options of developing countries with respect to TRIPS flexibilities, see Musungu and Dutfield (2003), Fink and Reichenmiller (2005), Oliva (2003), Roffe (2004), Santa Cruz and Roffe (2006), and Vivas-Eugui (2003).
80. The two treaties are the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT). For the text of each treaty, see http://www.wipo.int/treaties/en.
81. Dickinson (1999).
82. For critical reviews of the WIPO Patent Agenda and the proposed SPLT, see Correa and Musungu (2002).
83. New (2006*a*).
84. Ibid.
85. New (2005*c*).
86. Ibid.
87. For an overview of the evolving governance of international IP enforcement, see Biadgleng and Tellez (2008).
88. New (2008*b*).
89. Tansey and Rajotte (2008).
90. New (2005*e*).
91. Robinson (1998).

92. The NGOs involved were the Lutheran World Federation (LWF), Habitat International Coalition, and the International NGO Committee on Human Rights in Trade and Investment (INCHRITI).
93. Helfer (2004) and Kothari et al. (2000).
94. UNHCHR (2001).
95. UNCESCR (2005).
96. For a summary of references to IP by UN human rights treaty monitoring bodies in their reviews of the implementation of international conventions (i.e., the International Committee on Economic, Social and Cultural Rights (ICESCR), the Human Rights Committee, and the Committee on the Rights of the Child), see http://www.3dthree.org/pdf_3D/TreatyBodyIPrefs_en.pdf. On the relationship between human rights and IP, see Chapman (2002) and Robinson (1998).
97. See, for instance, 3D (2006*a*) and the Republic of the Philippines (2000).
98. Andersen (2006*a*), and Tansey and Rajotte (2008).
99. Emert (2005).
100. In 2005, three inter-sessional intergovernmental meetings (IIMs) to examine proposals for a WIPO Development Agenda were held. At the October 2005 meeting of the WIPO General Assembly, the member states agreed to 'accelerate and complete' the IIM discussions by convening two meetings of a Provisional Committee on Proposals Related to a WIPO Development Agenda (PCDA). In 2007, the Development Agenda discussions were turned over to a new Committee on Development and Intellectual Property (CDIP). See WIPO (2005*b*), New (2005*b*), Musungu (2004*b*), and May (2006*c*).
101. Boyle (2004).
102. See Musungu and Dutfield (2003: 11).
103. MSF (2003), Musungu (2003), Musungu and Dutfield (2003), and Civil Society Coalition (2004).
104. New (2005*b*, 2005*d*, 2006*a*).
105. Correa and Musungu (2002), Dhar and Anuradha (2005), and New (2007*g*).
106. New (2007*h*).
107. New (2007*e*).
108. Gerhardsen (2006*f*).
109. Ibid.
110. Abdel Latif (2005).
111. Ibid.
112. Stilwell and Monagle (2000: 3).
113. These included the group of seventeen Like-minded, Megadiverse Countries, created in 2002.
114. Gay and Oh (2008). Also see Das (2006).
115. Drahos (2002*a*).
116. Tansey and Rajotte (2008).
117. William Haddad was one of the founders of the U.S. generic trade association over which he presided as chairman/president for over a decade, and CEO of one of the largest U.S. generic drug companies. Haddad initiated and negotiated the Drug Price Competition and Patent Restoration Act (Hatch–Waxman) and

was among those centrally involved in the effort to cut the price of HIV/AIDS drugs.

118. For discussions of the role and influence of civil society, see Sell (2003*a*, 2003*c*, 2006) and Sell and Prakash (2004). Drezner (2005) argues that the magnitude of the change in international IP policy and the role played by civil society has been overemphasized and that the major powers remained the most decisive actors.
119. Das (1998), Hathaway (1993), and Shukla (1994). Also see Drahos (1995).
120. Crucible Group (1994).
121. For instance, MSF, HAI, and the Consumer Project on Technology held a joint meeting in November 1996 that resulted in the Amsterdam Statement, which set out concerns about the relationship between TRIPS and public health. See http://www.cptech.org/ip/health/amdsterdamstatement.html.
122. Sell (2003*b*, 2006).
123. Sell (2006).
124. Yu (2007), and Civil Society Coalition (2004).
125. Halbert (2005).
126. Consumers International (2006), Halbert (2003), Matthews (2006), and Sell (2006).
127. For analysis of the significance of coalitions between NGOs and developing countries regarding IP issues under discussion in multilateral institutions, see Matthews (2006).
128. For examples of such collaboration in debates on TRIPS and public health, see Odell and Sell (2006), and Shadlen (2004*b*).
129. Cited in Berne Declaration (2003:8). A group of international and European NGOs also lobbied the EFTA states arguing against the inclusion of IP issues in bilateral trade agreements (particularly with respect to patents on life forms and public health). See Berne Declaration (2003: 6–7).
130. The annual reports of each of these foundations list their respective grantees.
131. Rockefeller Foundation (2002) and Karaganis (2006).
132. See Chapter 1, note 108.
133. Barnett and Duvall (2005).
134. Vaubel (2006)
135. To understand the reasons for autonomy of IOs, a growing scholarly literature explores how governance structures and incentive systems at work within IOs influence their actions, particularly through the application of principal–agent theory. See, for example, Hawkins et al. (2006), Lyne et al. (2006), Martin and Simmons (1998), and Nielsen and Tierney (2003).
136. This point is made by Barnett and Duvall (2005) in their discussion of institutional power and how IOs can serve as vehicles for the indirect expression of the interests of powerful states.
137. On the history of the special relationship between UNCTAD and developing countries, see Nye (1973).
138. Bogsch (1992) and May (2006*c*).
139. For examples, see http://www.wipo.int.
140. UNCTAD (1996, 1999, 2007).
141. UNDP (2001) and UNDP (2003*b*).

142. For examples of WHO studies which advance this perspective, see WHO (1999*a*, 1999*b*, 2001, 2002*a*, 2002*b*, 2004). For additional studies published by WHO or with other organizations, see Bermudez et al. (2000), Correa (2002*a*, 2002*b*, 2004*c*), Keayla (2004), MSF/WHO (2000), Musungu and Oh (2006), Supakankunti et al. (1999), and UNAIDS/WHO (2000).
143. For analysis of the influence of international civil servants in IOs on policy debates, see Yi-Chong and Weller (2002), and Barnett and Finnemore (1999).
144. See, for example, Arthur (1989, 1994). See also Chapter 1, note 108.
145. Goldstein (1988), and Goldstein and Keohane (1993).
146. Gerhardsen (2006*f*).
147. WTO/WHO (2002). At the WTO, former Deputy Director-General Miguel Rodriguez was among those who promoted the idea of a joint report.
148. WHO (2004).
149. Correa (2002*b*, 2004*c*).
150. See UNCTAD-ICTSD (2005). See http://www.iprsonline.org/unctadictsd/description.htm, accessed on 1 February 2008.
151. Maonera and Chifamba (2003).
152. For papers and reports of these meetings, see Bermudez et al. (2000) and Balasubramanium (2000).
153. Bogsch's long WIPO career began in 1963 when he was appointed BIRPI's first Deputy Director-General.
154. See, for example, Gurry (1999: 385).
155. WIPO (1975).
156. WIPO (1994, 2004*d*).
157. Musungu and Dutfield (2003: 8). WIPO also collects fees for the dispute resolution services (mediation and arbitration) it offers to individuals or enterprises seeking to avoid court litigation. See Gurry (1999).
158. WIPO (1999*a*, 1999*d*)
159. For a report of the first meeting of the IAC, see WIPO (1999*a*).
160. For a press release regarding the first meeting of the IAC, see WIPO (1999*d*).
161. CIEL (2007).
162. Author's interviews with Geneva-based diplomats from 2004–7.
163. The idea that particular assumptions, beliefs, and worldviews come to dominate IOs over time has been presented in the literature for many years. For discussion of the influence of pro-market economists on the policy advice of the World Bank, see Wade (2002). On the influence of particular professional communities, such as economists, on IOs, see Kindleberger (1955) and Ramsay (1984).
164. See Chapter 1, note 108.
165. For analysis of how staff of IOs may sometimes promote a perception that they possess rational-legal and expert authority, see Barnett and Finnemore (2004: 23–5).
166. New (2007*b*).
167. New (2007*c*).
168. New (2007*a*, 2007*f*).
169. Musungu (2007).

5

International Pressures on Developing Countries

Developing countries faced a suite of international pressures regarding their implementation of TRIPS. The following example of TRIPS-plus demands on South Africa exemplifies how this occurred. In 1998, the U.S. Department of State sent a report to the U.S. Congress concerning IP protection in South Africa. According to the report:

> All relevant agencies of the U.S. Government the Department of State together with the Department of Commerce, its U.S. Patent and Trademark Office (USPTO), the Office of the United States Trade Representative (USTR), the National Security Council (NSC) and the Office of the Vice President (OVP) have been engaged in an assiduous, concerted campaign to persuade the Government of South Africa (SAG) to withdraw or modify the provisions of Article 15(c) [of the South African Medicines and Related Substances Act of 1965] that we believe are inconsistent with South Africa's obligations and commitments under the WTO Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS).[1]

The report further stated that:

> [s]ince the passage of the offending amendments in December 1997, U.S. Government agencies have been engaged in a full court press with South African officials from the Departments of Trade and Industry, Foreign Affairs, and Health, to convince the South African Government to withdraw or amend the offending provisions of the law, or at the very least, to ensure that the law is implemented in a manner fully consistent with South Africa's TRIPS obligations.[2]

In this chapter, I explore the sources, tools, and impacts of international pressures on developing countries with respect to TRIPS implementation. I argue that there were competing pressures both for and against TRIPS-plus approaches. On the one hand, a pro-IP team pushed developing countries to implement TRIPS early, to limit their use of TRIPS flexibilities, and to adopt laws that went beyond minimum TRIPS requirements. On the other hand,

a team in favour of a more development-oriented approach to IP reforms fought to encourage developing countries to use TRIPS flexibilities.

Pro-IP economic pressures were a primary explanation for TRIPS-plus implementation in a subset of targeted developing countries.[3] But economic pressures did not account for all of the TRIPS-plus reforms we see, nor for other aspects of variation. Some tools of economic pressure were more effective than others, not all countries were targeted equally, and sometimes pressures did not achieve the desired results.

Alongside economic pressures, the power of ideas also shaped the political context for TRIPS implementation and contributed to the variation in IP reforms. Ideational pressure was used to promote a pro-IP, compliance-plus political environment, and explains some TRIPS-plus outcomes even where explicit economic pressures were not forcefully exerted. Conversely, the power of ideas was also used to challenge compliance-plus pressures, raise awareness about TRIPS flexibilities and create political space for their use. Combining both ideational and economic power, capacity-building was both a decisive tool for securing TRIPS-plus reforms in countries, and an instrument of resistance for those keen to persuade countries to use and defend the TRIPS flexibilities.

This chapter begins with a review of the range of economic pressures exercised in the TRIPS implementation game, followed by the ideational pressures, and concludes with a discussion of the role of capacity-building.

5.1. Economic Pressure

Developed countries used a suite of tools to exert economic pressure for TRIPS-plus IP reforms, including bilateral trade, IP and investment deals, WTO accession agreements, trade sanctions, the threat of sanctions and withdrawal of aid, WTO DSU procedures, and diplomatic intimidation. Industry groups also used economic threats to pressure developing countries. In the following sections, I describe each of these pressures. I identify the particular countries and topics that were targeted, and note the ways in which pressures worked in tandem.[4] Importantly, while many developing countries were indeed cajoled or coerced through economic pressures to implement TRIPS-plus reforms, not all countries succumbed. I highlight several examples of resistance (which are taken up for deeper exploration in Chapter 6) and observe that some developing countries mounted countervailing efforts to use the economic power available to them.

5.1.1. *Trade Agreements*

Bilateral trade agreements were the most potent form of economic pressure used by developed countries to secure TRIPS-plus IP reforms in many targeted

Table 5.1. Examples of TRIPS-plus provisions in bilateral trade agreements

Shorter transition periods	Countries may be required to forgo privileges related to the transition periods under the WTO. For example, some agreements require countries to implement certain patent protections more quickly than demanded by TRIPS
New obligations	Countries may be required to extend patents to new subject matter, eliminate certain exceptions, increase copyright requirements, adopt UPOV 1991-style plant variety protection, provide patents for biotechnological inventions, adopt restrictions on the grounds for compulsory licensing, adopt restrictions on parallel trade, adopt obligations to create exclusive rights to the test data used to register new drugs, extend patent terms beyond 20 years, and allow patents on second uses of medicines
Highest international standards	Many EU agreements call for implementation of IP in developing countries *in line with international standards*. Given that new international standards are continually being established, the meaning of 'international standards' is uncertain
Narrow interpretations of TRIPS provisions	FTAs often specifically link bilateral trade to a developing countries' willingness to provide IP protection 'greater than' what TRIPS requires, or to the extent that the protection they offer is an 'improvement' on TRIPS. In practice, this often means developing countries must adopt interpretations of TRIPS provisions by the party with which they are making a bilateral deal (i.e. to match EU or U.S. standards)
Requirements to join international IP agreements	Some bilateral agreements require countries to join international IP treaties, such as WIPO's Internet Treaties or UPOV 1991

countries. In doing so, they also helped to shape a 'compliance-plus' global political environment.[5] These agreements often included specific TRIPS-plus obligations to extend patents to new subject matter, eliminate of certain exceptions, increase copyright requirements, accede to particular international conventions,[6] and adopt the highest international standards in certain areas (see Table 5.1).

After TRIPS entered into force, the United States concluded TRIPS-plus free trade agreements (FTAs) with a range of developing countries, forging deals with Bahrain, Central America and the Dominican Republic, Chile, Colombia, Jordan, Morocco, Oman, Panama, Peru, Singapore, and South Korea (Appendix 5 provides dates of all these Agreements).[7] With the shift to a Democratic Party majority in the U.S. Congress in November 2006, the U.S. FTAs with Colombia and Peru, which had been awaiting ratification, were opened for renegotiation of some aspects and were renamed Trade Promotion Agreements (TPAs). In both cases, the revisions included a dilution of some aspects of their TRIPS-plus components. While the Peru Agreement subsequently entered into force, the agreement with Colombia and new agreements with Korea and Panama were awaiting ratification in late 2007.

The United States also signed Trade and Investment Framework Agreements (TIFAs) with Brunei (2001), Ghana (1999), Indonesia (1996), Kuwait (2004), Liberia (2007), Malaysia (2004), Mauritius (2006), Mozambique (2005), Nigeria (2000), Pakistan (2003), Qatar (2004), and with the regional groupings

WAEMU (2002), COMESA (2001), and ASEAN (2006).[8] While these did not contain the explicit TRIPS-plus chapters and commitments included in FTAs, each TIFA included an article in which countries underlined their commitment to promoting IP protection, including in some cases to continue dialogue and cooperation with the United States and to consider stronger IP standards in the future.

The European Union also used bilateral trade agreements to secure not only faster TRIPS implementation and enforcement, but also TRIPS-plus standards of IP protection in South Africa, India, a series of Mediterranean countries, and in Eastern Europe.[9] Whereas all the U.S. FTAs included specific chapters with substantive IP provisions, the European approach to IP varied according to the trading partner in question.[10] Countries in Eastern Europe and some former Soviet countries were required to adopt standards identical to those in the European Union.[11] The European Union also has several bilateral agreements related to the protection of geographical indications (e.g. with Mexico).

In other cases, provisions in EU agreements were more general but still represented TRIPS-plus commitments. In its Partnership Agreement with the European Union, for instance, Jordan was required provide patent protection for chemicals and pharmaceutical products two years earlier than TRIPS.[12] In 2000, seventy-six African, Caribbean, and Pacific (ACP) countries signed the Cotonou Agreement with the European Union whereby they committed to including IP issues in their subsequent negotiations of bilateral Economic Partnership Agreements (EPAs).[13] While the Cotonou Agreement notes the need to take into account different levels of development, it has several TRIPS-plus aspects, including recognition of the need to accede to all relevant international conventions on IP (TRIPS does not call on countries to accede to any additional international IP conventions), for patent protection of biotechnological inventions, and for legal protection of non-original databases (also not required by TRIPS). Even though the Cotonou provisions are non-binding, they nonetheless formed the baseline conditions for the EPA negotiations that followed.[14] The motivation for the EPA negotiations was to address the WTO inconsistencies of prior EU preferential trading arrangements with ACP countries. Notably, however, this did not give rise to any requirement for bilateral negotiations between the EU and ACP countries on IP issues.[15] Nonetheless, as the deadlines for EPA negotiations approached in late 2007, ACP countries faced pressures to include IP provisions. Many countries instead signed interim agreements.[16] As of early 2008, only the Caribbean had signed a full EPA, which included a comprehensive IP chapter.[17] The European Union also included TRIPS-plus obligations in the Action Plans for countries covered by its European Neighbourhood Policy (ENP) (which applies to the EU's immediate neighbours by land or sea).[18] Further, in October 2006, the European Union announced that it would launch, for the first time in five years, a new

generation of bilateral free trade agreements with key partners that can also be expected to include TRIPS-plus IP provisions.[19]

Also in Europe, the four member states of European Free Trade Area (EFTA) (Iceland, Lichtenstein, Norway, and Switzerland) negotiated trade agreements with developing countries that include TRIPS-plus requirements, including obligations to accede to the 1991 UPOV Act and/or the Budapest Convention, and to provide stronger protection for patents and data protection.[20] Canada and Japan also concluded trade agreements with developing countries that included TRIPS-plus provisions.[21]

In general, bilateral trade agreements among developing countries rarely included explicit IP sections or TRIPS-plus provisions. However, where one of the countries had already implemented TRIPS-plus standards, these were sometimes reflected in its trade agreements with other developing countries (e.g., the 1999 Chile-Mexico FTA).

5.1.2. *Bilateral Investment Agreements*

Bilateral investment agreements were a further tool that developed countries used to put pressure on developing countries to improve IP protection.[22] Post-TRIPS, the United States added six bilateral investment treaties (BITs) to those already in force (Appendix 5 lists the years these Agreements came into force).[23] U.S. BITs are designed to ensure that U.S. investors receive national or most-favoured nation treatment (whichever is better) in these countries, and to protect them against performance requirements, restrictions on financial transfers, and arbitrary expropriation. Most individual European governments also completed BITs with a range of developing countries.[24] These investment agreements include IP rights in their definition of assets for which protection is required and call for such investments in host developing countries to receive the same level of protection they would in developed countries.[25]

BITs do not demand specific legislative reforms or enforcement performance. Their impacts are most likely to occur by deterring governments from taking actions that could weaken their IP protection. There is also potential for investors could take advantage of bilateral investment treaties to challenge IP standards by developing countries even if they are TRIPS-consistent. It is possible, for instance, that investment agreements could deter governments from granting compulsory licences because the patent owner may be able to claim an economic loss (even though the patent rights will continue in force and he will be able to compete with the compulsory licences). It is also plausible that the revocation of a patent and some exceptions to IP rights could be challenged as violations of investors' rights.[26] In the future, such disputes could induce changes of national IP legislation in host countries, but none has occurred to date. If for example, a U.S. company has a patent on a

given gene in the United States and would like to sell seeds containing that gene in a developing country, the importing country may then be called on to provide the same level of domestic patent protection of the gene to the company that it enjoys in the United States. This does not necessarily mean that the developing country must automatically honour the gene patent in its own territory or that it must rewrite its patent laws. But it does raise the possibility that the developing country may have to allow for patent protection on plant genes in its territory if and when the U.S. company seeks local protection.[27]

The United States also expanded a web of specific bilateral arrangements on IP with developing countries in Asia (Cambodia, China, Korea, the Philippines, Sri Lanka, Taiwan), and Latin America and the Caribbean (Ecuador, Jamaica, Nicaragua, Paraguay, Trinidad and Tobago).[28] The focus of these agreements was usually to promote stronger IP enforcement.

5.1.3. *The WTO Accession Process*

At the multilateral level, developed countries also took advantage of the WTO accession process to link trade opportunities to TRIPS implementation by developing countries and to their general performance in IP protection. To accede to the WTO, applicant countries are required to conduct a series of informal bilateral negotiations that determine the terms of their final accession agreement.[29] The transition periods granted to original WTO members during the Uruguay Round are not automatic for acceding countries. The United States was explicit about its IP goals in the accession process: '[N]egotiations on the accession of over 30 economies to the WTO offer us a major opportunity to improve intellectual property standards worldwide [. . .]. In each case, we require full implementation of TRIPS obligations as a condition of entry into the WTO, without transition.'[30]

The accession arrangements[31] of each of the twelve developing countries that joined the WTO between 1994 and 2007 included TRIPS-plus commitments as a legal condition for WTO membership (see Table 5.2).[32] While transitional arrangements were granted to some countries in a limited number of areas and for specific periods of time, when Nepal and Cambodia joined the WTO in 2004 they each agreed to speed their implementation of TRIPS in advance of the transition periods otherwise available to LDC members of the WTO. Cambodia, for instance, agreed to meet TRIPS obligations no later than 1 January 2007 and also to provide some interim protection.[33] (Cambodia did, however, incorporate the 2016 TRIPS extension for the protection of pharmaceutical products into its patent law, making it the first LDC to do so). When Vietnam joined the WTO in January 2007 it made a similar range of TRIPS-plus commitments.[34] Some of the toughest IP negotiations took place in the case of China, which had been preceded by over a decade of

Table 5.2. Developing countries with TRIPS-plus terms of WTO accession

Ecuador	1996
Panama	1997
Mongolia	1997
Jordan	2000
Oman	2000
China	2001
Chinese Taipei (Taiwan)	2002
Nepal	2004
Cambodia	2004
Tonga	2005
Saudi Arabia	2005
Vietnam	2007

bilateral pressures from the United States, the European Union, and Japan on IP standards and enforcement.[35] Across the accession countries, the legal status and binding nature of TRIPS-plus commitments varies. In some cases, a range of TRIPS-plus policies and measures is noted in accession documents, but then not included in the final conclusions, which have a binding nature. For instance, in the case of Vietnam, the Working Party Report notes a five-year data exclusivity provision, but no commitment to this policy is included in the final conclusions. In advance of the accession of Cambodia, the WTO Deputy Director-General issued a statement that, as an LDC, the terms of Cambodia's accession would not 'preclude access to the benefits under the Doha Declaration on the TRIPS Agreement and Public Health'.[36] Notably, after negotiating a TRIPS-plus accession package to the WTO, Vanuatu was the first country to drop its bid for WTO membership, concluding that across the range of economic sectors impacted by WTO accession the costs would outweigh the potential benefits.[37]

5.1.4. *The WTO Dispute Settlement Process*

The threat and use of economic sanctions were also harnessed to push specific approaches to TRIPS implementation, while simultaneously reinforcing a pro-IP political climate for IP reforms. Developed countries used both the WTO's Dispute Settlement Understanding (DSU) and national trade laws to threaten to withdraw, or to actually withhold, trade benefits in other areas of economic interest to the targeted developing country.

Contrary to expectations when TRIPS was signed, there was no great rush to litigation when developing country transition periods expired in 2000, despite the fact that many developing countries acknowledged they had not yet fully implemented the Agreement.[38] The DSU was, nonetheless, used by developed countries to foster a compliance-plus global political environment. Indeed, even when not deployed, the United States frequently alluded to the

potential for using the DSU in its Special 301 reports, related press releases, and in bilateral discussions.[39] From 1995 to 2007, a total of twenty-five DSU cases relating to TRIPS were initiated, the majority of which (eighteen) were between developed countries. The United States initiated WTO dispute settlement proceedings six times to remedy alleged violations of TRIPS by selected developing countries and the European Union did so once (see Table 5.3).[40]

Table 5.3. WTO TRIPS disputes involving developing countries

United States vs. Pakistan – 1996
- Alleged absence of either patent protection for pharmaceutical and agricultural chemical products or a system to permit the filing of applications for patents on these products; and
- Alleged absence of a system to grant exclusive marketing rights in such products.

United States vs. India – 1996
- Alleged absence of patent protection for pharmaceutical and agricultural chemical products and a mechanism to adequately preserves novelty and priority in such applications; and
- Alleged failure to establish a system for the grant of exclusive marketing rights.

European Community vs. India – 1996
- Alleged absence of patent protection for pharmaceutical and agricultural chemical products, and the absence of formal systems that permit the filing of patent applications and provide exclusive marketing rights for such products.

United States vs. Argentina – 1999
- Alleged absence in Argentina of either patent protection for pharmaceutical products or an effective system for providing exclusive marketing rights in such products; and
- Alleged failure to ensure that changes in its laws, regulations, and practice during the transition period provided under TRIPS Article 65.2 do not result in a lesser degree of consistency with the provisions of the Agreement.

United States vs. Argentina – 2000
- Alleged failure to protect against unfair commercial use of undisclosed test or other data submitted for market approval of pharmaceutical and agricultural chemical products;
- Alleged denial of certain exclusive rights for patents, such as the protection of products produced by patented processes and the right of importation;
- Alleged improper exclusion of certain subject matter, including micro-organisms, from patentability and impermissible limitations on certain transitional patents as well as on opportunity for patentees to amend pending applications to claim enhanced protection;
- Alleged failure to provide certain safeguards for the granting of compulsory licences;
- Alleged failure to provide prompt and effective provisional measures, such as preliminary injunctions, for purposes of preventing infringements of patent rights from occurring; and
- Alleged improper limitations on the authority of its judiciary to shift the burden of proof in civil proceedings involving the infringements of process patent rights.

United States vs. Brazil – 2000
- Alleged inconsistency of measures that establish a 'local working' requirement for enjoyment of exclusive patent rights with Brazil's obligations under Articles 27 and 28 of the TRIPS Agreement, and Article III of the GATT 1994.

United States vs. China – 2007
- Concerning measures pertaining to the protection and enforcement of IP rights;
- Alleged inconsistency of available criminal procedures and penalties for commercial scale counterfeiting and piracy with TRIPS Articles 41.1 & 61;
- Alleged inconsistency of requirement that infringing goods be released into the channels of commerce with TRIPS Articles 46 & 59; and
- Alleged failure to ensure authors of works whose publication or distribution have not been authorized (and whose publication or distribution is therefore prohibited) enjoy the minimum standards of protection granted by the Berne Convention and TRIPS Articles 3.1, 9.1, and 14.

The first three cases against developing countries emerged in 1996. These concerned alleged failures by Pakistan and India to establish systems to permit the filing of applications for patents for pharmaceutical and agricultural chemical products, and systems to grant exclusive marketing rights for such products in line with the 1 January 1996 TRIPS deadline. In its case against India, the United States complained that India had not conformed with the transitional provisions of Article 70.8 of TRIPS (which requires that if a developing country member exercises its right to delay full application of the Agreement with respect to patents on pharmaceutical and agricultural chemical products, it must nevertheless make available a means for the filing of patent applications).[41] In addition, the United States claimed that Article 70.9 of TRIPS, which deals with exclusive marketing rights, required that a mechanism to provide such rights be in place from the date of the entry into force of TRIPS.

In the two cases against India, the WTO Appellate Body upheld the complaints.[42] A supplementary impact of the India ruling was that it affirmed the flexibilities that countries have to implement TRIPS in a manner consistent with their own national legal systems and norms. In the case of Pakistan, the matter was settled prior to panel proceedings in February 1997 when Pakistan adopted an ordinance on filing and exclusive rights with respect to pharmaceutical and agricultural chemical products that satisfied the United States.[43] The settlement of this dispute by mutual agreement was consistent with GATT and WTO history whereby many disputes are 'settled by negotiation or dropped before the adjudication process has run its course'.[44] Alongside efforts to achieve fuller compliance through the DSU, most complainants 'engage simultaneously in settlement bargaining with the defending states'.[45]

In 1999, as the deadlines for TRIPS implementation approached, the United States launched a case against Argentina, followed by a second case in 2000. In both cases, the United States alleged a series of violations related to the scope of patent protection (particularly for pharmaceuticals). Also in 2000, the United States launched a case against Brazil, this time complaining against measures to establish 'local working' requirements for patents. All three of these cases were settled among the parties and so no rulings on the cases emerged.

Following these cases, there was no further use of the DSU against developing countries on TRIPS matters for almost seven years until 2007 when the United States launched a TRIPS-related case against China (the proceedings had not concluded at the time of publishing). Meanwhile, there were over ten cases among developed countries on TRIPS-related issues, at least one of which had significant implications for all WTO members, namely a Dispute Settlement Body (DSB) ruling in 2000 on a dispute between the European Commission and Canada, which clarified the scope of allowable patentable

exceptions under TRIPS. (Specifically, the agreement clarified the possibility for 'Bolar exceptions' to patentability.)[46]

Importantly, the DSU process did not always produce the impacts that developed countries hoped to achieve in launching a dispute. The Indian government implemented reforms in response to the DSB's findings, but lessened their practical impact through administrative delays.[47] In the case of Argentina, the outcome of the settlement was that Argentina retains several provisions in its law despite continuing U.S. dissatisfaction.[48] In the case of Brazil, the United States accepted an uneasy settlement in which Brazil retains the local working provision in its patent law but agreed to provide advance notice to, and hold consultations with, the United States should it deem it necessary to grant a compulsory licence for failure to work a patent locally.[49]

5.1.5. *Special 301 Threats and Related Sanctions*

The United States' deployment of it Special 301 powers was a central component of the high-pressure environment for stronger IP protection. Contrary to the hopes of developing countries for an end to unilateral pressures, the United States in fact stepped up the strength and use of its Special 301 powers post-1995. In its Uruguay Round Agreements Act, for example, the U.S. Congress stated that a country could be found to deny adequate and effective IP protection *even if it is in formal compliance* with its obligations under the TRIPS Agreement. The Act further stipulated that if a country does not respond to the Special 301 surveillance and reporting process, then 'trade sanctions may be imposed under Special Resolution 301 in the form of increased tariff duties or import restrictions'.[50] Between 1995 and 2007, USTR targeted over forty developing countries its annual Special 301 reports (Appendix 7 summarizes the Special 301 rankings of developing countries from 1995 to 2007).[51]

The United States used its Special 301 powers to bring selected countries to the bilateral negotiating table by making stronger IP standards the price for new market access agreements. In advance of bilateral negotiations, many developing countries were listed as Priority Watch List countries. Once negotiations were underway, many countries were downgraded to the Watch List or removed altogether. Since 1996, for example, the only years that Chile did not appear on the USTR Watch List were the three years in which FTA negotiations were underway. Jordan was also removed as a Watch List country once it had agreed to TRIPS-plus standards in its FTA with the United States.

Under the Clinton Administration, the U.S. Congress broadened the range of countries covered by its Special 301 surveillance activities and strengthened Special 301 by introducing Section 306 monitoring (to address specific

problems in countries with which the United States has bilateral agreements), out-of-cycle 301 reviews (for countries deemed to require further monitoring in addition to the annual review cycle), and IP action plans.[52] USTR also used Special 301 announcements to supplement diplomatic pressures on countries with respect to their positions in global IP debates. In April 1999, for instance, the United States placed South Africa on its Special 301 Review Watch List and scheduled an 'out-of-cycle' review for South Africa to conclude in September 1999. Among the U.S. complaints was that 'South African representatives have led a faction of nations in the World Health Organization (WHO) in calling for a reduction in the level of protection provided for pharmaceuticals in TRIPS.'[53] When the deadline for TRIPS implementation by developing countries expired in 2000, the focus of the 301 reports shifted to the implementation of TRIPS-plus standards and to enforcement. USTR also used Special 301 announcements to publicize actions it intended to take in the WTO against countries on IP matters. (Also see Section 5.3.4.)

In selected cases, the United States put its Special 301 threats into action. While the United States never formally invoked its Special 301 provisions to impose trade sanctions to punish alleged lack of performance on IP reforms and enforcement, it did withdraw its unilateral trade preferences in several instances. The United States imposed trade sanctions against Argentina in 2002, Honduras in 2003, and the Ukraine in 2004 by withdrawing unilateral trade benefits granted under its GSP scheme.[54] It also threatened on repeated occasions to withdraw GSP benefits in the case of Brazil and Pakistan.[55]

In a study examining the period from the late 1980s to 1998, Susan Sell concluded that Special 301 was an effective tool for getting developing countries to change their position in multilateral negotiations and also to change some domestic laws and policies, but not to improve the actual level of IP protection or enforcement.[56] A decade later, despite persistent Special 301 pressure, there are still large gaps between the formal IP standards and the actual degree of protection available. Further, the evidence suggests that while the Special 301 process was certainly an effective tool for communicating U.S. preferences (see Section 5.3.4.), the actual impact of trade threats on IP laws and enforcement varied (see Section 5.2.).

Alongside the Special 301 process, the U.S. International Trade Commission (USITC) also completed over 500 investigations under Section 337 of the U.S. Trade Act regarding claims of IP infringement, by imported goods most often in the semi-conductor industry.[57] The primary remedy available in Section 337 investigations was an exclusion order that directs U.S. Customs to stop infringing imports from entering the United States, but over forty per cent of cases were settled in advance.[58] Since 1995, the USITC initiated investigations against over twenty developing countries,[59] including China, Taiwan,

Korea and Malaysia. From 2002 to 2007, there were over 45 investigations against China.

5.1.6. *Diplomatic Threats*

Developed countries also used diplomatic channels to dissuade developing countries from using TRIPS flexibilities, promote improved enforcement and TRIPS-plus IP reforms, and influence global IP debates. The United States, for instance, wrote to heads of government, trade ministers, and foreign affairs ministers, to raise concerns on TRIPS matters, international negotiations, and national IP reforms. One example was a letter from the former head of U.S.–Africa relations at the U.S. State Department to African trade ministers emphasizing the importance of cooperation with U.S. priorities at the TRIPS Council in respect of public health.[60] In several cases, national trade ministers and ambassadors received informal and formal complaints from the United States about outspoken or 'disruptive' diplomats. The United States complained to ambassadors and to national capitals about the positions taken by delegates in Geneva, making its case through phone calls, letters to national officials in capitals, informal communications, and also démarches (high-level intergovernmental communications hand-delivered directly from one top official to another). In some cases, delegates were later recalled or reassigned.[61] This strategy was particularly used as a tool for breaking consensus among regional groups. In the context of the WHO negotiations related to IP, the United States used démarches to warn key Latin American countries that support for certain health-oriented provisions in a text under negotiations might violate the terms of bilateral trade agreements signed with the United States. After being contacted, some health ministries were confronted with a similar message from trade, IP, and foreign policy officials within their own countries.[62] In each of these cases, economic power was present in the form of explicit or implied threats to economic cooperation, trade benefits, development assistance or close political relations.

Within developing countries, the diplomatic and trade representatives of developed countries stationed in local embassies actively lobbied government officials, liaised with their respective companies operating in that country, and monitored the evolution of IP laws and their performance on enforcement. In addition, countries such as Japan, France, and the United States posted legal and technical advisors from their IP offices in key developing country capitals. Government officials in Thailand, Pakistan, and Uganda each received letters and visits from U.S. technical and legal advisors, USPTO officials, and U.S. trade officials regarding TRIPS implementation.[63]

The case of Pakistan shows that the mere threat of U.S. sanctions sometimes provoked decisive action on the part of governments, particularly in light

of broader political considerations. From 2001, the United States demanded that Pakistan make concerted efforts to address allegedly 'rampant' copyright piracy and, in 2005, threatened that Pakistan must take action or risk the suspension of its GSP benefits and other development assistance. In 2006, the United States withdrew the threat, citing Pakistan's concerted efforts to address piracy, including through the destruction of pirated optical discs, plant closures, arrests, and confiscations of imported discs.[64] Pakistan's decision to act on the enforcement issue was in part driven by the government's reluctance to place in jeopardy its ongoing negotiations with the United States for a bilateral investment treaty and also its hopes for bilateral free trade talks. But there was also a broader context; since the events of 11 September 2001, Pakistan had been under intense political pressure from the United States to prove itself a committed ally in the war against terror and a cooperative economic partner. In this context, the United States had set forth a suite of economic and political reforms that Pakistan would need to undertake in order to provide such proof.

The United States also used its economic weight as a major donor to IOs and the UN system to push for disciplinary measures against staff who expressed views against TRIPS-plus standards, particularly at UNCTAD, UNDP, WHO, and the World Bank. In a letter to the *Bangkok Post*, the WHO's Bangkok representative stated in 2006 that the 'lives of hundreds of thousands of Thai citizens' would be put at risk if Thai negotiators accepted United States calls for TRIPS-plus national standards of IP protection'. After the article appeared, the head of the U.S. Permanent Representative to the United Nations in Geneva called on the WHO Director General and registered verbally and in writing Washington's displeasure with the letter. Soon thereafter, the representative was 'abruptly transferred sideways to a job in India'.[65] In numerous cases, the United States issued attacks on key reports from IOs, sometimes insisting on extensive editing, the retraction of the report, or the removal of the relevant IO's logo.[66] In 1998, the publication of a WHO report on TRIPS and public health was forestalled due to concerns from the U.S. government and pharmaceutical industry. The publication, nicknamed 'the red book', was written by two WHO staff, Germán Velásquez and Pascale Boulet, at the request of the World Health Assembly which had mandated the WHO to report on the impact of the WTO's work on national drugs policies and essential drugs. The U.S. government prepared a seventeen-page paper 'pointing out the inaccuracies and false implications with which the document is riddled'.[67] Separately, a letter from the Pharmaceutical Research and Manufacturers of America (PhRMA), dated 30 June 1998, stated that the report was 'a deeply flawed document that misleads its readers and creates a false impression of how the WTO TRIPS agreement will affect pharmaceuticals'. The WHO's Director General, Gro Harlem Brundtland, established an independent expert committee and in January 1999 a revised version was published, referred

to as the 'blue book'. Subsequently, with input from independent external reviewers and the WTO, the book was revised again.

In 2005, when World Bank researchers published an analytical note examining the implications on development of TRIPS-plus provisions in U.S. FTAs, the United States sent a delegation to the World Bank to insist the piece be retracted and revised. Between 2006 and 2007, the United States also called for the WHO's logo to be removed from two WHO papers, one published jointly with the South Centre on the use of TRIPS flexibilities and one published jointly with ICTSD regarding guidelines for the grant of pharmaceutical patents.[68] The U.S. Mission to the UN in Geneva also issued critical comments on the analysis of IP issues in UNCTAD's 2006 *Trade and Development Report*.[69]

5.1.7. *Industry Pressure and Threats*

Large multinational companies also issued economic and legal threats to developing countries with the goal of influencing global IP debates and national IP reforms. In addition to working to ensure their particular IP rights were protected, companies in the pharmaceutical and agrochemical sector, such as Merck and Monsanto, directly lobbied countries such as Pakistan and the Philippines regarding TRIPS implementation. In South Africa, for instance, multinational pharmaceutical companies created the Pharmaceutical Manufacturers Association of South Africa (PMA) which became actively involved in TRIPS implementation debates (see Chapter 6).

Multinational companies also used lawsuits to challenge national laws that made use of TRIPS flexibilities. In 1998, for example, thirty-nine pharmaceutical companies launched a case against the South African Medicines Act even though South Africa still had two years within which to meet its TRIPS obligations.[70] While the South African case was ultimately withdrawn in the face of a domestic and international backlash, the companies involved did receive assurances from South Africa that their interests would be considered in the course of the implementation of laws (see Chapter 6).

Despite the significant damage to their public image, pharmaceutical companies did not relent. In 2006, pharmaceutical companies launched legal challenges in national courts in the Philippines (Pfizer) and in India (Novartis). Pfizer, the world's largest pharmaceutical company, sued the Philippine government for allegedly illegally importing and registering a product that was still under patent.[71] In May 2006, Novartis brought several cases to the Indian High Court in the state of Chennai. One concerned the refusal by India's patent office of its application for a patent for its drug Glivec. In another case, Pfizer challenged the constitutionality of the Indian Patent Law and alleged that India was in breach of TRIPS.[72] In August 2007, the High Court in Chennai dismissed the petition, deferring to the WTO to resolve

the issue of TRIPS consistency. Following the decision, Switzerland (where Novartis is headquartered) noted that it would not challenge the relevant provisions of the Indian Patent Act before the WTO. At the time of publishing, no Swiss complaint against India related to the Novartis case has been filed with the WTO.[73]

To influence IP reforms, multinational companies also sometimes issued threats to withdraw or withhold foreign investment. In the Philippines, for example, Microsoft and the Business Software Alliance (BSA) (a trade association of international software companies) lobbied the Philippines government to amend its legal rules of procedure to make it easier for law enforcement agents to obtain search warrants to conduct raids in cases of alleged software piracy. In so doing, business lobbyists emphasized that such reforms would be vital to maintaining foreign investment. Given the Philippines' hopes of expanding investment in its economy for data processing and related business services, the government succumbed to this request.[74]

The pharmaceutical industry also worked to diffuse the case for compulsory licensing by providing discounted HIV/AIDS drugs to African countries, usually on a drug-by-drug, country-by-country basis. While critics argued this worked against a more comprehensive approach, many countries were willing recipients of the discounted or free drugs. The pharmaceutical industry also applied pressure directly to generic drug companies. In August 2000, Glaxo Wellcome worked to prevent the import of AIDS drugs into Ghana by writing to the producer CIPLA in India to discourage sale of the drugs, and succeeded.[75] In November that year, Glaxo again wrote to CIPLA and succeeded in discouraging it from exporting the same drug, Duovir, to Uganda.[76] As noted above, industry groups also joined with developed countries in putting pressure on IOs. Their success in this endeavour was linked to the perception on the part of IOs, such as the WHO and the World Bank, that they needed to maintain working relationships with the pharmaceutical industry in order to engage them in a range of development and public health activities.[77]

The economic power of industry groups was also felt through the resources they devoted to establishing subsidiaries and networks within developing countries to influence national IP reforms. In some cases, industry groups also provided staff resources, surveillance, IT support, and financing to developing countries to enable them to better enforce their IP rights.

5.2. Resistance and Retaliation

While there was generally little prospect that developing countries or sympathetic NGOs could use economic power to systematically counter the pressures from more powerful developed country actors, there were a number

of important instances where countries were able to resist or retaliate in the implementation game. First of all, the combined economic weight and market size of Brazil, India, and South Africa enabled them to shift the dynamics in negotiations on TRIPS and public health. In the FTAA negotiations, where the United States proposed TRIPS-'plus' provisions, Brazil successfully resisted what it considered an unreasonable deal. Second, even though many countries were subject to coercive bilateral diplomacy, credible threats, or actual trade sanctions, these pressures were only sometimes effective at bringing about the desired reforms.[78] In two of the three cases where the United States used trade sanctions (in the form of the removal of GSP preferences), the targeted countries subsequently made the specific changes (the Ukraine and Honduras) and GSP benefits were reinstated. U.S. sanctions against Argentina did not yield, however, definitive changes. Argentina's offending IP provisions enjoyed strong support in its legislature and from its generic pharmaceutical industry, which resulted in a willingness to 'bear the cost' of the sanctions imposed.

Further, although the Special 301 process served to reinforce a pro-IP climate and to communicate the preferences of the world's most powerful trading nation, the evidence presents an important challenge to assumptions about its effectiveness in changing developing country behaviour on the ground.[79] Discerning the impact of U.S. Special 301 lists and threats on the specific decisions countries took is a complicated task. Many listed countries listed were also signatories to TRIPS-plus FTAs with the United States, generating a challenge of disentangling the effect of each. Moreover, in cases where the purpose of Special 301 pressure was to promote more effective IP administration and stronger enforcement, the absence of clear, quantifiable indicators makes it difficult to accurately assess changes in performance over time.

A review of the evidence does nonetheless show that while a broad range of developing countries were subject to similarly intense levels of Special 301 scrutiny (measured by the frequency, consistency, and level of Special 301 listings), the standards of protection across them varied widely. Appendix 7 details the 301 status of developing country WTO members targetted from 1995 to 2007, clustering countries according to their overall use of TRIPS flexibilities (using the categories set out in Table 3.11 in Chapter 3). It shows that a range of countries made use of TRIPS flexibilities despite repeated Special 301 listings by the United States. India, for instance, was on the Priority Watch List every year from 1995 to 2007. Argentina and Brazil were also consistently on the Watch List but did not succumb to U.S. pressure in key areas.

Interviews with officials from Brazil, India, Peru, Argentina, and the Philippines, revealed a common view that while the strength and frequency of Special 301 listings by the United States were often seen as notable communications of U.S. interests, they were not necessarily a prompt for

action unless accompanied by specific time-bound demands and threats with real economic implications. The effectiveness of 301 pressures relied on the perceived credibility of the threat to impose sanctions or withdraw trade concessions.[80] (In principle, WTO members were precluded from unilateral action on TRIPS matters without reference to WTO dispute settlement, but the possibility of GSP-related threats also existed.[81]) Countries also carefully considered the likely damage. This depended on the sectors the United States was likely to target and the economic importance of exports from those sectors to the national economy. Further, in some cases, countries correctly calculated that relatively small gestures toward improved enforcement or the expression of lots of 'political will' to improve might pacify the United States.

The Brazilian experience highlights that even the most strenuous U.S. threats did not necessarily prove effective in particular circumstances. On 8 January 2001, twelve days before President Clinton left office, USTR filed a complaint over the Brazil compulsory licensing law with the WTO. USTR officials called this the 'Merck' case. At issue was Article 68 of Brazil's patent law, which allows compulsory licences to be issued in situations where the patent holder does not locally manufacture the patented product (known as a 'local working' provision). In June, in the face of enormous negative publicity from NGOs, the Brazilian government, and the media, the Bush administration withdrew the complaint. However, under the agreement between the two countries, Brazil agreed that it would provide the United States with advance notice if a licence were issued under Article 68 of the Brazil Patent Act and that disputes would be discussed through a bilateral 'Consultative Mechanism'. In 2004, the United States threatened to withdraw Brazil's GSP benefits on the grounds of inadequate IP protection. While Brazilian officials expressed deep resentment of these threats, the government calculated that the cost to U.S. industries of sanctions against Brazilian exports would dissuade their actual imposition. They noted that many U.S. producers and exporters were too reliant on imports from Brazil to make this a cost-effective option for the United States, and that many of the Brazilian exporters to the United States were in fact U.S. subsidiaries.[82] Compared to many developing countries, Brazil relied less on access to U.S. markets as a proportion of its GDP. In addition, the government's ability to push through pro-IP reforms was constrained by opposition from domestic public health advocates and generic drug industries. Further, resistance to U.S. pressures on IP issues was a key component of Brazil's foreign policy, particularly its goal of bolstering its standing as a key international political and economic power.

Several developing countries also exercised economic power amidst debates on TRIPS implementation by opting to use compulsory licences to enable the purchase of generic drugs, thus cutting into the markets of major developed

country pharmaceutical companies. In addition, in South Africa, civil society groups harnessed national competition laws to challenge the economic power of pharmaceutical companies.[83] Further, in many developing countries, the fact of weak enforcement of IP laws was perhaps the strongest form of economic retaliation against pressures for stronger IP standards (discussed in Chapter 6).

Finally, several developing countries harnessed TRIPS as an economic tool for cross-retaliation in cases of to non-compliance by developed countries with decisions of the WTO's DSB.[84] In the case of Antigua and Barbuda, the DSB authorized it to suspend the application to the United States of concessions and related obligations under TRIPS and the General Agreement on Trade in Services (GATS) to the annual amount of US$3.4 billion (i.e. an amount equivalent to that which it lost as a result of the U.S. breach of its WTO obligations in that case).[85] The United States objected to the decision and called for arbitration. In the EU Bananas case, Ecuador was also permitted to retaliate by suspending obligations under TRIPS (but has not yet chosen to do so). In its case on U.S. cotton subsidies, Brazil also indicated its interest in cross-retaliating for non-compliance by suspending IP protection for U.S. rights holders, but the matter remains under discussion.

5.3. Ideational Power

Ideational power is also vital to explaining variation in the actions developing countries took to implement TRIPS.[86] Broadly speaking, ideational power was in play where actors sought to influence, alter, or build: (*a*) expertise, know-how, and institutional capabilities on IP matters, and (*b*) understandings, beliefs, and discourse.[87] Ideational power, like economic power, was a critical component of the effort to promote a compliance-plus and pro-IP agenda at the international level. It was also the primary vehicle for the countervailing efforts of critics challenge that agenda. Moreover, ideational power impacted the variation in how developing countries implemented TRIPS by influencing how governments understood their TRIPS obligations and options; supporting particular kinds of expertise; persuading officials of the pros or cons of stronger IP protection; and shaping developing country perceptions of the political climate and their room for manoeuvre within it.

The specific mechanisms used to exert ideational power included the creation of knowledge communities, framing, monitoring, and capacity-building. Compared to economic power, ideational power was available to a wider array of actors including governments, NGOs, industry, academics, IOs, and the media. All these actors had the potential to draw on technical expertise, access and share information, influence the media, and harness public opinion to exert ideational power.[88]

5.3.1. *Knowledge Communities*

Each of the teams active in global IP debates made conscious efforts to build like-minded 'epistemic'[89] or 'knowledge communities' of activists, experts, journalists, academics, and public officials. Each drew on distinct sets of ideas and assumptions to advance their respective priorities with respect to IP policy.[90] The scale of material and symbolic resources at the disposal of each team in their efforts to influence the intellectual climate and terms of debate varied significantly. In general, those in favour of stronger IP protection had greater access to financial resources, government agencies and officials, and the international media than those in favour of a more balanced IP system. Further, the pro-IP team had an advantage because it dominated the IP profession; most of the technical and legal experts on IP across the world belonged to this team.

A number of scholars have already highlighted the historical influence of the 'patent community' on IP decision-making.[91] While patent attorneys by no means match the economic weight of their industry clients, they are powerful by virtue of the expertise that they lend to industry lobbyists and the fact that, as a collective, they have technical knowledge that few others can match. In the area of patents, Peter Drahos argues that a community of 'patent attorneys and lawyers, patent administrators, and other specialists' plays a key part in the 'exploitation, administration and enforcement of the patent system'.[92] He argues that these actors form a community 'by virtue of their technical expertise and general pro-patent values'. He further notes that 'regular users of the patent system (like the pharmaceutical companies) might also be said to be part of this community'.[93] The significance of the patent community is further emphasized by Graham Dutfield who observes that its members 'speak the same language and share basic assumptions about patent law'.[94] Dutfield argues that '[w]ith the enormous economic power of some members arrayed alongside the "objective" expertise of others, it would hardly be surprising if one particular perspective on patent law became the conventional wisdom within regulatory agencies and processes, government trade and industry departments, and throughout society'.[95]

Just as NGOs worked to galvanize support from a scholars and sympathetic UN agencies, the pro-IP community found its own allies in academia,[96] think tanks, and international organizations, such as WIPO and the Organization for Economic Cooperation and Development (OECD). The pro-IP team also worked to identify leaders, lawyers, scholars, and organizations, such as local Chambers of Commerce, within developing countries to carry their message, sometimes funding their research or employment. In 2007, for instance, concerns about the inappropriate influence of pro-IP corporations on researchers erupted upon the release of the Mashelkar Report on Patent Law Issues,[97] produced by an expert group established by the Indian government in the

wake of controversy that emerged following the introduction in 2005 of a Patents (Amendment) Bill.[98]

5.3.2. *Framing*

In the course of the global IP debates, framing was deployed as a strategic tool to influence international discourse on IP issues and the outcomes of international negotiations with the objective of affecting the interpretation and implementation of TRIPS.

Frames were a used by a range of stakeholders to influence, distort, and alter communications to their advantage with the hope of setting and dominating the terms of debate and determining what stakeholders should be arguing about. Framing was used to fix meanings, build shared understandings, and influence how challenges were defined and represented. This in turn served to legitimate and motivate particular kinds of collective action and impact what kinds of solutions were adopted in particular policy debates.[99]

Both those for and against stronger IP protection used framing to promote distinctive perspectives on the global IP system, TRIPS, and its implementation by developing countries. Throughout global IP debates, stakeholders competitively used framing to create a political context conducive to their preferred approaches to global IP regulation and TRIPS implementation. Framing was used to influence the terms and outcomes of international debates, advance particular understandings and interpretations of TRIPS obligations, influence the perspectives of developing country policymakers, and promote distinct views on the benefits and costs of different IP reforms. Framing was also deployed to shift and dominate perceptions in developing country governments about what constitutes 'appropriate' and 'possible' behaviour in the global economy.

The energy that the various global actors devoted to framing is evidence of how seriously they took framing as a political tool. Devices used to frame and reframe international IP debates included research, conferences, training, monitoring, high-profile public campaigns, appeals and outreach to the international media, advocacy, lobbying, and the development of professional 'communities'.

Each side of the global IP debate used framing to influence perceptions about the relationship between IP and various social and economic indicators and to create positive associations between concepts that worked to their advantage. On the one hand, the pro-IP community used framing to advance positive links between stronger IP protection and innovation, economic development, modernization, good governance, integration into the global economy, and political security.

IP-holding corporations and developed country governments worked to rationalize stronger IP protection in terms of putatively universal human

wants (innovation and creativity), needs (for private property rights to knowledge), or understandings of the good (what is good for technology-producing corporations is presented as also for the good of all). To dominate policy debate, for example, they commissioned and published research from scholars from leading universities to rebut those from NGOs asserting the negative implications of IP protection for access to essential medicines.[100] In these efforts, pro-IP advocates were assisted by the prevailing discourse on IP in which issues were already framed primarily in technical and legal terms. The 'patent community', for example, had long advanced the notion that patent reform is a technical matter best left to experts (i.e. national patent offices, national associations of patent lawyers, the members of AIPPI, and WIPO staff), rather than a policy issue that warrants broader public discussion.

The WIPO Secretariat was also active in promoting a pro-IP discourse, not only through research, public awareness raising, and media outreach, but also through its ability to influence the agenda and content of intergovernmental meetings on IP. In its work to educate governments and stakeholders in developing countries on the nature and purpose of TRIPS obligations, the WIPO Secretariat emphasized the importance of stronger IP protection and an 'IP culture' for development. In WIPO publications, the term IP was frequently associated with modernization, innovation, increases in foreign direct investment, and technology transfer.[101] A leading example was a flagship publication by WIPO's Director-General entitled *Intellectual Property – A Power Tool for Economic Growth*. Published in 2003 for the attention of policymakers in businesses and governments worldwide, Idris asserted in the preface that the paper was written 'from a definite perspective – that IP is good'.[102]

In addition to the 'soft power' of persuasion,[103] the socialization of government officials served to broaden the community of supporters for stronger IP protection. Mechanisms for socialization included repeated attendance at international meetings, training events, and social engagements with professional peer groups.[104] In some cases, officials were in fact not convinced of the benefits of a particular position or policy, but they did understand that their room for manoeuvre was limited. Beyond the effort to justify the push for IP protection in terms of its own benefits, the pro-IP community had made stronger IP protection part of a broader economic and political bargain. Strengthened IP protection was presented as an integral part of the package of 'sound economic policies' that constituted 'appropriate behaviour' in the global economy. In policy statements, press releases, and research by industry and developed country officials, developing country officials were frequently reminded that governments that were 'good pupils' and promoters of such sound economic policies would garner the greatest rewards in terms of foreign aid, foreign investment, and trade deals.[105] Put in these terms, it was not surprising that many developing countries perceived and undertook swift, TRIPS-plus IP reforms as part of their efforts to brand

themselves on the international stage as forward-looking countries actively committed to good governance, economic modernization, and reform of their legal systems and institutions.[106]

Several statements from trade and IP officials demonstrate the diffusion of pro-IP ideas through framing. Responding to questions about the TRIPS-plus approach to TRIPS implementation taken in the francophone African region, the head of Burkina Faso's IP office stated that countries 'must make the necessary arrangements and adjustments, because globalisation is here. We cannot afford to marginalize ourselves'.[107] Similarly, a senior official in Benin's IP office argued that 'Africa must create "trust" that it can protect intellectual property rights'.[108]At a meeting sponsored by the International Chamber of Commerce, the Malaysian Minister of International Trade and Industry argued that a clear commitment to intellectual property protection would help in bilateral trade negotiations with the United States.[109] Noting that 'IP protection is something that Malaysia subscribed too', she argued that '[i]f we can give adequate IP protection to the American investors, they will come here'.[110]

The observation that stronger IP protection became part of a broader political and economic bargain over the past decade helps to make sense of the tendency among some of the smallest and poorest states to sign onto new multilateral IP agreements with apparently little assessment of their implications or capacity to implement them. In exchange for their ratification of new international IP agreements, governments often received the promise of technical assistance and capacity-building to implement them. (There were also other enticements at the individual level, including training, consultancy, travel, and career opportunities).

Anti-piracy campaigns were also part of the pro-IP framing effort. The software and entertainment industries launched high-profile campaigns to promote an 'IP culture' among the public, to influence perceptions of appropriate behaviour with respect to IP protection, and to pressure governments to do more to enforce IP laws.[111] Each year, the leading industry associations published indicators and rankings of piracy rates around the world.[112] The global campaign to reduce piracy extended across the developing world, even in those countries where the actual costs to industry were relatively low. Indeed in 2005, only four developing countries – China, Brazil, India, and Mexico – were among the top twenty-two countries for software industry losses to piracy.[113] In cinemas, on TV, on billboards, in magazines, and in the international media, industry groups and government alike targeted consumers as potential allies in a global fight against 'theft' of IP.

After 2000, with TRIPS-related legislative reforms completed or underway in most developing countries, the issue of IP enforcement emerged more forcefully as a developed country government priority in international IP debates. As noted in Chapter 4, developed countries launched a series of anti-piracy initiatives. By 2007 and 2008, IP and enforcement matters had

soared to be among of the top priorities discussed in the annual G-8 summit.[114] The emerging discourse linked trade in IP-infringing goods to failures to properly police the flow of a whole range of contraband goods, including drugs and arms. Indeed, in the post-9/11 world, countries that resisted U.S. preferences for IP protection were at risk of being characterized as fragile, weak, or hostile states that disrespected the rule of law and otherwise threatened U.S. commercial interests.

Pro-IP actors also worked to place IP protection within a broader frame of political security. Developed countries clearly signalled that TRIPS-plus FTAs were sometimes less economic agreements than foreign policy tools for acknowledging and rewarding political support.[115] A leading expert on U.S. trade policy observes that '[An FTA] is not necessarily an agreement in which all parties benefit from trade expansion, but rather a favour to be bestowed based on support of U.S. foreign policy'.[116] In 2004, Robert Zoellick, the former USTR affirmed that: '[N]egotiating a free trade agreement with the U.S. is not something one has a right to – it's a privilege'.[117] The premium the Presidents of both Colombia and Peru placed on their political relationships with the United States led each of them to declare that an FTA – on any terms – was their top foreign policy priority. For many countries, TRIPS-plus provisions were a small price for an agreement, so characterized in foreign policy terms. In countries such as Morocco and Jordan, for instance, TRIPS-plus FTAs were instrumental to garnering political recognition from the United States as 'friendly' Arab states.[118] U.S. FTAs were also tools for penetrating regional alliances, to isolate particular countries (such as Brazil in the context of the FTAA negotiations), or to get a foothold in a particular region. When the United States signed an FTA with Bahrain, the Arab Gulf Cooperation Council (GCC) urged Bahrain to pull out of the Agreement arguing that it would compromise future cooperation and development of the GCC. There were specific concerns that it would set a precedent that any Arab state signing a bilateral agreement with a developed country would be forced to meet or exceed in order to achieve new trade deals or attract foreign direct investment.[119]

5.3.3. *Counter-framing*

To respond to the various strands of the pro-IP discourse, NGOs, IOs, and scholars in favour of the TRIPS flexibilities worked to reframe IP debates to better facilitate discussion of their public interest priorities. Conscious of the power that words such as piracy and concepts such as intellectual property *rights* had acquired in global debates, developing countries, academics, and NGOs developed alternative discourses and frames, and worked to embed them in as many international processes, declarations, and international media commentaries as possible.

Some critics argued that the very term 'intellectual property' was problematic. For them, the conflation of a range of different types of rights (trademarks, patents, copyrights, etc.) under the single IP umbrella undermines the potential for nuanced public policy debate; it bundles together rights with different histories, rationales, and public implications.[120] In lieu of a careful discussion of the particular pros and cons of specific aspects of copyright, patent, or trademark protection, the conflation of categories facilitates the reduction of debate to one of name-calling that divides the world into those who are either for or against IP protection. They also contended that the language of IP promotes false analogies and associations. The discourse of IP 'rights', some argued, should be replaced by references to monopoly 'privileges' granted by states to advance particular goals.[121]

Those opposed to the push for ever-stronger IP protection sought different ways of characterizing their agenda, using terms such as, pro-competitive, pro-development, or balanced.[122] In so doing, they emphasized that stronger IP protection is at its core a deeply anti-competitive and protectionist policy instrument.[123] Some legal scholars emphasized the importance of the 'public domain' to innovation and creativity.[124] They insisted that the IP system must be fashioned to ensure affordable access to research inputs and to maintain the scope for sharing of key ideas, creative works, and technologies.[125] NGOs and scholars also worked to advance the idea that information, R&D, and vital technologies should properly be considered 'global public goods'.[126] In addition, proponents of a more balanced approach to global IP policy lambasted the 'faith-based' momentum toward ever-higher IP standards.[127]

NGOs and scholars also engaged in lengthy and high-profile debates with industry-sponsored experts on specific TRIPS-related issues, such as whether patents in Africa make a difference to access to medicines.[128] The effort by NGOs to shift international media coverage on compulsory licensing away from a frame dominated by the suggestion that IP is critical to innovation to a human rights frame, was critical to their success in prompting governments to address the relationship between TRIPS and public health.[129] NGOs also sought to alter the discourse of IP by distinguishing IP rights from fundamental human rights such as the right to health. NGOs commissioned research that drew attention to the failure of the current IP system to generate innovation for neglected diseases and promoted alternatives such as a Medical R&D Treaty and a Prize Fund for medical research. As a host of initiatives emerged, ranging from proposals for new public-private partnerships on IP to drug donation projects, NGOs were cautious that these would undermine their quest for fairer IP rules and insisted that the focus must be on reform.[130] Whereas industry emphasized the need for IP protection to guarantee returns on their R&D investments, public health NGOs, the WHO, and an associated community of scholars highlighted that a large proportion of R&D costs for many new medicines was actually publicly-funded by the taxpayer.[131] When

Sir John Sulston (who had led the Human Genome Project in the UK) and Joseph Stiglitz won Nobel Prizes for Physiology/Medicine and Economics respectively in 2002 and 2001, they were each sought after by NGOs as outspoken critics of the dangers of strengthened international IP protection.[132] NGOs focused on biodiversity and agriculture also launched anti-industry campaigns, most notably about Monsanto's controversial 'terminator technology' (which in addition to IP rights proposed using technological measures to control the use of its seeds) and appealed for farmers' 'right to seeds'. Concerned that the expanding scope of IP rights was accelerating the privatization of seeds and threatening the future of public agricultural research, they also protested the growing pro-IP industry influence on the work of the Consultative Group on International Agricultural Research (CGIAR) and the UN Food and Agriculture Organization (FAO).

From 2001, a growing civil society campaign for Access to Knowledge an explicit effort to reframe global IP debates and to develop a North–South platform for reform.[133] The initial effort to promote an A2K treaty spawned an A2K social movement that brought together activists, policymakers, scholars, scientists and industry groups with diverse priorities ranging from broader access to medicines, science, and research to open-source software, 'free software' and 'free culture'.[134]

NGOs also argued that the rhetorically powerful language of 'piracy' had spread far beyond the realm of logic. They emphasized that the frequent reference by multinational pharmaceutical companies to high-quality, low-cost generic copies of patented drugs as 'pirate' products was misleading – such copies often rely on the fully legal exploitation of flexibilities in national and international laws. They criticized the U.S. government for declaring such products 'counterfeits' (a term correctly applied only to wrongful use of another company's brand name) and for designating entire countries as 'pirates'. The fact that a particular developing country laws or practices impede the profit margins of IP holders need not, they argued, necessarily make them illegal under national or international law.[135] Further, they emphasized that not all copying is piracy or theft. In most countries, copyright laws specify at least some exceptions to copyright (such as for personal use). Further, NGOs and scholars used the language of their adversaries against them, deploying the term 'biopiracy' to draw attention to the misappropriation of traditional and indigenous knowledge related to genetic resources.[136]

In their appeals to the media, critics of pro-IP pressures also emphasized the hypocrisy of asking developing countries to adopt levels of IP protection that are stronger than those that developed countries used at similar stages of development.[137]

Notably, developed country development-assistance agencies also intervened in the battle to control the discourse about the impacts of TRIPS on developing countries and the options open to them with regard to

its implementation. In 2002, the Report of the UK Department for International Development's independent Commission on Intellectual Property Rights (CIPR) was welcomed as a major victory by advocates in favour of a more development-oriented approach to IP protection.[138] The research, fact-finding, and public meetings conducted by the Commission and the publication of its Report in 2002 lent considerable analytical and political support to the perspective advanced by developing countries and NGOs and was widely used by both in their various campaigns. The UK government issued a follow-up report in 2002 in which it committed to act upon many of the recommendations in the CIPR Report.[139]

In 2001, the Dutch Minister for Development Cooperation lent her voice to the international debate. Insisting that TRIPS does give 'developing countries some freedom', the Minister argued that they 'must be allowed to make use of it without rich countries putting a knife to their throat'.[140] She argued that: '[i]t is totally unacceptable for rich countries to put bilateral pressure on them to be stricter than TRIPS allows. Or to be stricter than the rich countries themselves. Surely the whole point of multilateral agreements is to protect countries from the bilateral jungle where the strongest always win'.[141]

In addition, developing countries actively advanced their own reframing efforts. Led by India, Brazil, and Argentina, developing countries sustained a critique that challenged the evidence and assumptions with respect to the linkages between IP, technology transfer, and innovation, and also the legitimacy of an international agreement forged through coercion. In their official statements, developing countries consistently emphasized the special needs of developing countries and drew selective attention to concepts and words, such as technology transfer and 'mutual advantage', contained in TRIPS Agreement's opening paragraphs on objectives and principles. They framed reform of TRIPS as central to the 'integration of developing countries in the multilateral trading system on equal terms'.[142] In 2003, the Group of 77 (G-77) called for a 'review of rules that unduly limit national policies as it is the case, for instance in the areas of TRIMS and TRIPS'.[143] In so doing, they underscored the importance of retaining sufficient policy space to advance national development objectives based on their 'development, financial and trade needs and circumstances'.[144] A statement by the Ugandan Ambassador captured this sentiment: 'We are simply asking for fair and equitable rules that would take into account our development needs and allow us to participate fully in the trade system. But instead we risk being pressured once again into accepting rules we don't need and can't afford'.[145]

The developing country effort to reframe IP discourse also led them to focus on WIPO's influence on global IP debates. In February 2003, developing countries reacted against an initiative by WIPO's Director-General to host a high-level summit in China on 'Intellectual Property and the Knowledge Economy' to bolster the image of IP protection.[146] The first draft of the declaration for the

proposed meeting read, unabashedly, of the myriad benefits of IP protection. In a preparatory meeting for the summit, WIPO faced stern rebukes from developing countries on the text. Despite efforts to revise the declaration to incorporate developing country views failed, the meeting was cancelled amidst mounting concerns about WIPO's activities.

In 2004, the call for a WIPO Development Agenda was in part a deliberate effort by developing countries to shift and reframe the discourse on international IP regulation.[147] By calling for a greater emphasis on the relationship between the international IP system and the development aspirations of developing countries, the authors of the proposal hoped to put pressure on the WIPO Secretariat and membership to broaden their view of WIPO's mandate away from one narrowly focused on the promotion of IP as an end in itself and to inject new momentum into global debates on appropriate rules for IP protection.

Importantly, developing country discourse on TRIPS was also sometimes a reflection of broader national trade politics. In countries, such as India, where powerful social movements had concerns about WTO obligations, especially in respect of agricultural liberalization, governments used their negative discourse on TRIPS to play to domestic constituencies. Keen to lock-in trade reforms in agriculture, for example, India's strong stance on TRIPS in Geneva was a useful symbolic mechanism for showing critics back home that the government shared concerns about threats to national sovereignty and was fighting hard at the international level to defend national priorities.[148]

Notably, few developing countries were anti-IP *per se*. Even during the TRIPS negotiations, many developing countries expressed interest in modernizing and using their IP systems in ways that might advance domestic innovation, technological capacity, and development. They acknowledged that as their level of development rises, their interests in IP protection may expand both to provide incentives to domestic innovation and also to derive stronger economic benefits from local cultural production by musicians, authors, and artists. Since the 1960s, developing countries have also been keen to explore how expressions of folklore might be protected through copyright law or *sui generis* systems.

5.3.4. *Monitoring*

Monitoring was an additional tool used to pressure individual countries on TRIPS implementation and to influence the framing of global IP debates. The United States, the European Union, industry groups, and the WTO Secretariat were each engaged in surveillance efforts that reinforced the pro-IP and compliance-plus political environment.

Foremost among monitoring initiatives was the U.S. Special 301 process. In addition to evaluating the performance of countries, the United States used

the Special 301 process to signal its preferences regarding the interpretation of international legal commitments. In its annual Special 301 reports, USTR frequently advanced narrow or restrictive interpretations of TRIPS flexibilities, oftentimes in clear contradiction with TRIPS negotiating history.[149] In its 2004 Report, for instance, USTR asserted that TRIPS Article 39.3 'recognizes that the original applicant should be entitled to a period of exclusivity. [. . .] During this period of exclusive use, the data cannot be relied upon by regulatory officials to approve similar products'.[150] In reality, however, Article 39.3 of TRIPS 'does not mandate any exclusivity nor does it prohibit reliance on data by public officials'.[151] USTR also used Special 301 announcements to publicize legal actions they intended to take in the WTO against countries on IP matters. The USITC also produced annual National Trade Estimates that reported unfavorably on IP standards in many developing countries.

The European Commission also actively monitored developing countries. In 2003, the European Union published a survey of IP enforcement around the world and in 2004 announced an upgraded monitoring initiative focused on enforcement.[152] Upon announcing its new initiative, the EU stated that it did not intend to 'impose unilateral solutions' to enforcement problems or to 'propose a one-size-fits-all approach'.[153] The European Union did, however, propose to revisit the IP chapters in bilateral agreements with a view to strengthening their enforcement clauses.[154]

Sometimes EU and U.S. pressures converged on a country. Argentina was, for instance, listed several times on the USTR Priority Watch List, investigated under Special 301, and faced simultaneous EU scrutiny. In January 1997, after a Special 301 out-of-cycle review, the United States announced the suspension of tariff benefits on 50 per cent of the tariff lines covered by GSP because of the alleged lack of adequate protection for pharmaceutical products. According to the Chamber of Argentine Exporters, the sanctions-affected items represented estimated annual exports of US$270 million. In July that year, the EU added its concern over the Argentine patent legislation, citing a lack of protection for the European pharmaceutical industry.[155]

At the multilateral level, several monitoring activities undertaken in the WTO framework served to reinforce an international political climate in favour of swift TRIPS compliance, high standards, and stronger enforcement. In addition to requirements upon WTO members to submit notification of their IP laws, the TRIPS Council undertook formal Reviews of Implementing Legislation. From 2000, all developing countries with a year 2000 deadline for TRIPS implementation were subject to such a review. All countries were also required to submit responses to a checklist on enforcement. Staff of the TRIPS Council argued that the purpose of these reviews was to promote a positive 'worldview' on TRIPS implementation.[156] In the early days of TRIPS, some scholars advocated these mechanisms as more 'cooperative' tools for promoting compliance than the threat of punishment through the WTO's

DSB.[157] In practice, the Reviews and the ongoing meetings of the TRIPS Council provided an opportunity consistently used by developed countries to reinforce the importance of stronger IP protection and full conformity with TRIPS, increase the pressure on countries to comply swiftly with TRIPS, and promote their interpretation of TRIPS implementation.[158]

By increasing transparency of the shortcomings of TRIPS implementation in developing countries, the WTO's Trade Policy Review (TPR) process placed further pressures on countries. Through its requirements on countries to report on their progress towards TRIPS implementation, the TPR process reinforced a general policy climate in favour of compliance and provided a multilateral vehicle for powerful trading partners to remind developing countries of their preferences. Not only did the TPR process make it difficult for developing countries to 'hide', it also gave the WTO Secretariat a powerful role in describing and communicating to WTO members the status of IP laws in developing countries. Both the member state and the WTO Secretariat's TPR Division prepared TPR reports. Each of the Secretariat reports included a specific section on TRIPS implementation, usually of between two and ten pages in length. The reports were then discussed at formal one- or two-day TPR meetings. Through the TPR process, the WTO Secretariat established itself as an authoritative voice among those promoting swift action to meet TRIPS obligations and a narrow, legal, compliance-oriented perspective on those obligations.[159]

The opportunities for the WTO Secretariat to exert influence were several: its manner of reporting on meetings, its role in the compilation and presentation of information in Trade Policy Reviews, and its press releases on the outcomes of these reviews. A review of these reports confirms that the WTO Secretariat's monitoring efforts were not neutral with respect to interpretation of what constituted satisfactory TRIPS implementation.[160] As might be expected, the Secretariat's reports focused compliance: they systematically drew attention to missed TRIPS deadlines and areas in which countries fell short of TRIPS obligations. They also made judgements on the degree of enforcement of these laws, providing examples on domestic and foreign industries that had allegedly suffered as a result, and noted institutional, financial, and human resources challenges that inhibited more effective enforcement. In no report was there any mention of other challenges associated with TRIPS implementation, such as examples of increased costs of technologies. The WTO Secretariat also never commented in any report on whether countries had taken advantage of the flexibilities affirmed in the Doha Declaration on TRIPS and Public Health; nor did the WTO Secretariat highlight the possibility that governments could amend their laws to take advantage of the opportunities that the Declaration provides. In contrast to the emphasis on the need to build capacity to enforce IP standards, no TPR report noted any broader capacity priorities (such as the development of policymaking processes to ensure TRIPS implementation proceeds in a manner responsive to national development needs).

Developed countries also took advantage of various WTO processes (i.e. the TPR process, the TRIPS Reviews, and TRIPS Council meetings) to put public pressure on developing countries for improved TRIPS implementation and to convey their views regarding what countries ought to do. In all but three of sixty-eight TRIPS Council Reviews of Legislation in developing countries completed by December 2008, at least one developed country posed a lengthy list of questions about TRIPS implementation.[161] The member state under review had then to respond in writing (a task which frequently resulted in a response of over twenty pages). At the meeting themselves, further oral questions frequently emerged.[162] In both instances, questions were posed in ways that either misrepresented or reflected narrowly interpretations of TRIPS obligations.[163] In most cases, countries faced detailed scrutiny from more than one country. In general, they received distinct sets of multiple questions from the United States, the European Commission, and Japan, as well as Switzerland, Canada, and Australia. Sometimes countries were faced with a second round of questioning. Across the entire suite of Reviews, Korea was the only developing country ever to pose questions (which it did for the Reviews of China and Taiwan).

Similarly, in the TPR process, developed countries were active in asking pointed questions of developing countries on the status of TRIPS implementation. A review of the records of all the TPR meetings reveals that each country was asked oral questions by at least one developed country regarding IP protection. In general, developing country participation in TPR meetings was low, and there was only a handful of questions from any developing country on IP protection in another member state.[164] The degree of engagement by national IP offices in the TPR information-gathering process varied widely: many national IP officials interviewed indicated that they were relatively uninvolved in the presentation of facts for this process. Other IP officials described the TPR process as a useful opportunity to learn more about the priorities of trading partners and also to receive useful instructions as to what more they needed to do to meet international obligations. While it is difficult to show the TPR reports or that the Reviews of Legislation themselves prompted particular action at the national level, it is clear that they did expose the status of national IP protection to external scrutiny. The need to account to the WTO Secretariat and WTO members regarding national IP reforms on numerous occasions reinforced the perception among many developing country officials of the need to respond to pressure for swift and full TRIPS implementation.

Finally, industry groups also used sector-specific monitoring of IP protection to push for stronger IP protection and faster compliance with TRIPS. In addition to their inputs into the U.S. Special 301 process, the entertainment, software, and pharmaceutical industries each published annual reports on the state of IP protection around the world.[165] These reports sometimes included

rankings and the findings were widely publicized through the international news and business media.

5.4. Capacity building

Capacity-building was the area where the clearest intersections between economic and ideational power emerged in the TRIPS implementation game. The range of capacity-building was broad but usually fell into one of several categories: (*a*) legislative and policy advice; (*b*) training and human resource development (courses, seminars, workshops, etc.); (*c*) administrative and IT support (including automation and computerization); or (*d*) institutional support for enforcement. The sheer number of conferences, meetings, visits, and technical advice given highlights how seriously the various actors viewed capacity-building as a tool to advanced their agendas in global IP debates and with respect to TRIPS implementation.

5.4.1. *The Donors*

The field of IP-related capacity-building involved a wide range of actors, including multilateral and regional IOs, developed country governments, NGOs, industry groups, individual companies, academics, and law clinics from leading universities. At the multilateral level, donors that provided technical assistance, advice, or training on aspects of TRIPS implementation or related to global IP debates included the International Telecommunications Unions (ITU), UNAIDS, UNCTAD, UNDP, UNESCO, UPOV, WCO, WHO, WIPO, the World Bank, the WTO, and the UN Human Rights bodies.[166] At the regional level, the Secretariats of IP arrangements such as OAPI, ARIPO, and the Andean Community provided advice to their members as well. Multinational companies and industry associations also independently provided technical assistance, training, staff, and funding to developing country governments, think tanks, and companies to improve IP expertise, administration, and enforcement. NGOs harnessed capacity-building to influence both TRIPS implementation and developing country engagement in international negotiations.

The scale of assistance from donors increased steadily from 1995 to 2007. The contributions varied widely by donor, both in terms of the focus of assistance and the financial resources devoted.[167] WIPO was the largest single donor providing IP-related capacity-building to developing countries, for TRIPS specifically, and also in general.[168] From 1996 to 2007, WIPO's contribution to IP-related capacity-building in developing countries reached over US$400 million, more than doubling from around $US25 million in 1996 to over US$50 million in 2007.[169] WIPO's prominence in IP-related capacity-building derived from agreements forged with the WTO Secretariat.

As noted in Chapter 3, TRIPS called on developed countries and the WTO Secretariat to provide assistance to developing countries to implement the Agreement. Acknowledging the enormity of this task, the WTO and WIPO Secretariats agreed in 1996 to work together on matters of technical assistance related to TRIPS.[170] The heads of both organizations subsequently established two joint technical cooperation agreements. The first, launched in 1998, was to help developing countries meet the 1 January 2000 deadline for conforming with the TRIPS Agreement. The second agreement, made in 2001, was for a programme to assist LDCs meet their original 1 January 2006 deadline and to make use of IP protection for their economic, social, and cultural development.

Most developing countries received capacity-building from a range of different donors. The target countries of donors varied according to commercial interests, colonial ties, and geographic proximity. The Philippine Intellectual Property Office, for example, received support from the Japanese International Cooperation Agency (JICA), the U.S. Agency for International Development (USAID), and the European-ASEAN Intellectual Property Rights Cooperation Programme (ECAP) as well as from WIPO, the U.S. Patent and Trademark Office, the Japan Patent Office (JPO), the European Patent Office (EPO),[171] and the Korean Intellectual Property Office (KIPO).[172] Francophone African countries received the majority of their support from the French IP office (INPI), the EPO, and WIPO, whereas anglophone colonies relied more heavily on WIPO and the UK Patent Office.

5.4.2. *Donor Objectives: Competition and Collaboration*

In the realm of TRIPS implementation, capacity-building was rarely just a 'technical' matter. The political objectives of donors varied significantly. Indeed, capacity-building was a core mechanism through which contests about the appropriate interpretation and implementation of TRIPS played out.

On the economic front, capacity-building was often used to 'buy' stronger IP administration and enforcement in developing countries. Through the provision of IT infrastructure, computer software, training, staff salaries, buildings, equipment, and direct financing of IP offices, donors were able directly to influence the capacity of developing countries to undertake and enforce IP reforms. Economic incentives were also sometimes personal. Material incentives, such as training and travel opportunities, consultancy contracts, and lucrative per diems associated with attending conferences, also influenced some developing country IP decision-makers.[173] In diplomatic circles, anecdotes abound about developing country officials promised such enticements in exchange for promoting particular perspectives at the national level or in WIPO meetings.

Capacity-building also had an ideational component. Donors built the capabilities, know-how, and institutional knowledge necessary for countries

to implement TRIPS, often in ways that reflected the donor's own particular preferences. The power of donors to exert ideational power derived from their superior technical knowledge of IP issues, access to information, and ability to harness professional communities to promote their views. Donors worked to advise, persuade, and socialize developing country policymakers to adopt particular ideas, assumptions, and policy preferences. Core mechanisms for socialization were training and repeated attendance at conferences and seminars. Importantly, capacity-building was used to influence TRIPS by those both for and against early and strong implementation of TRIPS.

WIPO's capacity-building activities exemplified how economic and ideational power were combined to push for compliance with TRIPS, promote higher IP standards in developing countries, and increase the effectiveness and enforcement of IP law. WIPO supported many large-scale projects to improve the infrastructure and automation of IP offices, training and development of IP professionals, participation of developing country IP officials in international meetings, and the provision of resources for enforcement. In addition, WIPO provided financial support to support public outreach on IP issues in developing countries, create interest groups of IP-'users' in developing countries, and foster a constituency of domestic policymakers in favour of stronger IP protection.[174] From 2002, for instance, parliaments were an increasingly important focus of WIPO's outreach efforts in developing countries and WIPO organized seminars on IP and TRIPS for members of a number of national legislatures. Further, in some cases, such as Egypt, WIPO supported the travel of parliamentarians to WIPO and arranged meetings with pharmaceutical industry representatives in Geneva.[175] A key vehicle for WIPO's efforts to build IP capacity in developing countries was the WIPO Worldwide Academy, a training institute that provided a series of seminars and training programmes in Geneva and also at the regional and national level. The Academy financed the participation of a high proportion of developing country IP officials now posted in IP offices around the world. In many of its capacity-building activities, trainings, and seminars, the WIPO Secretariat collaborated with regional IP organizations (such as the European Patent Office), national IP offices, UPOV, and the WTO Secretariat. For the first five years after TRIPS came into force, a review of WIPO's agendas for training and seminars highlights that speakers were most commonly from one of the agencies cited above, industry groups, corporations, or law schools. Only from 2001 did WIPO begin efforts to involve international NGOs and critics who advocated stronger use of TRIPS flexibilities.

The financial resources that the WTO Secretariat devoted to IP-related technical assistance were smaller, but its role was nonetheless significant. The WTO's Secretariat's assistance came mainly in the form of training and seminars, and also through the staff resources devoted to providing technical advice and legislative assistance to countries. As 'guardians' of the WTO rules,

the staff of the WTO promoted the importance of compliance with TRIPS commitments. In the lead up to, and aftermath of, the Doha Declaration on TRIPS and Public Health, the WTO Secretariat was much criticized by NGOs for failing to incorporate attention to TRIPS flexibilities in its technical assistance and legal advice. Once the flexibilities were affirmed in the Doha Declaration, WTO Secretariat staff began to devote greater attention to describing to countries the options available to them under TRIPS.

The capacity-building provided through bilateral initiatives on the part of developed countries generally shared common objectives: to promote legislative reforms to meet TRIPS commitments, greater efficiency of IP administration, and more effective enforcement. In many cases, capacity-building was also explicitly intended to promote the adoption of TRIPS-'plus' laws and enforcement measures, and to discourage the use of TRIPS flexibilities. Bilaterally, governments were explicit that the purpose of their capacity-building was to advance their economic interests. To deliver their assistance, developed countries often relied on consulting firms or collaborations with industry groups. Many different parts of developed country governments were engaged in capacity-building, including patent and copyright offices, development assistance agencies, foreign embassies, and ministries of foreign affairs, trade, and industry.

Across the bilateral and multilateral donors, a striking feature of IP-related capacity building was the lack of linkage to broader development assistance strategies. IP assistance was delivered through a vast array of stand-alone projects of varying scale and purpose. Notably, neither developing country governments nor key development agencies, such as the World Bank, considered the dedication of scarce national and donor resources to improving IP protection as a priority. IP protection never, for instance, featured prominently in the World Bank's Poverty Reduction Strategy Papers (PRSPs), which are designed to set the framework for the allocation of development assistance.[176] A review of more than fifty national PRSPs undertaken in 2008 revealed that the terms 'intellectual property', 'copyright', and 'trademark' were not mentioned at all in these documents.[177]

The countries that were particularly active in bilateral IP assistance were France, Japan, Sweden, Switzerland, the United Kingdom, the United States, and the European Union. In the period between 2001 and 2007, the United States and European Commission reported to the OECD-WTO database on trade-related capacity-building, expenditures of over US$25 million for TRIPS-related projects, while the other countries each reported between US$2 million and $10 million. Notably, these amounts were usually supplemented by a range of further expenditures related to IP capacity-building in general (not just TRIPS-specific projects).

The European Commission and the European Patent Office, for instance, supported a suite of IP projects in developing countries. In 1997, for instance,

the EU signed an agreement with Argentina to assist with the modernization of its IP system. A further example was a 2004 EU–South Asian IPR Cooperation Project for Bangladesh designed again to assist in the automation of IP procedures and the modernization of the Patents, Designs, and Trademark Department.[178]

In the case of the United States, its State Department, Patent and Trademark Office (USPTO), Commerce Department, and Trade and Development Agency (USTDA, formerly USAID) were all involved. In 2006, for instance, the USPTO conducted more than 200 IP training and outreach activities in over 100 countries. In addition, USPTO placed IP experts in Brazil, China, Egypt, India, and Thailand to advocate improved IP protection for American businesses and to coordinate training to help reduce piracy and counterfeiting.[179] In the same year, the USTDA supported an agricultural and pharmaceutical biotechnology training program for patent examiners in India's Patent Office.[180] In Argentina, Guatemala, Jordan, and the Philippines, U.S. government–financed technical assistance was designed explicitly to put TRIPS-'plus' standards in place.[181] In Argentina, for instance, USAID deployed Robert Sherwood, a pro-IP legal expert who also consulted for pharmaceutical companies, to draft the countries laws related to TRIPS implementation.[182] Across a range of countries, USAID financed work by the International Intellectual Property Institute (IIPI) (led by a former head of the USPTO) and pro-IP lawyers to provide legal advice across a range of developing countries, including Jordan and Jamaica.[183]

Multinational corporations and their industry associations were also active donors. They worked to establish and advise pro-IP interest groups in developing countries. Some corporations hired and deployed their own agents to monitor and police infringements in some countries.[184] Foreign trademark owners, for instance, established contracts with local private investigation companies in China to help identify violations of their IP rights and to make the case for greater action by domestic anti-counterfeiting agencies.[185]

The majority of bilateral aid and support from the larger IP donors, especially WIPO, was directed to national IP offices. Donor representatives and IP officials forged cooperative relationships and 'technocratic trust', which in turn significantly influenced the incentives of many developing country officials in their engagement in IP policy debates and their willingness to push particular reforms.[186] Indeed, IP officials sometimes became allies of their donors. The Philippines Intellectual Property Office (IPO), for example, was the group that, with assistance from WIPO, lobbied the Philippine Congress for the ratification of the WIPO Patent Cooperation Treaty in 2001 and the WIPO Internet Treaties in 2002.

Beyond the pro-IP providers of capacity-building, there were a range of players with an alternative agenda. The goal of most of the capacity-building provided by the WHO, UNCTAD, and UNAIDS was, for instance, to promote the

use by developing countries of the TRIPS flexibilities with an eye to advancing public policy goals in the areas of public health or industrial development. These organizations worked to build the capacity of agencies in national government beyond IP offices. WHO, for example, provided information and advice to health ministries through seminars and meetings on the patent situation of key essential medicines[187] and on their options under TRIPS.[188] In many cases, capacity-building to promote awareness of TRIPS flexibilities and the policy options available to countries, whether among diplomats in Geneva or policymakers in capital, came after the most significant pieces of legislation related to TRIPS implementation had been passed. In such instances, assistance aimed to add credibility to decisions already taken by developing countries, to persuade them to keep in place provisions that were under challenge through various bilateral pressures, or to push countries to revise existing laws to take better advantage of TRIPS flexibilities or to make practical use of flexibilities they had in place.

While generally lacking financial resources comparable to those of developed country governments and corporations, NGOs used many of the same capacity-building tools, including training, legal advice, and the publication of reports and recommendations. These were complemented by activities such as media outreach, policy dialogues, and awareness-raising through lobbying of government officials and parliamentarians. Together with legal scholars and economists, NGOs produced a significant legal literature alerting developing countries that they 'do still retain IP policy options'. In their work, they emphasized the possibility of divergent interpretations of TRIPS obligations, provided assessments of the feasibility and legality of various proposals for tailoring implementation to a country's particular stage of development, and offered advice on how to use particular TRIPS flexibilities such as compulsory licensing.[189] To bolster their persuasiveness, they documented cases where countries may and 'do exhibit substantial variation in their patent regimes, all while being compliant with TRIPS'.[190] NGOs worked to influence IP offices but also to engage a broader range of ministries that might be sympathetic to their objectives (such as health, environment, and agriculture ministries); to use the international media to influence governments; and to build the capacity of local NGOs to inform and lobby governments.[191] In Africa, for example, NGOs such as MSF worked to build awareness and capacity among local NGOs, and also to alert health ministries to the importance of compulsory licensing and the TRIPS options available to governments in that respect.[192]

5.4.3. *Countervailing Pressure to Reform IP-Related Capacity-Building*

From 2000, the purpose and content of IP-related capacity-building from developed countries, WIPO, the WTO, and multinational corporations began to attract increased scrutiny. A range of scholars, officials, and NGOs charged

that the technical assistance, training, and legislative advice from these sources were biased in favour of a narrow, compliance-plus approach to TRIPS.[193]

In the case of WIPO, critics questioned the neutrality of its advice to developing countries.[194] Critics emphasized that WIPO's status as a UN agency endowed its advice with legitimacy in the eyes of many developing country officials but that careful review of the substance of its assistance revealed a bias in favour of the interests of developed countries and developed country-based IP rights holders.[195] Criticisms also arose about technical assistance from the UPOV Secretariat's and its campaign to boost its membership. In particular, UPOV and its Secretary-General Barry Greengrass were targetted by NGOs for their 'crusade' in favour of a UPOV 1991 approach to plant variety protection and to recruit new members of the Convention. In 1999, critics of UPOV charged that its technical assistance activities amounted to 'lobbying exercises'.[196] During that year, UPOV, WIPO, and the WTO conducted a series of joint seminars in Geneva, Bangkok, Cairo, and Nairobi to promote the adoption of UPOV-type legislation and accession to UPOV as the best way to comply with Article 27.3(b) of TRIPS.[197] One workshop participant stated that UPOV representatives were 'very successful in confusing participants. Many think the two [UPOV and *sui generis*] are one and the same. Some seem to believe they must join UPOV to be a member of WTO'.[198]

Concerns about WIPO's technical assistance were a key motivation for the launch of the WIPO Development Agenda, which included recommendations to ensure an explicitly, development-oriented approach to advice, training, and technical assistance. They also spurred efforts by the UK's development agency to initiate multi-stakeholder dialogue on how to improve IP-related capacity-building.

5.5. Conclusion

The TRIPS implementation game was played by a range of stakeholders with intense interests in what happened 'on the ground' in developing countries. In the context of global debates about the terms of the TRIPS Agreement and IP regulation more broadly, economic and ideational power were used by a diverse array of stakeholders to push for rapid and strong TRIPS implementation or to advocate for more-tailored, development-oriented approaches to national IP reforms.

Diversity emerged because economic pressures were applied to varying degrees, sometimes with a distinct issue-specific focus on countries with different capacities to resist. Ideational power also had a significant influence on how countries approached TRIPS implementation by generating a compliance-plus, pro-IP political context for TRIPS implementation.

Countervailing ideational efforts to promote more tailored, pro-development approaches to TRIPS implementation were also exerted and sometimes succeeded.

Having emphasized international pressures on developing countries, it is important not to underestimate the role that national economic and political factors had in generating variation in TRIPS implementation. In Chapter 3, I observed that aspects of TRIPS implementation by some developing countries were at least in part attributable to changing economic dynamics and opportunities. In the following chapter, I explore how national political dynamics also had an influence. In particular, I argue that national politics often modified the impact of international pressures, either amplifying or diminishing their influence, and thus contributed to the variation in how governments responded to TRIPS.

Notes

1. U.S. State Department (1999).
2. Ibid.
3. See Chapter 1, note 85.
4. Krikorian (2008) analyses pressures on Thailand in relation to TRIPS and public health, and Krikorian and Szymkowiak (2007) on the dynamics of TRIPS-'plus' political pressure on Morocco.
5. See Chapter 1, note 75. Also see Fink and Reichenmiller (2005), Krikorian and Szymkowiak (2007), Oh (2008), and Wunsch-Vincent (2003).
6. Such requirements are found, for example, in the U.S–Jordan FTA, the EU–Jordan Partnership Agreement, the U.S.–Morocco FTA, the U.S.–Bahrain FTA, and the EU–Egypt Association Agreement.
7. For the text of the IP chapter of each of these agreements, see http://www.ustr.gov/Trade_Agreements/Section_Index.html. The United States also signed FTAs with Australia, and has ongoing bilateral discussions open with the Ecuador, Malaysia, the South African Customs Union (SACU), Thailand, and the United Arab Emirates as well Latin American countries in the context of negotiations for a Free Trade Area of the Americas. The status of these negotiations varies.
8. For text of each of these agreements, see http://www.ustr.gov.
9. The European Union has TRIPS-plus trade agreements with Algeria (2002), Bangladesh (2001), Egypt (2001), Lebanon (2002), Mexico (2000), Morocco (2000), the Palestinian Authority (1997), South Africa (1999), Sri Lanka (1995), and Tunisia (1998). For copies of each of these agreements, see http://europa.eu.int/eur-lex/en. For further background on the European Union's bilateral trade relations website, see http://europa.eu.int/comm/trade/bilateral/index_en.htm.
10. For an overview of IP provisions in EU trade agreements, see Santa Cruz (2006).
11. For its accession countries, the European Union required harmonization with its own regional laws, such as its seven Copyright Directives. Over fifty countries have copyright standards equivalent to those set out by these EU Directives. See Suthersanen (2005).

12. The Partnership Agreement called for such protection either within three years of the Agreement coming into force or Jordan's accession to the WTO, whichever came earliest.
13. The Cotonou Agreement replaced the Lomé Convention and provides a framework for privileged relations between the European Union and the ACP countries on matters of market access, technical assistance, and other issues until 2020. See http://www.acpsec.org/.
14. The Cotonou Agreement also commits countries to cooperation regarding the preparation of laws and regulations for the protection and enforcement of IP; the prevention of the abuse of such rights by right holders and the infringement of such rights by competitors; and the establishment and reinforcement of domestic and regional offices and other agencies including support for regional intellectual property organizations involved in enforcement and protection, including the training of personnel (Article 46).
15. ICTSD (2008) and CIEL (2007).
16. Ibid.
17. For reports that trace the evolution of the negotiations see *Trade Negotiations Insights* available at http://www.ecpdm.org and http://www.ictsd.org.
18. The developing countries in this group are Algeria, Egypt, Jordan, Lebanon, Libya, Morocco, the Palestinian Authority, Syria, and Tunisia. The central element of the ENP is the development of bilateral Action Plans agreed between the European Union and each partner which form the basis for a future European Neighbourhood Agreement. See EC (2004*a*, 2004*b*) and http://ec.europa.eu/world/enp/policy_en.htm, accessed on 1 February 2007.
19. The European Union also continues to pursue trade negotiations with Mercosur and the Arab Gulf Cooperation Council (GCC), ASEAN, the Andean region, the Central American region, and India. See Mandelson (2005) and EC (2006).
20. The EFTA states concluded free trade agreements with Turkey, Israel, Jordan, and Singapore and have ongoing negotiations with Thailand. For the texts of these FTAs, see http://secretariat/efta/int/Web/legalCorner/.
21. Examples include the Canada–Chile FTA, the 2004 Japan–Singapore FTA, and the 2004 Japan–Mexico FTA. Other bilateral negotiations underway in December 2007 included those between Australia–China and Japan–Thailand.
22. This summary draws from the analysis of IP provisions in bilateral investment treaties by Correa (2004*a*) and Drahos (2001*b*). While the scope and content of BITs have been standardized over the years, the wording of some individual provisions still varies. The most significant differences occur between BITs signed decades ago and those signed more recently. See UNCTAD (2003: 89).
23. For information on U.S. BITs, see http://www.tcc.mac.doc.gov.
24. Note that investment treaties are organized at the bilateral rather than regional level in the European Union. Several governments (France, Germany, Switzerland, and the Netherlands) have online databases which provide details of these individual treaties.
25. The MFN clauses in investment agreements contribute to a global elevation of protection standards. During discussions of the OECD's draft Multilateral Agreement on Investment (MAI), some delegations proposed excluding copyrights and neighbouring rights, as well as databases, from provisions designed

to replicate the highest levels of investment protection for IP. See OECD (1997).

26. Provisions in investment agreements that enable foreign corporations to sue governments have generated considerable policy debate. See IISD (2001), UNCTAD (2000), and Verhoosel (2003).
27. For a more detailed review of the implications of BITs and the procedures in case of IP disputes that might arise, see Correa (2004*a*).
28. For the full text of these agreements, see http://www.tcc.mac.doc.gov. Also see Drahos (2001*b*) and Morin (2003).
29. After an initial fact-finding stage, WTO accession negotiations fall into two main categories: (*a*) negotiations on multilateral rules (such as TRIPS), and (*b*) bilateral market access negotiations. Acceding governments are expected to observe the rules set out in the WTO Agreement, as well as any additional binding commitments negotiated and agreed in their Protocol of Accession or in the relevant commitment paragraphs of the Working Party Report, which are incorporated in the Protocol of Accession. See WTO (2005*f*).
30. USTR (2005: 2).
31. The commitments of newly acceding WTO members are located in several legal documents including the working party report (which includes paragraphs specifying IP commitments), the Protocol of Accession, the General Council Decision, and the schedules of goods and services commitments.
32. Karky (2004).
33. Musungu and Oh (2006).
34. Gay (2005).
35. The United States forged a series of bilateral agreements with China regarding IP standards and enforcement before it became a WTO member. These include the 1992 Sino–American Memorandum of Understanding on the Protection of Intellectual Property and an Exchange of Letters in 1995 (with an attached Action Plan). See Mertha and Pahre (2005).
36. See http://www.wto.org/English/thewto_e/minist_e/min03_e/min03_11sept_e.htm, accessed on 5 May 2007.
37. Gay (2005).
38. Finger and Schuler (2000: 527).
39. For examples, see http://www.ustr.gov.
40. In 1996, the United States launched a case against Indonesia on measures affecting the U.S. automobile industry. The United States complained that an Indonesian measure on trademarks related to its National Car Programme violated various provisions of TRIPS. The panel found, however, that the United States had not demonstrated discriminatory treatment within the various relevant senses provided in TRIPS as it applies to trademarks.
41. With respect to filing, the central issue became whether certain 'administrative instructions' to the Indian Patent Office by the government were sufficient to provide 'a sound legal basis to preserve both the novelty of the inventions and the priority of the applications as of the relevant filing and priority dates'. See Trebilcock and Howse (2001: 330–1). Also see WTO (1997*a*).
42. The Appellate Body held that Articles 70.8 and 70.9 operate in tandem, so that when TRIPS came into force, India was obliged to have in place a mechanism for

the granting of exclusive marketing rights, even if it could delay making the rights effective until the end of the transition period. See Reichman (1998*a*).

43. USTR (1997).
44. Busch and Reinhardt (2003), and Davey (2005).
45. Ibid.
46. See Chapter 3, note 70.
47. Author's interview with Jayashree Watal, former TRIPS negotiator for the Indian government and now a staff person of the WTO Secretariat's TRIPS Division, Feb. 2005.
48. Author's interview with Marta Gabrieloni, Argentinean delegate to the TRIPS Council, Oct. 2005. See also Czub (2001) and Bentolila (2002/03).
49. The United States challenged a provision in Brazil's industrial property law that prohibits importation as a means of satisfying the requirement that a patent be 'worked' in Brazil. Author's interview with Robert Juagaribe, Director, Brazilian Patent Office, Oct. 2005. Also see USTR (2006).
50. Drahos (1995: 11).
51. For USTR's Special 301 reports and related press releases, see http://www.ustr.gov/Trade_Sectors/Intellectual_Property/Section_Index.html.
52. Drahos (1995: 11).
53. USTR (1999).
54. Sell (1995) and Pechman (1998).
55. For related USTR press releases, see http://www.ustr.gov/Document_Library/Press_Releases/Section_Index.html.
56. Sell (1998).
57. Other claims of unfair competition involving imported products, misappropriation of trade secrets, passing off, and false advertising were also investigated.
58. Expedited relief in the form of temporary exclusion orders and temporary cease-and-desist orders may also be available in certain exceptional circumstances. Section 337 investigations include trial proceedings before administrative law judges and review by the ITC.
59. For a summary of all cases, see http://www.usitc.gov/trade_remedy/int_prop/inv_his.htm, accessed on 1 February 2008.
60. Raghavan (2002).
61. Author's interviews with diplomats in Geneva between 1999 and 2007 confirmed instances of such pressures in a range of countries, including the Dominican Republic, Egypt, Kenya, Pakistan, and South Korea.
62. New (2007*e*).
63. Markandya (2001).
64. Reuters (2006).
65. In his letter to the *Bangkok Post*, the official noted that the deal Washington sought could hinder Thailand's domestic production of generic drugs and have a detrimental impact on the ability to fulfil its pledge to provide drugs to Thais living with HIV/AIDS. See Beattie et al. (2006).
66. Author's interviews with staff of IOs and NGOs involved in these cases.
67. Author's discussion with WHO officials and individuals involved in preparing the report. Also see Bermudez and Oliveria (2004) and Gerhardsen (2006*e*).

68. Author's interviews with staff in organizations involved in the preparation of these studies.
69. For the report, see UNCTAD (2006). For the U.S. government's comments, see U.S. Mission to the United Nations (2006).
70. Marc (2001).
71. Gerhardsen (2006*c*).
72. In 2005, a number of Indian patient groups filed a 'pre-grant opposition' to a proposed patent for Glivec. Novartis had filed its patent application in 1998 and received exclusive marketing rights for in March 2003 until India's mailbox facility was opened. In January 2006, the patent office refused Novartis' application on the grounds that the product was not sufficiently innovative to warrant patent protection. Novartis challenged the decision of the Indian Controller General of Patents and Designs (which administers the patent office), arguing that 'India should not establish additional requirements for patentability beyond novelty, commercial applicability and non-obviousness.' The appeal case was still ongoing at the time of publication. See Gerhardsen (2006*c*, 2006*d*).
73. Gentleman (2007).
74. Author's interview with Johannes Bernabe, former Philippine TRIPS negotiator, Feb. 2007.
75. Boseley (2000).
76. Kamath (2000) and Schoofs (2000).
77. From 2000, for instance, the World Bank agreed to host a staff member seconded from the pharmaceutical industry, a decision which was much criticized by public health advocates and also by some staff within the Bank.
78. Sell (1998: 221–8).
79. Unilateral U.S. pressures (including use of Special 301) helped secure many changes to IP laws in Latin America and South Korea in the 1970s and early 1980s. See Odell (1980), Yoffie (1983), Odell (1985), Bayard and Elliot (1994), and Sell (1995). In the immediate pre-TRIPS era, however, Marcus Noland (1997) found that USTR's Special 301 pressures were relatively ineffective in achieving IP changes at the domestic level in all but a few cases. For more on debates regarding the relationship between TRIPS and 301, see Getlan (1995).
80. For debate on the extent to which unilateral trade pressures impacted policy changes in targeted countries across a broader range of trade issues, the conditions under which such pressures were effective, and the methodological challenges associated with measuring such dynamics, see Bayard and Elliot (1994), Elliott and Richardson (1996), Knapp (2000), Martin (1992), Noland (1997), Sykes (1992), and Zeng (2002).
81. Trebilcock and Howse (2001: 333) argue persuasively that 'even if unilateral action does not violate any specific provision of the GATT or the TRIPS Agreement (as it would not for instance in the case of withdrawal of voluntary GSP preferences as was [. . .] done in the case of Honduras), it may be in contravention of Article 23 of the WTO DSU'.
82. This analysis draws on the author's interviews with officials responsible for IP in the Brazilian Ministry of Foreign Affairs and the Brazilian Patent Office from 2005 to 2007.
83. Ruse-Khan (2007).

84. Subramanian and Watal (2000).
85. See WTO document WT/DS285/22, 22 June 2007.
86. For further discussion of the use of framing in debates on international IP regulation, see Drahos (1996), Mayne (2002), Okediji (2003*a*), Sell (2002, 2003*c*), and Odell and Sell (2006).
87. See Chapter 1, note 89.
88. The role of such communities in international IP debates is also discussed in Braithwaite and Drahos (2000), Sell (2003*a*), and Dutfield (2000).
89. Epistemic communities are defined by Peter Haas (1992*b*: 3) as 'networks of professionals who share common normative and causal beliefs, accept common truth-tests and are engaged in a common policy enterprise'.
90. Sell (2003*a*).
91. Drahos (1999) and Dutfield (2000).
92. Drahos (1999: 443).
93. Ibid.
94. Dutfield (2000).
95. Ibid.
96. See, for instance, Attaran and Gillespie-White (2001).
97. Mashelkar Committee (2007).
98. Raghunath Mashelkar, former head of India's Council for Scientific and Industrial Research (ICSIR). Mashelkar also became the focus of controversies regarding alleged efforts by WIPO, developed countries, and to manipulate debates on WIPO's patent reform multinational companies agenda. See *Times of India* (2007) and New (2005*c*).
99. See Barnett (1999: 25), Crawford (2002: 19), and Snow and Benford (1998). Keck and Sikkink (1998) argue that the success of environmental networks and women's movements relied on the development of durable cognitive frames, such as 'sustainability', 'rights-based', and 'discrimination' frames. The relationships between framing and social movement action are taken up by Snow et al. (1986) and McAdam et al. (1996).
100. See, for example, Attaran and Gillespie-White (2001).
101. Drahos (1996).
102. Idris (2002).
103. Nye (2004).
104. Checkel (2005).
105. Reinhardt (2002).
106. The NEPAD initiative in Africa can be understood as a collective African effort in this respect. See van der Westhuizen (2003). Also see Hope (2005).
107. Ngangoue and Oeudraogo (1999).
108. Ibid.
109. Bernama (2006).
110. Ibid.
111. Halbert (1997).
112. See, for example, BSA (2005) and IFPI (2005).
113. The software industry estimates its losses in each Brazil, India, and Mexico at around US$500 million annually and in China at US$3,884 million per year. The countries with the highest rates of piracy are not those where industries incur the

greatest losses. According to the BSA, Zambia, Zimbabwe, Cameroon, and Senegal each had software piracy rates of over 80 per cent in 2005, but the actual losses in those countries were under US$6 million per year. See BSA (2005).

114. Biadgleng and Tellez (2008).
115. See Price (2004) and *Khaleej Times* (2004). On the relationship between bilateral trade agreements and political security, see Gruber (2000). Also see Jackson (1997: 173).
116. Weintraub (2003).
117. Solo (2003).
118. Choudry (2005).
119. Author's interview with Ahmed Abdel Latif, Egyptian Ministry of Foreign Affairs, Nov. 2006.
120. Stallman (2006).
121. See, for example, Boyle (1996, 2003), Drahos and Braithwaite (2002*a*), Drahos (1996), Okediji (2003*a*), and Tansey and Rajotte (2008).
122. UNCTAD (2008).
123. Bhagwati (2001), Correa (2000*a*), and Stiglitz (2002: 245–6).
124. Boyle (2003).
125. Dinwoodie and Dreyfuss (2004), Heller and Eisenberg (1998), Jaffe and Lerner (2004), and Lessig (2001).
126. See, for instance, Maskus and Reichman (2005), Maskus and Reichman (2004), and Stiglitz (1991).
127. Boyle (2004).
128. Abbott (2001), Maskus (2002*a*), Mayne (2002), Scherer and Watal (2002), and WHO (2002*a*, 2004).
129. Odell and Sell (2006), Sell (2002), and Sell and Prakash (2002). Palmedo (2005) provides a review of the coverage of the December 2005 WTO deal on generic medicines manufactured under a compulsory licence.
130. MSF (2001). Examples of public-private IP-related initiatives launched included the African Agricultural Technology Foundation (AATF) and the Centre for the Management of intellectual Property in Health Research and Development (MIHR).
131. Love (2003).
132. Stiglitz (2002: 245–6).
133. For information on this campaign, see http://www.access2knowledge.org/cs/.
134. Lessig (2004).
135. Leading legal scholars observe that the use of words like 'theft' and 'piracy' to describe unauthorized copying is often misleading because both terms obscure important differences between *physical* and *intellectual* property. See Landes and Posner (2004).
136. ActionAid Brazil (1999), Shiva (1997, 1999, 2001), and Perlas and Salazar (1991).
137. Civil Society Coalition (2004), May (2006*b*), and Musungu (2005).
138. CIPR (2002).
139. DFID/DTI (2003).
140. Herfkens (2001).
141. Ibid.
142. Group of 77 and China (2003*b*).

143. Ibid.
144. Ibid.
145. Cited in Kwa (2002).
146. Author's interviews with Geneva-based developing country delegates and NGOs in 2003.
147. Menescal (2005) and author's interview with Ahmed Abdel Latif, see note 119.
148. Author's interviews with Indian government delegates and NGOs from 2003 to 2007.
149. Musungu and Oh (2006: 46).
150. Musungu and Oh (2006).
151. Ibid.
152. EC (2003, 2004*c*).
153. EC (2004*c*).
154. EC (2004*c*: 2–3). See also EC (2006).
155. Bentolila (2002/3).
156. Otten and Wager (1996), and Otten (2003).
157. Reichman (1998*a*).
158. For a WTO perspective on the activities of the Council, see Otten (2003).
159. For analyses of the operation of these mechanisms, see Geuze and Wager (1999), Gerhart (2000), Giust (1997), Helfer (2004), Okediji (2001, 2003*b*, 2004*b*), and Qureshi (1995).
160. Barnett and Finnemore (1999).
161. The three exceptions were Ghana, Mauritius, and Swaziland.
162. These reviews provided for written questions prior to the review meeting, with follow-up questions and responses during the course of the meeting. At subsequent meetings of the TRIPS Council, delegations could follow up on points that emerged in the review session. For the record of the introductory statements made by delegations, the questions put to them, and their responses, see the WTO's online document database at http://www.wto.org/english/docs_e/docs_e.htm.
163. Reichman (1998*a*).
164. Ghosh (2007). Korea and Taiwan were the only developing countries to pose questions.
165. These include IIPI, PhRMA, RIIA, CISAC, and the BSA. Annual reports from each of these organizations are available on their websites.
166. Pengelly (2005) provides a summary of capacity-building from a range of donors. Matthews and Munoz-Tellez (2006) compare bilateral assistance from the European Union, Japan, and the United States. The FAO (1997) and WTO (2004*b*) each also summarize their respective IP-related technical assistance activities in developing countries.
167. Records of technical assistance and capacity-building provided by the WTO, WIPO, the U.S. government, and the EPO are all available on their respective websites, sometimes in a searchable database format. Each donor, however, organizes and presents data in different formats using distinct categories. Several sources list the projects initiated but do not indicate the budget. The WTO/OECD database on trade-related capacity-building also lists IP assistance from a broad range of donors.
168. WIPO (2005*a*).

169. WIPO (2007*a*).
170. WIPO-WTO (1996).
171. The EPO's membership includes all European Union members (except Malta) as well as Iceland, Lichtenstein, Monaco, Switzerland, and Turkey.
172. Villaneuva (2005).
173. This observation draws from author's interviews conducted between 1999 and 2007 with a range of developing country delegates to WIPO and long-term observers of the organization, including former and current staff.
174. WIPO (1999*c*, 2004*a*, 2005*a*).
175. Author's interview with Ahmed Abdel Latif, former Egyptian delegate to WIPO, Feb. 2005.
176. Fink (2008).
177. Fink (2008: 23).
178. For information on these and related cooperation projects, see Matthews and Tellez-Munoz (2006).
179. USPTO (2006).
180. USTDA (2006).
181. See Andersen (2006), New (2006*b*), and Villaneuva (2005).
182. Author's interview with Diana Tussie, Director, Department of International Relations, Latin American School of Social Sciences (FLACSO), Mar. 2008.
183. For examples, see http://www.iipi.org. In 2007, Intellectual Property Watch conducted an interview with another active provider of technical assistance, Michael Ryan, who noted the support he received from major U.S. multinationals and government agencies for his work to promote stronger IP protection in developing countries. See IP-Watch (2007).
184. Author's interviews with national IP officials from Brazil, the Philippines, and Thailand.
185. Mertha (2005).
186. Drahos (2007).
187. UNAIDS/WHO (2000) and WHO (2004).
188. Correa (2004*c*) and WHO (1999*a*, 2001, 2004).
189. Correa (2000*a*). Other notable references include Baker (2004), CIPR (2002), Correa (2003), South Centre (2000), TWN (2003*b*), UNDP (2001), Velasquez and Boulet (1999), and Watal (2001).
190. Correa (2000*a*).
191. Tarlock (1992), Nelson (1995), Weiss and Gordenker (1996), and Raustiala (1997).
192. Essential Innovations (2005).
193. See, for example, Matthews (2005), Matthews and Munoz-Tellez (2006), and May (2004). Several NGOs also published critical reviews. See Bellmann and Vivas-Eugui (2004), Kostecki (2005), Musungu (2003), and Pengelly (2005).
194. Kostecki (2005), MSF (2003), May (2004), and Musungu (2003).
195. Ibid.
196. GRAIN (1999*d*).
197. For summaries of these meetings see the following documents available, see the following WIPO documents: UPOV-WIPO-WTO/NBO/99, UPOV-WIPO-WTO/CAI/99, UPOV-WIPO-WTO/BKK/99 and UPOV-WIPO-WTO/99.
198. GRAIN (1999*d*: 4).

6

The Developing Country Dimension: How National Politics Mattered

International pressures such as trade threats, diplomatic intimidation, and capacity-building had a decisive impact on how developing countries implemented TRIPS. Developing countries simultaneously faced a pervasive compliance-plus IP discourse at the global level. But such pressures did not hit the ground unmediated. To gain a full explanation for variation in developing country responses to TRIPS, attention to the national dimension is vital.

At the national level, a range of factors in developing countries mediated international pressures and acted as drivers of domestic decision-making. As noted in Chapter 3, national economic circumstances were sometimes a key influence on the decisions of legislatures, IP offices, and others playing a role in implementing TRIPS. Economic circumstances of countries also impacted the susceptibility of national governments to pressures from abroad and their capacity to filter and manage these pressures.

This chapter explores how political dynamics within developing countries conditioned the extent to which the pressure of international power and global IP debates influenced how governments approached TRIPS implementation. In literature on the politics of TRIPS, the importance of national factors within developing countries in the TRIPS implementation games is often neglected. This chapter emphasizes that developing countries were not simply 'empty vessels' upon which TRIPS and international pressure for strong implementation were applied. It shows how national factors intervened in the IP reform process in developing countries and contributed to variation in TRIPS implementation.

At the national level, governments were the main actors charged with giving domestic effect to the international legal obligations in TRIPS. The task of implementing TRIPS required governments to decide on the substance of IP laws and the nature of institutions responsible for their implementation, to clarify and interpret laws where conflicts arose, to promulgate regulations

to give TRIPS practical effect, and to specify the level of resources that would be dedicated to administration and enforcement of those laws. These decisions, and the subsequent operation of the IP system, involved many parts of government, including courts and the judiciary, the legislature, patent and copyright offices, customs and taxation offices, and law enforcement agencies. Across the developing world, the character, capacity, and behaviour of government in all these matters varied widely.

This chapter reviews three main aspects of variation in national political dynamics that contributed to differences in how developing countries responded to their TRIPS commitments: (*a*) government capacity, (*b*) the degree of public engagement, and (*c*) government coordination. I introduce each of these elements separately, but emphasize the overlap between them. To support my analysis, I draw on examples of variation in the use of TRIPS flexibilities and in the timing of TRIPS implementation set out in Chapter 3. The second half of the chapter presents four mini case studies that illustrate how the interplay between these three elements – national politics, international pressures, and global IP debates – generated variation in TRIPS implementation.

6.1. Government Capacity on IP Decision-Making

Several aspects of the capacity of developing country governments help to explain variation in TRIPS implementation, namely differences in depth of government expertise on IP issues, the administrative competence of government institutions, and the ability to maintain control of national IP offices.[1]

6.1.1. *Technical Expertise*

As countries embarked on reforms to meet TRIPS commitments, their expertise on IP issues varied considerably. As observed in Chapter 2, most developing countries inherited IP laws from their former colonizers and had subsequently not devoted much attention to the IP system.

Across Africa, the colonial era left most countries with very weak expertise on IP. At the time TRIPS was negotiated, most IP regimes in African countries were effectively dormant. Few local businesses or innovators made use of the IP system. Rather, it was overwhelmingly foreign companies that applied for and were granted IP rights in the region. National governments devoted few resources to the operation of IP offices. In most instances, decision-making was further constrained by a deep lack of technical knowledge or policy experience of IP issues. In the capitals of francophone Africa, government capacity was particularly low, in part because governments had long delegated significant responsibility for IP administration to a regional organization (see

Chapter 7). In anglophone Africa, the capacity of countries varied for historical reasons. In colonial times, the governors of each separate UK territory were allowed some discretion as to how they administered national IP laws. In certain cases, local lawyers were trained in IP administration and local innovators were allowed to access the system. Consequently, in several of these countries (e.g. Kenya, Ghana, Nigeria), the body of IP expertise was greater than in other African countries. Many of the poorest countries, however, continued to defer to former colonial powers for legal models. In the absence of local expertise, many countries also copied or adopted laws from countries with a shared colonial heritage or linguistic background. Angola's draft industrial property law, for example, includes elements from the 1995 Portuguese Code of Industrial Property, the 1996 Brazilian Law of Industrial Property, and the 1999 Mozambique Code of Industry Property.

The availability of expertise was higher in several of the larger and more economically advanced developing countries, such as Argentina, Brazil, Chile, India, Korea, Mexico, and South Africa. Governments in each of these countries had greater substantive experience with the IP system. In India, for instance, the British colonizers left a considerable IP technical and legal expertise behind. Further, for countries such as Brazil and Argentina, participation in the TRIPS negotiations equipped them with stronger technical knowledge of the options in TRIPS than most other developing countries. While many developing countries built their IP expertise over the course of implementing TRIPS, at the time most faced deadlines for implementation (i.e., in the year 2000), national IP expertise was very limited.

6.1.2. *Institutional Strength*

The characteristics of government institutions also impacted TRIPS implementation. The fact of weak public administration in many of the poorest developing countries is widely acknowledged; indeed this is often identified as among the core conditions that defines countries as developing. In many of the poorest countries, TRIPS implementation was undertaken by governments plagued by corruption, inadequate resources, and political unrest. In such circumstances, political survival rather than coherent decision-making preoccupied many national elites.[2] By contrast, countries such as Brazil and India had stronger institutions.

When studying TRIPS implementation, we should also not assume that policymakers accurately perceived their national interests or had the resources and inclination to carefully weigh the different options for TRIPS implementation. The political science literature on government institutions alerts us to the fact that policymakers may be only 'boundedly rational' when making decisions[3] because they are involved a complex set of interactions between interests, ideas, individual psychologies, and organizational

structures. Within developing countries, decision-makers on TRIPS implementation were embedded in social, economic, political, and cultural relationships that were often beyond their control and also their cognition.[4] In the face of limited time, information, expertise, and finances, developing country governments often 'satisficed' rather than 'maximized' when it came to responding to TRIPS obligations.[5]

6.1.3. *Control of IP Offices and Decision-making*

With the exception of a handful of countries, like Brazil and India, the prospect of tailored approaches to TRIPS implementation was curtailed by the absence of a broader policy framework setting out national needs and priorities through which reform options could be considered.[6] In general, IP law was perceived as a 'technical' issue rather than one central to a range of public policy goals. This led most governments to delegate the task of responding to TRIPS and drafting laws to a small staff of technocrats located in national IP offices.[7] Among developing countries, Brazil stood out for having a strategic approach to TRIPS implementation based on a broad policy framework for development and associated industrial policies. India also worked to place IP issues within a broader policy framework through its five-year plans.[8]

In most developing countries, IP responsibilities were typically divided between an industrial property office located within the Ministry of Trade or Industry, a copyright office located within a ministry charged with issues related to culture, and another independent office addressing issues of plant variety protection. In Chile, for example, copyright was handled by the Ministry of Education, Libraries, Archives, and Museums; industrial property by Ministry of Economy; plant varieties by the Ministry of Agriculture; and border measures by the National Customs Service. In Egypt, industrial property was handled by the Egyptian Patent Office under the authority of the Ministry of Higher Education and State for Scientific Research. Responsibility for copyright registration and enforcement rested with three different ministries. The Ministry of Culture was responsible for literary works, visual art, audiovisual and musical works, and sound recordings. The Ministry of Media oversaw the protection of broadcasting organizations through neighbouring rights and the Ministry of Information and Communications dealt with computer software and databases.

The way in which several governments organized IP decision-making evolved over time. In 2004, the Philippines became one of the first developing countries to establish a combined national office for all IP matters. A 2005 study noted that the 'lack of specialized knowledge on IP in other government agencies' meant that the national IP office 'monopolizes IP policy in the Philippines'.[9] The study further stated that '[s]ince IP is a specialized field, the Philippine government defers to and relies on the Intellectual Property Office

(IPO) to advise it on international IP matters and in trade negotiations'.[10] By 2005, Jamaica had also created a combined Intellectual Property Office (JIPO) charged with all matters relating to IP. The same year, Pakistan similarly established an overarching IPO, with the active support of the United States, which reports to the national Cabinet and is directly under the supervision of the Prime Minister.

The uneven capacity of governments to provide substantive policy direction and oversight of their IP offices further contributed to variation in TRIPS implementation. Across the developing world, most IP officials openly favoured strong IP protection and took a compliance-driven approach to TRIPS. This shared tendency was attributable to several factors, including the narrow mandate of most IP offices (one of promoting IP protection), the financial autonomy of many IP offices, the staffing of IP offices by lawyers generally trained only in the technical aspects of IP, and dependence on donor support. In many cases, national IP offices were authorized to retain all or a portion of their income from the fees they charged from patent applications and renewals. Otherwise, revenues were forwarded to the national treasury for distribution through the national budget process.[11] The self-financing nature of many IP offices had two implications. First, they escaped the regular oversight that agencies fully reliant on annual disbursements from national budgets might have experienced. Second, self-financing rendered IP offices strong candidates for 'capture' by their core clients (i.e. industries and IP attorneys seeking IP protection) and an institutional bias towards the approval of IP applications. In developed countries (upon which developing countries have modelled their approach to IP administration), evidence of these challenges has prompted calls for reform to the governance of IP offices.[12] Importantly, in addition to funds raised through fees or from national budgets, IP offices reviewed heavily on in-kind and direct financial support from foreign donors. (see Chapter 5).

All developing country IP offices were the beneficiaries of technical assistance, training, institutional support, IT infrastructure, or other services provided by international donors. This support enabled IP offices to undertake a range of activities, including public awareness activities, training, and the modernization of IT and administration systems. The high degree to which IP offices relied on external support rendered them vulnerable to financial influence from donors. The constant supply of training, advice, and capacity-building from international donors bolstered the dominance of IP offices in national IP decision-making, and thereby reinforced a compliance-plus approach to TRIPS implementation. Countries with the lowest technical capacity on IP, such as those in Africa, were particularly vulnerable to pro-IP capacity-building (see Chapter 7).

Even in IP offices with relatively strong administrative and staff capacity, officials generally had a positive disposition towards stronger IP protection. In

these cases, capacity-building reinforced the dominance of pro-IP technocrats in national IP debates. A 2005 case study on IP-related capacity-building to the Philippines IP Office (IPO) (which has some 300 staff) notes that the 'purely compliance-driven nature of the assistance converged with IPO's statutory mandate and orientation to strengthen the administration of the IP system; that is, the technical assistance only reinforced the compliance agenda of the IPO'.[13] The study emphasized the importance of which agencies donors choose to support, noting that the Philippines IPO was by far the dominant recipient of capacity-building and also the agency most active in pushing for higher standards of IP protection and enforcement. In 2000, for example, the Philippines IPO 'announced that its vision was "to be an active player in the IP global community," thus projecting itself as part of an international network of IP offices that share a common objective: advancing IP protection'.[14] Other national agencies relevant to IP policymaking, such as the Department of Science and Technology, received no assistance for their work. Similarly, a study of capacity-building in Thailand noted that in the area of legislative reform, 'most technical assistance appears to be designed to further the development of IP rights'.[15] According to the head of the Thai IP office, the bulk of donor resources to Thailand were channelled to fund enforcement activities whereas the primary national needs were how to manage IP and use it to commercialize new inventions.[16] Beyond countries such as Brazil and India, the IP offices of Pakistan and Venezuela were among the few noted for the more independent perspective of their staff.[17] In the absence of a broader public policy framework, public oversight, and strong technical expertise – and under the influence of pro-IP capacity-building and technical assistance – the incentives for most IP offices to advocate a swift and compliance-oriented approach to TRIPS were clear.

After legislative reforms to meet TRIPS commitments were made, decisions made within IP offices influenced how TRIPS flexibilities were used and interpreted.[18] The approach to the examination of industrial property applications varied. Most developing countries' governments lacked the capacity to examine patents. In these cases, IP offices served as registration offices only, relying on cooperative arrangements with WIPO and developed country IP offices for patent searches and examinations. The Japanese Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the European Patent Office (EPO), and the U.S. Patent and Trademark Office (USPTO), for instance, all conducted patent searches and examinations for developing countries either for a fee or free of charge. Vietnam, for example, relied on technical cooperation with KIPO, the JPO, and the EPO.[19] The majority of patent applications in developing countries were filed through WIPO's Patent Cooperation Treaty (PCT), which called on each member to designate an international search and examination authority. In the Philippines, for example, KIPO was the international searching authority and preliminary examining authority for

PCT applications. Most national IP offices were thus concerned primarily with procedural matters, not the scientific and legal assessment of actual IP applications. The size of the staff available for this task varied widely according to the available resources and also the quantity of applications submitted. In late 2007, Venezuela's patent office had four patent examiners and had not issued any patents for any foreign pharmaceutical product for at least five years.[20] In contrast, Brazil, China, Korea, and India had between around 500 (in the case of Brazil) and 4,000 (in the case of China) staff devoted to administering the rapidly growing number of applications from both national and foreign applicants in their countries.[21] In each case, governments had explicitly charged national patent offices with generating expertise for the substantive examination of patents, though their capacity varies greatly.

IP offices and patent examiners also had considerable influence on the nature of patents granted. In anglophone Africa, it was only in the post-TRIPS era that IP offices stopped the practice of re-registration of UK patents.[22] That said, the practice of rubber-stamping patents already issued elsewhere (such as in the United States or European Union), whether or not consistent with national IP laws, continued widely across Africa and the developing world.[23] In his work on the patent examination process in Vietnam, Drahos highlights that a culture of 'technocratic trust' promoted deference to the expertise of foreign IP offices.[24] Examinations conducted by foreign IP offices were often conducted according to criteria that did not necessarily match those in their national laws. Even where governments did review applications nationally, many developing countries used patentability criteria that mimicked developed country standards with respect to scope and inventiveness.[25] The assessment of patents claims and the interpretation of the scope of patentability were influenced by the regulations, guidelines, and procedures for examination developed by IP offices and national courts.[26] Moreover, the task of determining whether the criteria of novelty, inventive step, and industrial applicability were met was often beyond the technical, legal, or scientific competence of national IP officials. The result was that many countries granted patents on subject matter not required by their laws. In the ARIPO region, for example, even though several countries took advantage of TRIPS flexibilities to exclude the animals and plants from patentability, national governments regularly failed to challenge the grant of precisely such patents by the ARIPO Secretariat.[27] In addition, across Africa pharmaceutical product patents were issued even though most country's laws did not yet provide for such patents. In the course of debates about compulsory licensing in Brazil and Thailand, questions arose about whether the patents for the medicines in question should have been granted in that country in the first place.[28] The security of patent rights also varied, as did the existence of procedures for pre-grant and post-grant opposition of patents, and the speed with which patents were examined and granted. In general, IP offices in both developing

and developed countries faced extensive backlogs in patent and trademark applications. In 2006, the Brazilian Industrial Property Office estimated that it would take five to six years to work through its backlog (estimated to include some 21,000 applications for pharmaceutical product patents and 600,000 trademark applications). Similarly, India was estimated to have some 45,000 patent applications pending in the same year.[29] In 2007, China and Korea together boasted the busiest IP offices in the world in terms of the number of applications received.[30]

6.1.4. *Examples of How Government Capacity Mattered*

Several examples highlight how differences in technical expertise, institutional strength, and control of IP offices contributed to variation in how developing countries approached IP reforms to implement TRIPS and their susceptibility to international pressures.

Despite having incorporated TRIPS flexibilities with respect to compulsory licensing in their national laws, less than fifteen developing countries subsequently issued such a licence. The use of compulsory licensing depended on national circumstances and the degree of external pressure (See Section 6.4.4 for a fuller discussion of the political dynamics in this area.). On the domestic front, government capacity was often a core constraint. Many officials lacked both knowledge of the compulsory licensing options available to them (even where these were provided in their laws) and the legal expertise on how to proceed.[31] Further constraints included administrative and legal hurdles on the part of national governments weak or non-existent local generic drug manufacturers.

The limited technical IP capacity in many developing countries made the influence of technical assistance more potent. In the area of plant variety protection, most developing countries had no history of protection in this area pre-TRIPS and had particular difficulty promulgating and administering relevant laws. Even India, one of the most advanced of the developing countries, took six years to move from the passing of its 2001 Act on the Protection of Plant Varieties and Farmers Rights to the promulgation of related regulations in 2006 and the launching of an Authority to actually begin the administration of the Act in 2007. In the area of copyright, the varying technical capacity of governments again impacted the use of TRIPS flexibilities. The failure of many countries to take advantage of limitations and exceptions to copyright available in TRIPS was spurred by the compliance-oriented nature of external technical assistance and legal advice to copyright offices with little internal expertise.

To address the capacity gap, donors stepped in, with WIPO taking the lead role. Between 1996 and 2007, WIPO provided targeted legal advice to over 100 developing countries on matters of TRIPS interpretation, developed and

promoted 'model laws' for the implementation of TRIPS obligations, provided advice and feedback on proposed laws, and supported legal drafting of laws.[32] WIPO provided a series of model laws that countries could consult or adopt 'off the shelf'. While there were some modifications to the model laws over time, they have been widely criticized for failing to draw full attention to the flexibilities and options available to developing countries with respect to TRIPS implementation.[33] In the Philippines, for example, WIPO provided legal advice to the patent office regarding implementation of TRIPS and the Philippines subsequently used WIPO's model laws to draft its legislation on integrated circuits.[34] In Antigua and Barbuda, draft IP laws were based on the WIPO model for copyright and the WIPO PCT model for patents; at the time of drafting, the country had no national IP office.[35]

Differences in government capacity also influenced how countries organized the management of copyrights. In most cases, TRIPS implementation laws established societies for the collective management of copyright (i.e. organisations that collect and disperse licensing and royalty fees for copyright holders) within government (usually in copyright offices or the ministries that house them) or provided the legal framework for independent societies (e.g. self-financing, non-profit entities established by the authors on their own behalf).[36] Countries are not obliged under international law to set up collecting societies, but both the Berne Convention and TRIPS (by incorporation of Berne) refer to them as important instruments for implementing the obligations contained therein. In 2001, the UK government's Commission on Intellectual Property Rights (CIPR) drew attention to the administrative and financial challenges that developing countries may face in establishing such societies, and urged careful reflection upon the most appropriate approach.[37] Nonetheless, the vast majority of the WTO's developing country members established some kind of collecting societies, at least on paper. The exceptions were small countries with small markets (such as Swaziland) or those which have faced particular internal political challenges (such as Rwanda).

In Latin America, most collecting societies were independent (reflecting the approach of most developed countries) and focused on the music sector. In the Middle East, the only country with a collecting society was Lebanon (not a WTO member) and in North Africa, two governments established state-run collecting societies post-TRIPS. In Asia, where TRIPS spurred the establishment of most collecting societies, there was a combination of independent and state-run collecting societies. In general, state-run collectives existed in countries where much of the relevant economic activity was state-run (e.g. state-run broadcasting organisations in China and Cuba), or where there was little local demand from industry to establish such a service. In sub-Saharan Africa, for instance, most collecting societies were state-run, either in collaboration with or through copyright offices within the Ministry of Culture. Many of these societies were established post-TRIPS with WIPO's assistance and have

very limited resources and activities. In some African countries with an active local music industry and market, such as Kenya, Nigeria, Senegal, and South Africa, there were also independent music collecting societies.

In most developing countries, the establishment of collecting societies was only achieved through collaboration and financial support of agencies such as CISAC, WIPO, and also by foreign collecting societies with local interests (i.e. Japanese societies in other Asian countries).[38] Across the developing world, the ratio of royalties received from other countries versus royalties paid to other countries weighed strongly in favour of foreign interests. That is, most royalties went abroad.[39]

6.2. Public Engagement

The degree of engagement by national legislatures in IP reforms and the responsiveness of the executive and legislative branches of developing country governments to interest groups strongly contributed to the variation in TRIPS implementation.

In general, parliaments in many developing countries do not subject laws proposed by the executive branch to the same degree of scrutiny as developed countries with a longer parliamentary tradition. There are, however, considerable differences among developing countries with respect to the strength and role of the legislative branch both formally (in their constitutions) and also informally (through the customs and cultures that influence how decisions are actually made).

The relative strength and autonomy of the executive branch, its discretionary power with respect to foreign policy, and its power to sign and ratify international agreements also vary widely. The constitutions of some countries provide that international treaties have 'direct effect' without the need for legislatures to debate and act. In these cases, TRIPS implementation generally required a series of administrative directives issued by the executive branch of government. In most developing countries, legislatures were required to ratify TRIPS and also to enact laws to give effect to the commitments contained therein. Importantly, TRIPS was just one of a suite of Agreements that were signed at the conclusion of the Uruguay Round. Faced with a document of over 1,000 pages, most developing legislatures proceeded swiftly with ratification with little discussion of the substance of the Agreements. Only later, as deadlines to actually implement TRIPS approached, did some parliaments become aware of the full extent and implications of the legal commitments in TRIPS.

Parliaments also impacted the timing of TRIPS implementation. In many countries, there was a considerable lag, from several months to over ten years, between the date that governments proposed new laws to implement

TRIPS and the date at which legislation came into force. Developing country governments frequently attributed delays in TRIPS implementation to the fact that the national legislative agenda was already full, dominated by other pressing legislative priorities, or that parliamentary debate was still underway.[40] In a number of cases, however, governments consciously left legislation to languish in slow parliamentary processes (sometimes as a form of passive resistance to implementing an agreement they perceived as illegitimate and contrary to their economic interests).[41]

In only a few countries, such as Argentina, Brazil, India, South Africa, and the Philippines, did some aspects of IP reforms related to TRIPS implementation provoke intense debate in national legislatures or parliamentary committees.[42] In Argentina, where the process of legislative reform began even before TRIPS was completed, the passage of TRIPS-compliant patent legislation in 1996 was preceded by some five years of substantive congressional debate on the issues.[43] In most developing countries, parliaments were marginal to the process of TRIPS implementation. When sixteen francophone African governments signed and ratified a new, updated regional IP agreement to bring them in line with TRIPS, for instance, their decision did not attract debate in any of their legislatures.[44] Indeed, governments in four of these countries were facing internal civil unrest at the time (Guinea-Bissau, Congo, Chad, and Côte d'Ivoire). Domestic political instability and civil wars also constrained the prospect for parliaments to debate IP reforms in Sierra Leone, Angola, and Sudan.[45] Even in countries where parliamentary debate did occur, such as India and the Philippines, most legislators lacked the expertise needed for substantive consideration of IP laws (as is also generally the case in developed countries such as the United Kingdom and the United States).

In some developing countries, lobbying by interest groups impacted the degree of parliamentary engagement in TRIPS implementation as well as executive branch decisions.[46] In the ideal model, bargaining with respect to government policy takes place among equally well-resourced and informed interest groups. In practice, however, there is a tendency for 'diffuse public interests' to be less well represented.[47] Such was often the case in the realm of IP decision-making. Where there was debate, well-organized, pro-IP industry lobbies dominated decision-making processes while consumer groups generally had a 'weak, diffused, virtually voiceless interest'.[48] Indeed, in developed countries, IP decision-making is cited as a classic example of regulatory capture by rent-seeking constituencies.[49] In the United States, for instance, government agencies such as the USPTO and the USTR are far more directly engaged with, and influenced by, the concentrated pro-IP interests of multinationals, local exporters, and local IP producers than by the diffuse interests of consumers, scientists, libraries, patients, schools, and elderly people in promoting access, at affordable prices, to knowledge and technologies.[50]

In the majority of developing countries, only a small number of interest groups actively expressed any opinion on TRIPS implementation or IP reforms. The limited activity of any IP constituency groups – from industry or civil society of domestic or international origin – presents an obvious constraint to the use of interest-group analysis in these cases. In countries with low technological development, such as Nepal and most sub-Saharan African countries, the absence of pro-IP lobby groups was not surprising. Just as supporters of stronger IP policy frequently lamented that developing countries lacked pro-IP constituencies to help governments see the benefits of stronger IP protection,[51] NGOs expressed regret about the low interest of local public interest groups in IP issues.

The absence of public debate on IP issues provides a critical part of the explanation for the limited use of TRIPS flexibilities, particularly in those countries where economic realities and social needs would lead us to expect countries to have taken advantage of them.[52] In many developing countries, the only significant domestic interlocutors governments encountered were national associations of patent and trademark agents and copyright lawyers, staff of national IP offices, and national legal scholars. Most IP offices lacked procedures for systematic or even occasional consultation with stakeholders from the business sector or others sectors. In some cases, sporadic consultations occurred with assistance from external donors or NGOs. As TRIPS implementation advanced, some governments established their own internal committees on IP issues, a handful of which were complemented by mechanisms for consultation with the private sector and experts (e.g. India, Brazil, and the Philippines). From 2004 to 2007, a growing number of governments established mechanisms to facilitate cooperation with private IP rights holders in the area of enforcement or to sporadic consultations.

In a subset of developing countries, interest group politics did significantly impact TRIPS-related IP reforms, namely those with distinctive civil society campaigns on aspects of IP policy, particular industry interests in favour low IP protection, or industry groups with interest in stronger IP standards and/or enforcement. Existing scholarly studies of Brazil, Mexico, Argentina, India, the Philippines, and South Africa highlight that interest groups both for and against stronger IP protection actively promoted their viewpoints on TRIPS implementation to parliaments and government agencies.[53] The impact of these groups was felt in several ways, including through intervention in legislative debates, lobbying of the executive branch and parliamentarians, and passive or active resistance to government measures to protect IP.

The agenda of public interest–oriented interest groups varied by country, but there were common threads. As global debates on IP policy expanded from biodiversity/agriculture to public health and then from education to access to knowledge, the range of civil society organisations and breadth of public debate grew. At the national level, some groups became powerful

domestic lobbies against stronger IP standards, sometimes defeating efforts to strengthen laws and in other cases slowing or weakening proposed IP reforms. In many countries, interest groups emerged in response to national social challenges (such as high rates of HIV/AIDS infection) or political concerns (such as the rights of indigenous people and the misappropriation of indigenous knowledge). In India, Brazil, and the Philippines, campaigns by civil society groups and NGOs began with concerns about biopiracy and an opposition to patents on life forms.[54] In Kenya and South Africa, well-organized civil society movements successfully lobbied their respective parliaments to pass or retain laws that promoted greater access to medicines.[55] In Brazil, India, and the Philippines, well-informed and highly organized domestic peasant-based social movements took to the streets even before TRIPS was concluded to express concern about IP protections on plants and to protect their rights to share, use, and sell seeds.[56] In some countries where government capacity was low and pro-IP interest groups were largely absent, even small NGOs were able to exert strong influence over parliaments. In Zambia, for example, a handful of NGOs and national experts, with the assistance of international advisors, developed a *sui generis* approach to the protection of plant varieties and traditional knowledge that remains under consideration in the national parliament.[57] Between 2002 and 2005, NGOs were also active in Bangladesh in pushing for a *sui generis* approach to plant variety protection and the draft law continues to be debated. In Bangladesh, lobbyists for its growing software and entertainment industries pushed for TRIPS-consistent copyright laws well in advance of its LDC deadline for implementation.[58]

In some developing countries, alliances formed between NGOs and governments. In Peru, government officials undertook a series of consultations with indigenous communities seeking input on a proposed national law to protect and promote indigenous knowledge. Meanwhile in Geneva, Peruvian diplomats worked alongside representatives of their indigenous community to use their draft national law to bolster their call for an amendment of TRIPS to defend indigenous knowledge against biopiracy.[59] Similarly, campaigns by public health activists helped South African officials to resist U.S. and industry pressures to revise their Medicines Act and alter their approach to TRIPS implementation (discussed in Section 6.4 below).[60]

Changes in technology and business opportunities also provoked the emergence of interest groups in some developing countries that lobbied in favour of stronger IP protection. In Argentina, Brazil, and India, generic drug industries lobbied governments on issues related to IP protection for pharmaceuticals even before TRIPS. But as economic opportunities emerged, such as the potential to conduct 'outsourced' research for multinational R&D companies, the views expressed by domestic industry diversified. In India, for instance, the growth of the domestic software and film industries spurred some companies to voice a preference for stronger and more effective IP protection

both at home and abroad.[61] Similarly in the area of public health, while some Indian generic manufacturers remained keen to keep IP protections for pharmaceuticals low, the growth of a domestic R&D capacity produced a new set of actors in favour of stronger IP protection, either for their own inventions or to provide the legal security necessary to attract contracts for research and clinical trials from foreign pharmaceutical companies.[62] In Brazil, where generic drug manufacturers had long favoured IP rules that would permit them to copy and adapt foreign technologies, the growth of domestic R&D capacity in biotechnology, information technology, and alternative fuels led some companies to favour stronger IP protection for their inventions and to attract research contracts from large multinationals.[63] Meanwhile, Bangladesh's generic drug industry maintained a clear view that the government should take full advantage of the country's LDC status to delay efforts to upgrade IP laws, particularly for pharmaceutical products.[64] In Ghana, a group of private sector actors took the initiative in 2005 to establish their own private sector advisory group on IP bringing together several key local business associations, including the Association of Ghana Industries (AGI), Ghana National Chamber of Commerce, and the Federation of Ghanaian Exporters.[65]

Variation in developing country responses to TRIPS also emerged from the broader politics of how governments made national trade policy. Most developing countries lacked systematic processes for gathering expert and stakeholder input into their trade policy. Where consultations on trade policy and bilateral FTAs did occur, export lobbies were the primary, and sometimes the only constituency, that were organized to express clear views and recommendations.[66] Part of the reason for TRIPS-plus trade agreements was that domestic governments responded more to the targeted interests of market access lobbies than to the diffused, less-organized constituencies interested in cheaper technologies.[67] Few countries assessed how the trade-offs between deals that prioritize market access over autonomy in domestic policy regulation would impact their core development priorities. (See Section 6.2. below.)

A final aspect relevant to how interest group politics generated variation in TRIPS implementation was the relationship between 'national' and international interest groups. The perspectives expressed by many local interest groups in developing countries were influenced by international counterparts keen to advance their agendas on the national political stage. As noted earlier, international NGOs, technical assistance providers, and foreign multinational corporations were all active within countries, financing local affiliates, IP attorneys, and legal scholars to work with or for them. The line between national and international interest groups was further blurred because many apparently 'national' IP interest groups were in fact international actors operating within national borders, engaging directly in national politics, and pursuing legal challenges in national courts. To build constituencies in favour of

stronger IP protection, pro-IP companies and industry associations established subsidiaries, affiliate national associations, and networks of IP professionals in developing countries. The Business Software Alliance (BSA), for example, created programmes in more than eighty countries worldwide to promote the interests of the commercial software industry.[68] In Argentina, Software Legal was created, representing several software manufacturers including Adobe, Symantec, and Microsoft. The International Confederation of Societies of Authors and Composers (CISAC) helped create sister organizations at the national level in developing countries such that it now boasts members in over 100 countries.[69] Similarly, AIPPI's membership expanded to include groups from some twenty-one developing countries and also established an Arab regional group.[70] While the community of IP attorneys in developing countries was generally too weak to engage directly in TRIPS debates, its members nonetheless served as the local partners and allies for international actors.[71] In some countries, local IP attorneys and scholars provided advice to their governments regarding TRIPS implementation, often while simultaneously employed by foreign companies, NGOs, international law firms, or IOs to represent their interests. In Chile, for instance, several national IP law firms involved in providing advice on IP matters listed major pharmaceutical companies such as Pfizer as their core clients.[72] In Colombia, a member of the governments' IP negotiating team for its U.S. FTA later resigned to work as a legal advisor for Pfizer.[73]

In many countries, the most energetic NGOs active at the national level were direct subsidiaries of international NGOs or networks. While MSF led its prominent Campaign for Access to Essential Medicines from offices in Geneva and Paris, its subsidiary organizations in over fifty developing countries served as the foot soldiers in its campaign. The Oxfam network also relied on offices in over thirty developed and developing countries to lobby particular governments and promote public campaigns. Third World Network (TWN) similarly worked with its regional partners (such as the Africa Trade Network) to provide technical advice and information to aid campaigns and government decision-making at the regional and national level.[74] GRAIN, one of the key international NGOs active on IP issues related to agriculture, worked with offices in the Philippines and in West Africa to support local NGOs lobbying in those countries. The Health Action International movement harnessed its global networks of consumers, NGOs, health-care providers, academics, and individuals in Africa, Asia-Pacific, Europe, and the Americas to promote the use of TRIPS flexibilities in favour of increased access to essential medicines. In many cases, the existing location of regional and national offices influenced the geographic focus of NGO campaigns. In addition, international NGOs worked to build the capacity of partners in countries perceived to be particular 'hot spots' – either because of the threat of TRIPS-plus laws or because of the potential to secure precedents for the use of TRIPS flexibilities. NGOs with

no national or regional offices in developing countries – such as the Rural Advancement Foundation International (RAFI) (now called the Action Group on Erosion, Technology, and Concentration (ETC)) and CPTech were able to be active within developing countries through alliances with broad networks of other NGOs and civil society movements.

Importantly, many of the NGOs, civil society movements, think tanks, and local experts engaged in TRIPS-related campaigns within developing countries had links to transnational campaigns to influence not just national IP reforms, but also global IP regulations. NGOs such as the Treatment Action Campaign in South Africa and the Kenya Coalition for Access to Medicines were deeply engaged with broader international networks of NGOs, some of which were in turn included as part of their national coalitions.[75] National and international NGOs frequently worked together to develop political strategies, share information and expert advice, and advance joint advocacy efforts (such as 'sign on letters' to government officials). In November 2003, for example, the Uganda Coalition for Access to Essential Medicines (which involved a broad range of international and national NGOs working on human rights, consumer issues, public health, and church groups) worked together with CPTech to draft a letter to the Minister of Health concerning legal mechanisms for expanding access to generic medicines in Uganda. Developing country NGOs often provided the 'on the ground' information that global campaigners needed to secure the attention of the international media. Conversely, national NGOs generally relied heavily on technical and legal inputs from an international network of experts on TRIPS flexibilities. Collaborations with international think tanks were also important. In Africa, for example, the Rome-based International Plant Genetic Resources Institute (IPGRI) harnessed the support of range of international donors (including from developed country government aid agencies) to convene experts from across the African region to discuss *sui generis* options for meeting TRIPS plant variety protection requirements.[76]

6.3. Government Coordination

The third national factor that impacted variation in TRIPS implementation was the degree of government coordination. Several aspects of coordination were relevant, including coordination between national officials and diplomats that represented their external face, and coordination in respect of the oversight of regional organizations.

6.3.1. *Internal Government Coordination on IP Decision-Making*

At the time IP laws were revised to meet TRIPS commitments, less than ten of the WTO's developing country members had a clear process for bringing

together relevant ministries to discuss and coordinate IP decision-making (e.g. Brazil, India, Peru, Senegal, and South Africa). Even where coordination process existed, IP offices usually prevailed. In Venezuela, for example, the existence of a multi-agency committee to focus on the implementation of the entirety of WTO commitments did not result in a substantive discussion on the appropriate national policy response to TRIPS obligations. Instead, TRIPS implementation was seen as the competence of the IP office; a perception that the IP office was keen to protect.[77] While many governments established multi-agency processes to respond to the entirety of their WTO obligations, most of these efforts took place only after TRIPS-related legislative reforms had been passed – and few resulted in a collaborative approach or substantive debate about how best to respond to TRIPS obligations specifically. After TRIPS reforms, some countries, such as Colombia, established internal processes to consider IP policy issues. Such initiatives were often taken in response to U.S. and EU pressures to improve IP enforcement or to feed into bilateral trade negotiations, rather than to guide TRIPS implementation.

The distinctive internal cultures, priorities, and constituencies of different parts of national governments impacted the prospect for coordination on TRIPS implementation. In the Philippines, a legal authority noted that the perspective of the IP office was 'focused solely on efficient IP administration and greater standards of protection', thus limiting its ability to anticipate or communicate to policymakers 'the adverse impact of such policies on other sectors such as health'.[78] While the public health priorities of health ministries sometimes led them to favour the use of compulsory licensing, the pro-IP perspective of IP offices made them predisposed to guarding the rights of patent holders. Trade ministries were also cautious about the use of compulsory licensing as they were most sensitive to the fact that key trading partners may respond negatively. Similarly, ministries responsible for culture or education sometimes had distinctive views on the costs and benefits of IP protection to the achievement of their respective priorities.[79]

The interplay of government institutions within developing countries also affected TRIPS outcomes. The term of patent protection that rights holders acquired in a given country sometimes depended on the time required for regulatory and marketing approval, and on the country's approach to prequalification of generic drugs for which patents already existed. In some cases, the use of TRIPS flexibilities depended on the initiative taken by non-IP agencies within governments. In Malaysia and Thailand, for instance, it was the Ministry of Health that initiated requests for the grant of compulsory licences. In South Africa, the Medicines Act explicitly grants the health ministry the right to issue compulsory licences for public health purposes.[80] Also in South Africa, the Competition Commission played a role in how TRIPS flexibilities were used. In 2003, a coalition of South African individuals, trade unions, and civil society groups lodged a complaint before the South African Competition

Commission against GlaxoSmithKline (GSK) and Boehringer Ingelheim.[81] Upon finding the defendants guilty of excessively pricing their products and refusing to grant generic licences, the Commission announced its intention to seek a compulsory licence to allow all qualified suppliers to supply public and private markets.[82] Ultimately, an agreement was signed between the AIDS activists and the pharmaceutical companies that reduced the price of medicines.[83] In November 2007, South Africa's Treatment Action Campaign filed a further complaint before South Africa's Competition Commission, this time against Merck for alleged refusal to licence the HIV/AIDS drug Efavirenz on reasonable terms.[84]

In some countries, there were sporadic debates among IP offices and ministries of health, culture, agriculture, and industry regarding the use of particular TRIPS flexibilities (e.g. Columbia, Peru, and Thailand). But it was governments with established processes for internal coordination that were best able to resist external pressures and to advance a tailored approach to TRIPS implementation.[85] Among developing countries, India was the country with one of the longest histories of internal coordination and, relative to other developing countries, and stands out for its strategic and tailored approach to TRIPS implementation. In India, the Ministry of Commerce has overall responsibility for WTO, including TRIPS implementation. In 1997, a Coordinating Group of Secretaries on all WTO matters was established by the Prime Minister and is chaired by the Commerce Secretary. Starting in 1996/7, the Commerce Ministry initiated one of the most comprehensive consultation processes among developing countries on TRIPS, involving industry and trade organizations, NGOs, research and academic institutions, political parties, and parliament. Consultations with NGOs and civil society were particularly important in the process of designing India's Plant Variety Protection and Farmers' Rights Act. In addition, the Commerce Minister constituted an Advisory Committee on International Trade under his own chairmanship. The Committee comprises industrialists, economists, NGO representatives, experts from research institutions, and former public servants with an expertise in WTO matters. This committee formed a subgroup to address TRIPS matters and to consider specific issues and proposals for formulating India's positions in the WTO.[86]

In Brazil, there was also a formal collaborative relationship between the patent office and the health ministry. (The grant of patents for pharmaceutical products or processes must receive the prior approval of the Brazilian Sanitary Surveillance Agency (ANVISA).)

From around 2002 there was growing recognition by developing countries of the need to improve internal coordination among government agencies. In 2002, Brazil bolstered its internal coordination by establishing an Interministerial Group on IP (IGIP), which draws together all relevant ministries and agencies, including the ministries of agriculture and supply; science and

technology; culture; development, industry, and foreign trade; justice; foreign affairs; health; and the Brazilian patent office. Representatives of others parts of government and experts were also invited to participate in the inter-ministerial meetings. The Committee's tasks included advising on pending legislation on IP matters, giving guidance for multilateral and bilateral negotiations regarding IP, and promoting inter-ministerial coordination on IP matters. In 2002, Costa Rica set up an Inter-Ministerial Committee on IP matters with representatives from the Ministry of Justice, Ministry of Foreign Trade, Public Ministry, Customs Administration, and the Judicial School.[87] From 2001, Egypt also committed to greater coordination on trade and IP matters. The Ministry of Trade and Industry established a Central Department for WTO matters and a Coordination Committee, which gathers representatives of all relevant ministries and agencies and includes a subcommittee on TRIPS. Egypt's positions on ongoing topics of WTO negotiations, such as TRIPS and public health, are determined in these committees.

6.3.2. *Coordination Between the External and Internal Faces of Government*

Weak coordination and communication between delegates stationed in Geneva (with whom the greatest political technical expertise about TRIPS often resided) and their counterparts in capitals meant that many national IP offices were not well informed of political debates underway at the international level or of the options to integrate TRIPS flexibilities into their laws. Interviews with the heads of several IP offices in francophone Africa, for example, revealed that they were unaware that their government's national delegates to the WTO in Geneva had secured in 2005 a seven-and-a-half-year extension to their TRIPS implementation deadlines.[88]

In many developing countries, the traditional chain of delegation from capitals and diplomats (whereby diplomats act on instructions from their national capital) was reversed. Instead, expertise, policy direction, and leadership on matters related to TRIPS implementation came from Geneva. Lacking input from national capitals, developing country diplomats frequently turned to NGOs and international experts to test and galvanize ideas about options in international negotiations and with respect to TRIPS implementation. In the case of Senegal and Zimbabwe, for example, diplomats based in Geneva played a critical role with NGOs to raise awareness of the public health implications among national trade and health ministries of the different approaches to TRIPS implementation. Collaborations forged among diplomats, NGOs, representatives of IOs, and experts at the international level were particularly important in promoting the adoption of a *sui generis* approach to plant variety protection in several African countries. The Philippines provides a further example. A Geneva-based diplomat prompted officials in the national capital

to consider revising the national IP law to shift from a national exhaustion regime to an international exhaustion regime that would provide greater opportunity to import cheaper technologies.[89]

Having observed that efforts to help developing countries coordinate at the international level were not necessarily improving the quality of decisions related to TRIPS implementation, some international NGOs made intentional efforts to serve as a 'bridge' between international and national NGOs, experts, and government officials. The International Centre for Trade and Sustainable Development (ICTSD), the South Centre, and the Quaker United Nations Office (QUNO) each worked to link actors involved in TRIPS debates in Geneva with those engaged in TRIPS implementation at the national level. To promote greater synergy between negotiations in Geneva and national-level decision-making, they organized travel for national experts and stakeholders to Geneva, and financed travel for Geneva-based diplomats to contribute to substantive discussions in their home countries. Through meetings and seminars in Geneva, national capitals, and at the regional level, they worked to facilitate communication and collaboration among government officials and stakeholders they hoped would promote development-oriented IP reforms.[90]

6.3.3. *Coordination of External IP Relations*

A further aspect of coordination that contributed to variation in TRIPS implementation concerned how national officials interacted with the multiplying number of international processes in which IP was discussed, the many different agencies within developed country governments with interests in IP matters, and the widening number of suppliers of IP-related capacity building. The challenges of coordination in these areas were exacerbated by the fact that different government agencies often took the lead on particular processes and relationships. While health ministries interacted with the WHO, trade ministries were responsible for the WTO, and IP offices were the primary interlocutors with WIPO and developed country IP offices. Beyond coordination constraints, there were also sometimes competing objectives within governments. In many cases, IP offices supported the push for strengthened IP protection and were not keen to fight at the international level, particularly where they were reliant on significant technical and financial support from donors such as WIPO. In some countries, trade and/or health ministry officials were more willing to take a stand to defend TRIPS flexibilities or to push for fairer rules. But most governments were unable to effectively coordinate the various agencies responsible for relationships with the multiplying array of external actors and processes. The 'external face' of many developing countries was thus fragmented.[91]

The notable exception in this respect was Brazil – the country that exhibited the highest degree of coordination domestically on IP policy matters and

that also achieved the greatest coordination of its external IP relations. A core explanation for Brazil's integrated approach to global IP debates was the role and strength of its Ministry of Foreign Affairs,[92] both in terms of its power within the government and the calibre of its professional staff. In most developing countries, ministries of Foreign Affairs did not usually play a significant substantive role on IP issues.[93] In Brazil, the Foreign Affairs Ministry had the monopoly on the representation of Brazil in international fora and on IP negotiations. The Ministry also had the prime role within Brazil in the articulation of Brazilian positions on trade and IP matters. While Brazil's National Industrial Property Institute (INPI) is charged with offering comments regarding the advisability of signing, ratifying, and terminating conventions, treaties, accords, and agreements on industrial property, Brazil is one of only one of handful of developing countries that designated the Ministry of Foreign Affairs the focal point under Article 69 of TRIPS.[94]

In 2001, the Brazilian Ministry of Foreign Affairs also consolidated its efforts to ensure the coherence of its national and international IP strategies, establishing an independent unit to follow global IP-related matters and to contribute towards a more coherent approach to IP issues at the multilateral, regional, and bilateral level. More generally, Brazil places foreign affairs officials within each government ministry to manage its external relations. The result was that Brazil not only spoke with a far more unified voice across international processes than most other developing countries, but was also able to better manage the range of input, advice, assistance, and capacity-building from external sources.

Drawing on the Brazilian experience, several other countries have established stronger coordination processes. In 2007, for instance, the Egyptian Prime Minister approved a proposal by the Foreign Ministry to establish a committee, steered by the Foreign Ministry, to coordinate on all non-WTO IP issues at the international level (including matters related to WIPO, CBD, and UNESCO) and to maximize benefits and coherence of technical assistance provided particularly by WIPO.

The fragmented way the external face of developing country governments interacted with international processes and donors had particular consequences for variation in TRIPS implementation. In many developing countries conflicting understandings of which IP policies would aid their national development and which would be viable under TRIPS emerged.

The way governments organized their interactions with foreign donors had particular implications for TRIPS implementation. As noted in Section 6.1.1, IP offices often had direct relationships with bilateral and multilateral donors in respect of IP-related capacity-building. Given the limited salaries and professional prospects for staff in the IP offices in many developing countries, the influence of donors was often not just institutional but personal. Access to training, seminars, and international conferences provided attractive

incentives for many developing country IP officials to advance the agenda of donors in their countries. They were also tools for the continual socialization of officials into the international community of IP professionals persuaded of the benefits of stronger IP protection.[95] The potential for such influence was particularly high in countries where national oversight of IP offices was weakest.

Decisions regarding TRIPS implementation were often influenced by how government officials charged with foreign and trade policy viewed the importance of IP issues among other national priorities and what behaviour they perceived would be rewarded by donors, companies, and trading partners. Depending on the broader issues at stake (trade, security of foreign aid), officials sometimes perceived compliance with the preferences of foreign powers and donors on IP issues as a small price to pay. Repeated participation by officials in international discussions on IP issues served to reinforce beliefs regarding the benefits of IP protection and what kinds of policy decisions were necessary in order to be considered a 'forward-looking' government, worthy of success in the global economy. Conversely, the determination of national officials critical of stronger IP protection was bolstered by repeated interaction with pro-development and public interest activists and experts at international conferences and negotiations.

6.3.4. *Coordination and Regional IP Arrangements*

The way national officials managed relations with regional institutions made a critical difference to how TRIPS implementation proceeded. Well over a third of the WTO's developing country members adopted a regional approach to the administration of their IP systems and to TRIPS implementation. The timing of implementation and the use of TRIPS flexibilities were linked to their participation in these regional IP arrangements. Over thirty African countries are members of regional intellectual property organizations. Five Andean countries also approached TRIPS implementation through a regional arrangement, as did members of the Gulf Cooperation Council (GCC). The scope and structures of these regional arrangements differed considerably.

The Andean countries approached TRIPS implementation with significant expertise within the region on both the policy and legal dimensions of IP. Together, Colombia, Bolivia, Ecuador, Peru, and Venezuela built their approach to TRIPS implementation on several decades of cooperation within the context of the Andean Community on matters of economic regulation broadly and on IP specifically.[96] Over the history of the Andean Community, the perspective of members on the legal status of regional decisions and their relationship to national laws varied. In principle, and according to the Andean Court, regional Andean Community 'decisions' serve as supranational law. Regional decisions may be complemented by national laws and

higher national standards, but in cases of conflict, such as on IP matters, the regional decisions prevail.[97] In practice, however, some members supplemented regional laws with national laws and at various points in the history of the Community questioned the authority of the regional court.

In 1993, the Andean countries undertook a package of reforms that reflected their commitment to liberalizing their economies.[98] At that time, even before the TRIPS negotiations were concluded, the Andean countries adopted Decision 85 (which brought their industrial property regime largely in line with TRIPS) and Decision 351 (which established common provisions on copyright and neighbouring rights). The Andean countries faced considerable pressure from the United States to match the 'state-of-the-art' IP standards that Mexico had recently adopted as part of the NAFTA negotiations. At the time of Decision 85, pressure from national pharmaceutical industries made it politically impractical for the governments to pass such IP reforms in their national legislatures. A decision at the regional level, on the other hand, would automatically have an effect at the national level. Even though Decision 85 brought in stronger IP standards, the Andean countries did not, however, abandon altogether their reformist agenda in the area of IP and industrial strategy.

In 2000, the Andean Community adopted a further decision (Decision 486) on industrial property to meet their commitments under TRIPS. They did so with a clear set of policy goals in mind. Decision 486 made considerable use of the range of TRIPS flexibilities and was complemented by additional IP-related law to regulate access to genetic resources. The Andean countries also adopted a *sui generis* law for plant variety protection, adapted from the approach advanced by UPOV 1978. These Decisions were complemented by an earlier Decision 291, taken in 1991, which sets out provisions regarding foreign investment and the treatment of foreign trademarks, patents, licensing agreements, and royalties.[99]

Subsequently, as Andean governments changed, so too did national views on the status of regional decisions. Several countries joined UPOV 1978 and also supplemented the Andean decisions with their own national laws. In 2005, the Andean countries' collective approach to TRIPS implementation was further fragmented by bilateral FTAs with the United States. After efforts to negotiate a U.S.–Andean FTA collapsed, Peru and Colombia proceeded individually. In each of their FTAs, they committed to higher IP standards than those in the Andean Community decisions. Their subsequent effort to amend the regional Andean framework to incorporate these changes met considerable resistance from other members.[100] Indeed, Venezuela's withdrawal from the Andean Community in 2006 was attributed by its President in part to this pressure.[101] With the entry into force of the U.S–Peru FTA in 2007, the status of the Andean Community's decisions was uncertain. In order to promote consistency between the regional decisions and its commitments

in the FTA, Peru submitted a proposal to revise Decision 486 on industrial property, but was rebuffed by other members of the Andean Community, such as Bolivia, and criticized by NGOs in the region.

In Africa, the technical and institutional capacity of national governments to properly monitor and guide the work of their two regional IP organizations was limited. While regional delegation helped to address the challenges of limited capacity and resources, the flip side was a failure to build national technical or institutional capacity on IP or to embed IP decision-making in broader national policymaking processes. The result was a scarcity of substantive policy discussion on IP issues or TRIPS implementation within national governments and minimal oversight of the regional organization on technical, but socially significant, matters.

In francophone Africa, the African Intellectual Property Organization (OAPI) is the most unified and comprehensive of the three regional frameworks. In 1999, the sixteen members of OAPI revised their core legal instrument to comply with TRIPS. When it came into force in 2002, the Bangui Agreement became the national law for all its member states. (Chapter 7 explores TRIPS implementation in this region, illustrating the ways in which regional delegation increased the vulnerability of governments with weak national capacity to pressure from actors advocating stronger IP protection).

In anglophone Africa, regional cooperation has been underway for several decades. ARIPO's sixteen members have two core protocols, the Harare Protocol on Patents and Industrial Designs adopted in 1982 and the Banjul Protocol on Marks adopted in 1993.[102] In 2000, ARIPO's mandate was expanded to include activities related to traditional knowledge. In 2002, this mandate grew further to include copyright, genetic resources, and expressions of folklore. Importantly, ARIPO's approach to regional cooperation was such that governments still needed individually to implement TRIPS through their own national laws. ARIPO was, however, the common industrial property authority for its members. In this capacity, the ARIPO Office received and processed patent and industrial design applications on behalf of its members according to the rules and standards of patentability set out in the Harare Protocol. In practice, these activities gave the ARIPO office considerable influence over the scope of IP rights protected by its members. Formally, the IP rights ARIPO grants are issued as independent rights by each member state. In principle, any patent approved by ARIPO can be rejected by any member on the basis of their own national laws.[103] In practice, however, no national IP office has ever challenged an ARIPO patent.[104] As in francophone Africa, the delegation of technical decision-making to the regional level meant that few countries had the capacity at the national level to critically review patents granted.[105]

In 1992, the six member countries of the GCC agreed to a Unified Patent Law (Bahrain, Kuwait, Saudi Arabia, Oman, Qatar, and the United Arab Emirates). The Law provides for a combined patent office, based in Saudi

Arabia, which opened for applications in October 1998. In 2000, the GCC adopted amendments to the unified law, drafted in consultation with WIPO, to fulfil TRIPS commitments. With little national expertise or institutional experience of IP protection, most Arab WTO members lacked TRIPS-consistent laws in other areas when their transition period expired. In the absence of regional coordination, upgrading of trademark and copyright laws proceeded slowly.[106]

Beyond the four major regional IP arrangements among developing countries, the Association of South East Asian Nations (ASEAN) also forged cooperative agreements on IP and pursued joint capacity-building activities in areas such as administration and enforcement (including the ASEAN Framework Agreement on Intellectual Property Cooperation and a regional 'Intellectual Property Rights Action Plan' 2004–10).[107] In addition, the five members of Mercosur signed a 1995 Protocol of Harmonization of Rules on Intellectual Property with respect to trademarks and geographical indications, as well as a Protocol on the Harmonization of Industrial Designs, and further committed to work on harmonizing copyright rules.[108] Countries in the Caribbean region also included IP commitments as part of their CARICOM regional integration agreements (see Article IX of Protocol III), but these have not yet been ratified by all members.[109]

6.4. Mini Studies of Variation

National political factors intervened to diminish or amplify international pressures on developing control regarding implementation. In this section, I use several mini case studies to highlight how the interplay between global IP debates, international pressures, and national politics played out on the ground. The first explores TRIPS implementation in the context of TRIPS-plus trade pressures, noting that TRIPS-plus reforms often resulted, but not always. The second case reviews the decisive role of bilateral technical assistance in promoting a TRIPS-plus approach to TRIPS implementation. The third case highlights the resistance of South Africa to a suite of economic and ideational forces in respect of its TRIPS implementation. The fourth case sets out the variation in the extent to which developing countries used TRIPS flexibilities regarding compulsory licences. It shows how the degree of international pressure against their use varied and the responses of developing countries differed.

6.4.1. *TRIPS-plus Trade Pressures: Reform and Resistance*

A survey of TRIPS-plus FTAs between the United States and developing countries reveals that while similar in many respects, the terms of the FTAs differed

(Appendix 6 compares the TRIPS-plus provisions in a selection of U.S. FTAs).[110] Part of the explanation for this variation was that U.S. interests differed by country. A review of the letters of notification from USTR to the U.S. Congress highlights that while the United States approached the negotiations with a common template, its top IP priorities in particular countries varied depending on its commercial interests and changed over time.[111] In Morocco, for example, USTR stated its main IP priorities as stronger protection of patents and undisclosed information. The United States added a strong focus on optical disc protection in its FTA with Singapore, and a focus on Internet service provider liability in the case of Chile (neither of which are covered by TRIPS). Importantly, even on those IP issues where the United States appeared to have sought the same provisions across countries with equal vigour (such as extensions of the term of patent rights on pharmaceutical products through linkages to exclusive marketing rights), it did not always succeed in equal measure at achieving this goal.

Beyond the particularities of U.S. IP interests in each country, national political factors accounted for some of the variation in FTAs. The internal organization of developing country governments and their technical capacity impacted the way FTA negotiations proceeded, the final deals to which governments committed, and how Agreements were subsequently implemented. In countries where the IP terms of FTAs were particularly strong, the limited public accountability of governments also contributed to this outcome. In Jordan, for instance the government signed and ratified its TRIPS-plus FTA under the executive authority of the monarchy in a two-year period in which Jordan's parliament was suspended, precluding opportunities for substantive public debate.[112] In Morocco, on the other hand, attention from national and international NGOs sharpened the government's attention to IP issues in the FTA negotiations and resulted in the first side letter on public health.[113] The FTA remained, nonetheless, TRIPS-plus and Morocco, like other FTA countries, swiftly moved towards implementation, twice amending its IP laws between 2004 and 2006 to comply with TRIPS rules and introduce additional IP provisions required by the 2004 FTA.[114]

In Chile, the technical competence of government negotiators on IP matters, internal government coordination, and a clear set of negotiating objectives resulted in an FTA that, while still TRIPS-plus, included less onerous provisions in some areas than other FTAs.[115] In the case of Colombia and Peru, tensions between the trade ministries, IP officials, and health ministries, and also between negotiators and the country's respective Presidents contributed to FTAs that were more TRIPS-plus than the U.S.–Chile FTA. In Peru, a political struggle arose over who should lead the IP component of the FTA negotiations – the trade ministry or the IP office. As the Peruvian trade ministry pursued its market access agenda, both the health and IP agencies commissioned impact assessments of the FTA (the first of their kind by any

developing country). The studies provided evidence of risks to national public health and to innovation posed by stronger IP commitments, and advocated a cautious approach to the FTA negotiations.[116] Nonetheless, the Peruvian President made a series of high-profile statements during the negotiations assuring the United States that the conclusion of an FTA was his top political priority.[117] Similarly in Colombia, internal debates within government and intervention by the President, who similarly declared his intention to ensure the conclusion of an FTA with the United States, undermined the negotiating power of officials charged with IP negotiations.[118] To the frustration of USTR, the Colombian IP officials expressed a series of public concerns about the proposed terms of the FTA. When the Colombian government was pressured to drop one of its leading advisors, Carlos Correa (a renowned international IP expert), from its negotiating team, the national press took up the issue. In response, the government published a statement that Correa would remain on the team in an advisory capacity.[119] As concern from local public health advocates and generic drug manufacturers intensified, both the Colombian President and the trade ministry assured the public that they had nothing to fear from the FTA.[120] Convinced that the benefits of a trade deal would outweigh the costs of TRIPS-plus provisions, the President declared that ultimately the FTA deal would be closed politically, not by technical negotiators.[121] Believing they would then be wasting their time to pursue further technical negotiations, the IP negotiating team collectively resigned, issuing a public statement in the major national newspaper.[122]

In several cases, the TRIPS-plus provisions of FTAs complicated the ratification of the agreements. In the case of the U.S. FTAs with Peru, Colombia, Morocco, and several Central American countries, concerns in national legislatures about IP provisions delayed ratification of the signed agreements and thus their entry into force. In Costa Rica, the ratification of the FTA was put to a referendum in 2007, which the government only narrowly won.[123] Debates at the national level were intensified by the fact that, under the terms of these FTAs, the United States stipulated that it would not ratify the agreements until after the other party had done so. Even then, the agreement would only enter into force when the U.S. President was satisfied that the other party had implemented key aspects of the agreement in line with U.S. demands.[124] As a result, after formal negotiations had concluded, negotiations continued through the process of implementation. Countries often faced pressure to introduce IP reforms beyond those agreed to in the FTAs in order to satisfy the U.S. In Chile, for example, TRIPS-pressures during the implementation process generated debate in the national legislature, government agencies (such as those concerned with health and education), and from a range of public interest groups.[125] With the shift to a Democratic majority in the U.S. Congress in late 2006, USTR was instructed to reopen the agreements

with Peru and Colombia to provide for improved environment and labour provisions, and also to make some of the IP components less stringent.[126]

The case of Guatemala provides a clear example of the inter-section between bilateral FTA negotiations, capacity-building, and national political dynamics. In its negotiations with the United States on the Central American Free Trade Agreement (CAFTA), the Guatemalan government faced pressure to adopt new standards for the protection of pharmaceutical test data. In April, a consultant from the U.S. pharmaceutical industry, hired by USAID, drafted a new law that granted originator pharmaceutical companies five years of data exclusivity. When the law was passed,[127] mobilization by civil society groups and a growing indigenous majority in the Guatemalan Congress forced the repeal of the law in November 2004. A new decree was put in place that regulated test data in a way that was consistent with TRIPS but which was designed to better protect public health. To reverse this decision, the United States used the recently concluded CAFTA as leverage. In January 2005, the U.S. Embassy to Guatemala released a fact sheet stating that the new law 'gives the U.S. Congress the impression that Guatemala is not serious about complying with commitments it made in the CAFTA. This could result in CAFTA not being ratified by the U.S. Congress, where a close vote is expected'.[128] U.S. pressure prompted the Guatemalan government to publish a statement regarding the implementation of the law, and then to again propose new legislation that fulfilled the U.S. expectations.[129] Fierce opposition from Guatemalan generic drug manufacturers, civil society groups, and international NGOs such as MSF, delayed the passage of this law. Ultimately, however, a powerful group of legislators supported by lobbying from export industries determined to expand their access to U.S. markets prevailed and the law was passed in July 2006. At that time, USTR announced that Guatemala had complied with all the legislative changes necessary for DR-CAFTA to become effective and U.S. Congress ratified the FTA.

Significantly, not all developing countries that embarked on FTA negotiations with the United States succumbed to TRIPS-plus pressures. In the negotiations for a Free Trade Area of the Americas (FTAA), Brazil's steadfast stance against the IP negotiating text advanced by the United States was a core reason for the breakdown of FTAA talks.[130] In the U.S.–Andean negotiations, skilled Andean negotiating teams presented detailed IP proposals and counter-proposals to those put forward by the United States. The negotiating team received *pro bono* advice from leading international IP experts and from the WHO amongst others, frustrating the U.S. negotiating team as it became locked in drawn-out technical negotiations.[131] After several years of U.S.–Andean FTA negotiations, opposition from newly elected parliamentary majorities of indigenous peoples and advocacy by NGOs prompted both Ecuador and Bolivia to walk away from a deal.[132]

In Thailand, FTA talks spurred public protests regarding potential impacts on food security and on public health. An outcry from health advocates and human rights activists on the IP aspects of the negotiations prompted the national human rights commission to conduct the first 'human rights impact assessment'[133] of any proposed U.S.-FTA and ultimately led Thailand's trade ministry to call for a suspension of negotiations pending more reasonable terms.[134] Before the FTA negotiations, Thailand had already been pushed by U.S. diplomatic pressures to change its provisions on data exclusivity in ways that would slow the availability of cheaper generic drugs.[135] In the FTA negotiations, the United States pushed for authorities to grant pharmaceutical companies 'compensatory' patent extensions in the case of unreasonable delays either in granting patents or marketing approval for drugs. The U.S. also sought five years of data exclusivity to prevent generic drug manufacturers from using clinical trial data, and it called for more specific language on the terms and conditions under which Thailand would issue a compulsory licence.[136]

Negotiations between the United States and Southern African Customs Union (SACU) (comprising South Africa, Zambia, Namibia, and Lesotho) similarly faltered. The SACU countries became the first group to proceed with a bilateral trade arrangement with the United States that did not include an IP chapter or TRIPS-plus commitments.[137] In this case, the strength of the South African parliamentary process and strong civil society engagement on issues related to public health lent the government significant capacity to resist TRIPS-plus pressures.[138] The need for the South African government to account to powerful domestic constituencies was clearly visible to U.S. negotiators and helped SACU countries to recast the terms of their negotiations.[139]

6.4.2. *Capacity-building in the Philippines*

In the Philippines, capacity-building was the critical vehicle for international pressures in favour of TRIPS-plus implementation in the area of plant variety protection. In 1997, the U.S. government forged a broad technical assistance agreement with the government (called Accelerating Growth, Investment, and Liberalization with Equity – AGILE).[140] Through AGILE, USAID subcontracted a U.S.-based consulting firm, Development Alternatives, Inc. (DAI). Among DAI's activities was the task of drafting and promoting specific legislative reforms in the area of IP, namely the adoption of UPOV 1991-style plant variety protection.[141] Since 1995, farmers groups and civil society in the Philippines had been working to advance a *sui generis* approach to meeting TRIPS obligations in that area.[142]

DAI staff placed in the national office were responsible for developing plant variety protection legislation and lobbied members of the Philippines legislature. DAI's website provided a detailed history of its activities: 'DAI (. . .)

is working with the Department of Agriculture, redrafting PVP legislation to make it compliant with UPOV standards'. DAI also stated that it was 'advocating for the PVP law in Congress' and took 'key officials and congress persons to Argentina and the United States to learn about PVP programs and legislation'. It further stated that in anticipation of the passage of the law, its 'staff have been preparing the ground for its implementation by helping the Department of Agriculture develop rules and regulations, and establish the PVP board, which is responsible for registration and enforcement of breeders' rights'.[143]

Through DAI, the U.S. government was able to intervene indirectly in the domestic political process in the Philippines. Combined with the lobbying efforts of companies such as Pioneer Hi-Bred and Monsanto, this capacity-building effort ultimately overwhelmed the debate in the Philippine parliament and the backlash from civil society. When the Philippine Plant Variety Protection Act was passed in 2002, it was essentially (albeit still not fully) compliant with UPOV 1991. In late 2007, the Philippines was in the final stages of accession to UPOV 1991.[144]

6.4.3. *The Offensive Against South Africa*

From 1997 to 1999, the South African government faced intense international pressure regarding TRIPS implementation when the United States, Europe, and a group of multinationals unleashed a multifaceted campaign against provisions in its national laws regarding parallel imports and its policies related to generic drugs. The stand-off involved spurred economic threats related to foreign aid and trade, Special 301 surveillance, a law suit from pharmaceutical companies, lobbying, and intense media scrutiny. A range of different parts of the U.S. government and business sectors became involved along with civil society actors. Within South Africa, the business sector, NGO activists, parliamentary committees, as well as the ministries of health, trade, and the office of the President were engaged. Simultaneously, debate underway at the WHO impacted the global politics of the issue and the WTO procedures for review of TRIPS also came into play. The following abbreviated timeline of events highlights how the interplay between global IP debates, international pressures, and national politics unfolded.[145]

In 1997, South Africa proposed several amendments to its Medicines and Related Substances Control Act that would allow for parallel imports of pharmaceutical products to help reduce the cost of essential medicines. The U.S. government's first concerns about South Africa's implementation of TRIPS emerged in response to concerns raised by the head of PhRMA and the Chairman of the U.S.–South African Business Council that the proposed amendments would have 'grave consequences for not only the US pharmaceutical industry, but all US direct investment in South Africa',[146] the U.S. government

established an inter-agency task force on the matter under the direction of the Department of Commerce that involved USTR, the State Department, and the Department of Health and Human Services. Meanwhile, USTR wrote to South Africa's UN Ambassador concerning TRIPS implementation. In addition, representatives of Bristol-Myers Squibb, Merck, Johnson & Johnson, Eli Lilly, and American Home Products met with South Africa's U.S. Ambassador to discuss the proposed Medicines Act among other issues.[147]

There was also action within South Africa. A U.S. Congressional delegation to South Africa raised concerns and in June, the U.S. Embassy in Pretoria presented its views at a parliamentary hearing on the proposed amendments to the Medicines Act.[148] The U.S. Ambassador to South Africa made frequent public statements and multiple private demarches to high-ranking South African officials against the amendments. In July, a group of U.S. Members of Congress also wrote letters to Deputy President Mbeki and Vice-President Gore expressing concern about the IP protection for pharmaceuticals in South Africa. Later that month, at a meeting of the U.S.–South African Binational Commission (co-chaired by Vice-President Al Gore and Deputy President Thabo Mbeki), U.S. Secretary of Commerce William Daley voiced opposition to the proposed amendments to the South African Trade Minister Alec Erwin. The same day, the United States pushed for Minister Zuma and others from South Africa to meet with PhRMA in Washington DC to discuss IP and pharmaceuticals. In mid-August, the Pharmaceutical Manufacturers Association of South Africa (PMA) distributed a document entitled 'South African Pharmaceutical Prices: A Six-Country Comparison', which argued that prices for pharmaceuticals were competitive in South Africa and that the amendments to the Medicines Act were not necessary.[149]

In July, representatives of U.S. public interest NGOs (Ralph Nader, James Love, and Robert Weissman) wrote to Vice-President Gore, arguing that they saw 'no grounds for U.S. government intervention on behalf of the international pharmaceutical companies' and urging the expansion of USTR's advisory committee on IP to include consumer interests.[150]

From mid-September, the focus of external pressure was on the South African parliament and specifically its Portfolio Committee on Public Health that was reviewing the proposed amendments. The PMA submitted a position paper to the Committee and in October, the U.S. Ambassador described to the Committee the U.S. objections to section 15(c) of the proposed Medicines Act stating that 'my Government opposes the notion of parallel imports of patented products anywhere in the world. We argued for a prohibition of such parallel imports in the TRIPS Agreement'. The Consumer Project on Technology (CPTech) presented comments via fax to the Portfolio Committee; and Merck, Sharpe and Domme (South Africa) also wrote a position paper. In late October, an article in Johannesburg's leading business newspaper, *Business Day*, reported that U.S. Senator Jesse Helms might hold up ratification of a

new U.S.–SA Tax Convention in retaliation for South Africa having 'abrogated' the patent rights of U.S. drug companies by permitting parallel imports.[151] The article reported that Helms was acting on behalf of Glaxo, a British drug company with offices in North Carolina. In late November, the Head of the European Commission's delegation in South Africa weighed in, advising the Department of Health that it had 'received complaints' from the European pharmaceutical industry that the proposed amendments to the Medicines Act appeared to be in violation of TRIPS. Not dissuaded, President Mandela signed the proposed amendments to the South African Medicines Act, including Section 15(c), into law on 12 December 1997.

South Africa's decision to proceed with the Medicines Act provoked a series of reactions from U.S. industry, interest groups, and the U.S. government. In January 1998, the U.S. National Medical Association (NMA), the U.S. National Black Nurses Association, and the National Black Caucus of State Legislators all wrote letters opposing the amendment, including to Health Minister Zuma and to President Mandela. In early February, forty-seven members of U.S. Congress wrote to USTR urging action against the amendments. On 18 February, thirty-nine pharmaceutical companies filed a lawsuit against the government of South Africa.[152] On 23 February, PhRMA asked USTR to designate South Africa as a Priority Foreign country in its Special 301 Review as did Bristol-Myers Squibb.[153] In March, USTR stated in a letter to concerned U.S. members of Congress that: 'USTR and other agencies with both trade and health policy responsibilities will continue to press the South African Government in all possible fora as long as possible'.[154] In April, a group of Congressmen and several industry representatives wrote to USTR calling for South Africa to be cited in the U.S. Special 301 list, arguing that '[o]ur Special 301 decisions will have no credibility with our industry or with the South Africans if we do not name South Africa in this year's announcement. The amendment was a mistake, and identifying South Africa in the Special 301 announcement is a gentle reminder'. In early May, USTR put South Africa on the Special 301 Watch List. Meanwhile, Sir Leon Brittan, Vice-President of the European Commission, wrote to Vice-President Mbecki arguing that the Medicines Act 'would negatively affect the interests of the European pharmaceutical industry'. Shortly thereafter a PhRMA representative was cited in a radio broadcast in South Africa, alleging 'that South Africa is being used by India and Argentina as a test run to see how world wide agreements could be broken relating to the protection of intellectual property rights'.

The United States also took up its case at the WTO where South Africa had in March submitted its report for its 1998 Trade Policy Review in which the government asserted that 'IPR protection in South Africa is consistent' with TRIPS.[155] As part of the review process, USTR submitted a series of questions focusing on South Africa's approval of generic versions of Taxol (as

a possible TRIPS Article 39.3 violation) and Section 15(c) of the Medicines Act.

Amidst ongoing debate between the U.S. and South African governments, the international media, NGOs, and the WHO intervened. The *New York Times* published a story entitled 'South Africa's Bitter Pill for World's Drug Makers', which reported that South Africa was paying prices that were sometimes eight or nine times as high as other countries.[156] In May 1998, public health and consumer groups from around the world (including CPTech, HAI, and Consumers International) held a conference in Washington DC on health care, IP, and international trade agreements. In the same month, the Executive Board of the WHO's World Health Assembly (WHA) recommended the adoption of a resolution regarding a proposed Revised Drug Strategy that asked countries to 'ensure that public health rather than commercial interests have primacy in pharmaceutical and health policies' and to 'review their options' under TRIPS 'to safeguard access to essential drugs'.[157]

In June, U.S. pressures on South Africa intensified. The White House announced that four items for which South Africa had requested preferential tariff treatment under the Generalized System of Preferences (GSP) would be held in abeyance pending adequate progress on IP protection in South Africa.[158] The South African press referred to the withheld GSP tariff reductions as 'hostages'.[159] In July, the French President Chirac raised concerns about Article 15(c) in a state visit to South Africa. The Swiss and German presidents also privately raised the issue with Deputy President Mbeki. In Washington, pressures on South African diplomats continued and senior U.S. officials raised concerns at events surrounding the U.S.–South Africa Binational Commission meetings in Washington. In those discussions, the South African government asked the U.S. government to intervene with the U.S. pharmaceutical industry to suspend or terminate its pending legal challenge to Article 15(c). Unimpressed by South Africa's steadfastness, the U.S. Congress passed a law in October that cut off aid to South Africa, pending a Department of State report outlining its efforts to 'negotiate the repeal, suspension, or termination' of South Africa's 1997 Medicines Act.[160] In November, South Africa passed a new medicines bill but with provisions identical to those in Article 15(c) that offended the United States.[161]

In the following months, South Africa was again placed on the USTR Watch List for IP violations, scheduled for an out-of-cycle review by USTR, and criticized by the U.S. government for speaking out at the World Health Assembly. Among the charges against South Africa cited in the 301 Report were that: 'During the past year, South African representatives have led a faction of nations in the World Health Organization (WHO) in calling for a reduction in the level of protection provided for pharmaceuticals in TRIPS'.[162]

By early April 1999, the tide began to shift. The pending U.S. election shifted political priorities and media interest in HIV/AIDS and access to medicines grew. In early April, Ralph Nader and James Love wrote to Vice-President Gore asking for a reversal of U.S. policy on the South African Medicines Act. On 28 April, the *Chicago Tribune* published a one-page story, 'Third World Battles for AIDS Drugs', which was the first major U.S. newspaper story on this issue and was read by the U.S. President.[163] In May, CPTech and ACT UP met with the U.S. Department of Health and Human Services (DHHS) asking the United States to moderate its trade policies to improve access to drugs. In May, the WHO's World Health Assembly approved its Revised Drug Strategy. In early June, the International Issues subcommittee of the Presidential Advisory Council on HIV/AIDS (PACHA) held a public debate on compulsory licensing and parallel imports. As the U.S. Presidential debate advanced, HIV/AIDS activists worked to disrupt Vice-President Gore's campaign and to draw attention to U.S. trade sanctions against South Africa and Thailand. From late June 1999, congressional representatives expressed growing concern. The Congressional Black Caucus wrote to Vice-President Gore with concerns over trade sanctions against South Africa and a proposal was put before Congress to make it illegal for the State Department to lobby Asian or African countries against access to medicines. The House of Representatives began hearings on U.S. Trade Policy and the Global AIDS crisis. USTR testified that it now had no objection to parallel importing or compulsory licensing of pharmaceutical drugs in South Africa if TRIPS-compliant. Finally, under intense domestic pressure, the United States agreed in 1999 to a deal with South Africa on the Medicines Act dispute.[164] In December, the U.S. government dropped South Africa from its 301 Watch List, signalling this change in policy. This was not, however, the end of the dispute. The thirty-nine pharmaceutical companies only withdrew their case in 2001 (after securing assurances from the South African government that it would apply the law's controversial provisions cautiously and prudently). The United States continued to closely monitor South African IP policy.[165]

6.4.4. *Compulsory Licensing: Threats and Defiance*

In the period under review, at least ten developing countries took steps to issue compulsory licences for public health purposes, in most cases for the production or import of antiretrovirals to address HIV/AIDS.

In April 2004, Mozambique's Deputy Minister of Industry and Commerce granted a compulsory licence for several HIV/AIDS drugs to a local producer. Also in April, the Ministry of Health and Social Welfare in Swaziland noted the existence of an emergency relating to AIDS, and authorized procurement of medicines for HIV/AIDS 'in the best cost/effective way possible on the

international market irrespective of the existence of any patent or other Intellectual Property protection applicable in Swaziland until such time as it will no longer be considered essential to address the current Public Health crisis related to HIV/AIDS'. In September 2004, the Malaysian Minister of Domestic Trade and Consumer Affairs issued a two-year government-use compulsory licence to import three HIV/AIDS drugs from India and in October that year, Indonesia similarly issued a government-use compulsory license to manufacture generic versions of two HIV/AIDS drugs. Meanwhile in Africa, Zambian Minister of Domestic Trade and Consumer Affairs issued a compulsory license for several HIV/AIDS drugs in September 2004; and in October 2004, Zimbabwe's Minister of Justice, Legal, and Parliamentary Affairs declared a Period of Emergency that enabled its government to override antiretroviral drug patents. In February 2005, when India amended its patent law to provide patent protection for pharmaceutical products, it also established a mandatory compulsory licence for products that were already manufactured and marketed in India. In April 2005, the Guinean Ministry of Health issued compulsory licences on several HIV/AIDS drugs; and in October 2005, the Ghanaian Minister of Health issued government-use compulsory licences for importation into Ghana of generic HIV-AIDS medicines. Finally, in 2007, Rwanda, Brazil, and Thailand each issued compulsory licences for HIV/AIDS medicines.

In certain instances, the threat of compulsory licences was sufficient to secure reductions in prices to the satisfaction of the developing country at hand.[166] In 2005, China used the threat of a compulsory license to obtain voluntary licences to manufacture a generic version of Tamiflu. Earlier, in 2001, Brazil had used the threat of non-voluntary licences in its negotiations with Merck and Roche to secure lower prices for two HIV/AIDS drugs, nelfinavir and indinavir efavirenz.[167] In March that year, Brazil reached a settlement with Merck for price discounts on efavirenz in exchange for not issuing a compulsory licence. In August, however, the Brazilian Health Minister Jose Serra announced that Brazil would issue a compulsory licence for the manufacture of nelfinavir (sold under the brand name Viracept by Roche) to the Brazilian pharmaceutical producer Far Manguinhos. A few days later, the two parties resumed talks and reached an agreement; Roche agreed to sell the drug in Brazil at an additional 40 per cent discount and Brazil agreed not to issue a compulsory licence. In 2005, Brazil threatened to issue a compulsory licence so that the state-owned pharmaceutical company could produce Abbott Laboratories' Kaletra, an HIV/AIDS drug that would otherwise have been too expensive for purchase by Brazil's national AIDS treatment programme. The head of the AIDS programme stated that government officials were subjected to intense lobbying from the United States at the highest levels: 'I was told of meetings, phone calls from the Senate, Congress and the White House, with threats of direct retaliation'.[168]

Ultimately, the Brazilian President backed away from issuing a compulsory licence in exchange for Abbott's agreement to a six-year contract offering the drug at a lower price (while preserving the patent rights). The same year, Brazil declared that it was considering issuing compulsory licences to permit the manufacture of Viread, an HIV/AIDS drug produced by Gilead. After discussions Gilead reached agreement with the Brazilian Health Ministry in May 2006 'to reduce the price of Viread in Brazil by approximately fifty per cent.'[169] Brazil also used the threat of compulsory licences on the patents for Glivec, an anti-cancer drug held by Novartis, to obtain a price discount of more than 65 per cent.

Many developing country efforts to use compulsory licences, particularly by smaller African countries, occurred largely under the radar of the international media. In the wake of debate on the AIDS crisis and access to medicines, the multinational pharmaceutical lobby and developed countries shied from the public backlash that would surely follow were they to put strong pressure on the world's poorest countries. Further, in some instances, the practical threat from such licences was low. Several African governments issued or threatened licences for drugs that were not in any case patented in their countries. In addition, in the poorest countries, many governments lacked the technical capacity and coordination to turn their initial grant of a compulsory license into a practical outcome. Further, their market size was often still too small to secure supplies from a generic drug manufacturer even after a licence was issued.

In the case of middle-income countries where multinational pharmaceutical companies had profits at stake, governments faced intense pressures not to use the compulsory licensing flexibilities in TRIPS and many countries deferred from such action due to fears of retribution. The pharmaceutical industry was keen to prevent precedents for compulsory licensing wherever possible, but focused most attention on countries with strong generic industries, where compulsory licenses might undercut their market share. Of particular concern were countries like Brazil and Thailand where governments proposed to issue licenses to profit-driven, but government-owned drug manufacturers. In these cases, pharmaceutical companies alleged that the licenses were motivated more by industrial policy and than public health objectives. While some countries dared not risk the reprimands of more powerful economies, countries such as Brazil, Thailand and China defied threats of retaliation and went ahead to issue compulsory licenses. In the first two countries, the government's resistance to external pressure was bolstered by the strength within Brazilian politics of the generic drug industry, a strong and well-informed Health Ministry, inter-agency coordination, and public pressure to ensure the effectiveness of its national HIV/AIDS programme. Whereas Brazil and Thailand's efforts provoked international media attention, licenses in Malaysia and Indonesia proceeded more quietly.

Importantly, governments did not always see it as in their interests to respond positively to requests for compulsory licences. In 2001, for instance, the Indian pharmaceutical manufacturer CIPLA called on the South African Department of Trade and Industry to issue compulsory licences on a number of HIV/AIDS drugs, but the request was denied. Further, drug donations from pharmaceutical companies sometimes mitigated public pressures to secure supplies through compulsory licenses.

6.5. Conclusion

This chapter has argued that national politics impacted TRIPS implementation in developing countries. It has shown how government capacity, the degree of public engagement and coordination within governments impacted the decisions taken, and also sometimes amplified or filtered international pressures, thus generating variation in the timing and use of TRIPS flexibilities. While the choices of developing countries with respect to TRIPS implementation were often severely constrained, by internal pressure national factors also had a significant impact.

The following chapter explores the case of TRIPS implementation in francophone Africa, where a group of the world's poorest countries adopted some of the world's highest IP standards at an earlier date than TRIPS required. To explain why countries took such an unexpected approach, it highlights the role of compliance-plus ideational pressures, weak domestic institutions, regional organization, and capacity-building. While the chapter focuses exclusively on francophone Africa, it nonetheless, sheds light on dynamics that were also play in other developing countries.

Notes

1. CIPR (2002).
2. Job (1992) and Reno (1998).
3. Government of India (2007).
4. The concept of bounded rationality has been advanced by scholars interested in the relationship between psychology and political science. See, for example, Simon (1985). Odell (2000) elaborates on how bounded rationality operates in the context of WTO negotiations.
5. This perspective has been advanced by sociologists, political scientists, and also IR scholars. See Granovetter and Swedberg (1992), Koelble (1995), Polanyi (1944), Hancher and Moran (1989), and Allison (1999).
6. Koelble (1995: 234).
7. CIPR (2002) and Correa (2003).
8. The deference of governments to technical experts on matters of IP policy has strong historical precedent. Analysing the period from 1875, Machlup and Penrose

(1950: 29) observe that 'lawyers and engineers appeared as the "experts" on the economic effects of the patent laws and their possible changes' and there was little engagement by economists or experts from other disciplines.

9. Villaneuva (2005).
10. Ibid.
11. This appraisal derives from author's review of national websites of IP offices of sixty developing countries.
12. In many developed countries, for example, IP offices are increasingly scrutinized for conflicts of interest, prompting a range of proposals for reform. See Drahos (2007*b*), Taylor and Cayford (2002), and Roth (2005).
13. Villaneuva (2005).
14. Ibid.
15. Kuanpoth (2005).
16. Ms. Wiboonluck Ruamrak, Deputy Director-General, Thai Department of Intellectual Property, cited in Kuanpoth (2005).
17. Author's interview with Sangeeta Shashikant, IP policy specialist, Third World Network, Feb 2008.
18. CIPR (2002) and Shadlen (2006).
19. Drahos (2007*a*).
20. WIPO (2007).
21. In 2004, Brazil committed to hiring 300 new patent examiners, with further recruitment anticipated, to speed the patent examination process and respond to the growing number of patent applications. Between 2003 and 2006, the Office's Budget increased by nearly 50 per cent. See AS/COA (2006) and USTR (2006).
22. Kongolo (2000*a*: 269–70).
23. Author's interviews with Tshimanga Kongolo, Head, Professional Training Section, WIPO Worldwide Academy, June 2006 and Sisule Musungu, IP Programme Coordinator, South Centre, Oct 2005.
24. Drahos (2007*a*).
25. Drahos (2007*a*) and Correa (2007*a*).
26. For critical reviews of the discretionary power of patent offices in developed countries to devise guidelines and procedures for patent examinations, see Dunleavy and Vinnola (2000: 68) and Dutfield (2000).
27. Musungu and Oh (2006), and Thorpe (2002).
28. Correa (2007*a*) and UNCTAD (2008).
29. Dogra (2006) and USTR (2006).
30. WIPO (2007*b*).
31. Oh (2006).
32. WIPO (2005*a*).
33. May (2004) and Consumers International (2006).
34. Villaneuva (2005).
35. WTO (2001*b*).
36. For an overview of the status of collective management in Asia and Latin America, see Gervais (2006). For further background, see http://www.wipo.int/about-ip/en/collective_mngt.html.
37. CIPR (2002: 98–9).
38. CISAC (2005).

39. Ibid.
40. This observation draws from an analysis of reports related to the TRIPS Council Reviews of TRIPS implementing legislation conducted from 2000 to 2001.
41. Author's interviews conducted with national trade and IP officials from developing countries between 2003 and 2007.
42. See Andersen (2006*a*), Bentolila (2002/3), Bermudez et al. (2000), Czub (2001), Ramanna (2005), and Varella (2004).
43. The focus of much of the debate was on the costs to Argentine pharmaceutical industries of new industrial property protections, and the anticipated royalties they would have to pay to foreign companies. See Bentolila (2002/3) and Czub (2001).
44. This case is taken up in detail in Chapter 7.
45. Dunn (2001).
46. For interest-based arguments emphasizing the role of lobbying and bargaining by domestic interest groups on the formation of domestic and foreign policies, see, for example, Ikenberry et al. (1988), Keohane and Milner (1996), Mastanduno (1994), and Putnam (1988).
47. Olsen (1965).
48. Doern (1999: 46).
49. Drahos (2002*b*) and Dutfield (2000).
50. Ibid.
51. Author's interviews with Eric Noehrenberg, Director, Intellectual Property and Trade Issues, International Federation of Pharmaceutical Manufacturers Associations, August 2008; Denis Croze, Acting Director Advisor, Economic Development Sector, WIPO, Oct 2006; and Geoffrey Onyeama, Director, Cooperation for Development Bureau for Africa, WIPO, Sept 2005.
52. See ICTSD (2002).
53. Sell and Prakash (2002), Das (2003), Mathur (2001), Ramanna (2005), and Ramanna and Smale (2004).
54. For analysis of NGO campaigns on IP in these countries, see Andersen (2006*a*), Borowiak (2004), Das (2003), Mathur (2001), Nagan (2001/2), Ramanna (2005), Ruiz (2005), Sell (2006), and Varella (2004).
55. Author's interviews with Sisule Musungu, IP Programme Coordinator, South Centre and former coordinator of the Kenya Access to Medicines Campaign, Oct 2005 and Faizel Ismail, Head, South African Delegation to the WTO, Apr 2007. See also Afavia (2005), Bombach (2001), Kongolo (2001*a*), and Lewis-Lettington and Munyi (2004).
56. Andersen (2006*a*) and Hathaway (1993).
57. Author's interview with Joseph Ekpere, former OAU official responsible for science and technology issues, Feb 2006. See also Lulu et al. (2000).
58. Interview with staff of the Bangladesh's Centre for Policy Development, Feb 2008.
59. The Peruvian government also supported the efforts of local NGOs to work with an environmental NGO in Washington, the Center for International Environmental law (CIEL), to mount a legal challenge against a patent on Ayuhuasca, a sacred plant with medicinal qualities. This analysis draws from the author's discussions

between 2003 and 2005 with Begona Venera, INDECOPI (the Peruvian IP office); Manuel Ruiz, Senior Legal Officer, the Peruvian Society for Environmental Law; Alejandro Argumedo, Director, ANDES Association; Alejandro Neyra, Second Secretary, Permanent Mission of Peru to the WTO; and Betty Berendson, Second Secretary, Peruvian Mission to the WTO.

60. Ismail (2003).
61. In January 2005, for instance, India's government promulgated a Patent (Amendment) Ordinance that increased standards of IP protection beyond the minimum necessary to conform with TRIPS. This decision has been attributed to pressures from domestic computer software industries and new companies conducting R&D for biotechnological and pharmaceutical products. See, for example, *New York Times* (2005) and Chaudhuri (2005*a*).
62. Chaudhuri (2005*b*). This observation is also based on author's interviews in June 2005 with André Dua, Deputy Minister, Indian Ministry of Industry and Preeti Saran, Minister Counsellor, Permanent Mission of India to the United Nations.
63. Ferrer et al. (2004), Shadlen (2006), and USTR (2006).
64. Author's interview with Toufiq Ali, Ambassador, Permanent Mission of Bangladesh to the WTO, Feb 2007.
65. Bampo-Addo (2005).
66. Shadlen (2004*a*: 752).
67. Ibid.
68. The BSA's members include leading software and technology companies such as Compaq, Digital, IBM, Intel, Apple, Microsoft, Novell, and Lotus.
69. See CISAC (2004). CISAC offered a range of training and technical assistance to new authors societies, and established a Solidarity Fund to help new members acquire IT equipment and build modern techniques for the management of rights. CISAC also set up regional committees for Africa and the Caribbean, the Asia Pacific, and the Ibero-American region. See http://www.cisac.org.
70. See http://www.aippi.org.
71. In some countries, groups of patent and trademark attorneys lobbied against accession to the PCT and the Madrid Agreement on trademarks (both of which aim to facilitate international filing) on the grounds that they would lose revenues from application fees that would otherwise be paid to them to lodge applications with national authorities.
72. Author's interview with Pedro Roffe, Senior Fellow, ICTSD, Mar 2008.
73. Ibid.
74. For reports of TWN activities at the regional level, see TWN (2003*a*, 2004, 2005).
75. The Kenya Coalition on Access to Essential Medicines includes ActionAid; The Association of People living with AIDS in Kenya (TAPWAK); Health Action International (HAI Africa); Network for people living with HIV/AIDS (NEPHAK); Women Fighting AIDS in Kenya (WOFAK); Society for Women and AIDS in Kenya (SWAK); Nyumbani International; CARE International; Médecins Sans Frontières (MSF); DACASA; Kenya Medical Association (KMA); Consumer Information Network, and Campaigners for AIDS Free Society.

76. For a report of this meeting, see Chitsike (2000). The meeting received financial support from the Canadian government's International Development Research Centre (IDRC) and the German Gesellschaft für Technische Zusammenarbeit (GTZ).
77. Interview with David Vivas, IP Programme Manager, ICTSD, Aug 2007.
78. Villaneuva (2005).
79. For an exploration of how government bureaucracies can become 'idea-generating centres' that influence policymaking, see Matecki (1956).
80. Bombach (2001) and Marc (2001).
81. The coalition included the Treatment Action Campaign (TAC), COSATU, the AIDS Consortium, four people living with HIV/AIDS (including a woman called Hazel Tau), and four health-care workers.
82. Berger (2004) and Avafia (2006).
83. TAC (2003).
84. TAC (2008).
85. Author's interviews with Robert Juagaribe, Director, Brazilian Patent Office, Oct 2005 and Falou Samb, former First Secretary, Mission of Senegal to the WTO and delegate to the TRIPS Council, May 2007.
86. Abdel Latif (2005).
87. U.S. State Department (2007).
88. This observation draws from author's interviews with representatives of OAPI SNLs from 2005 to 2007.
89. Author's interview with Johannes Bernabe, former TRIPS delegate at the Permanent Mission of the Philippines to the WTO, Feb 2007. Bernabe's advice ultimately prompted the introduction in Oct 2005 by Senator Max Roxas of a bill that would revise national IP laws to provide for international exhaustion. Also see Gerhardsen (2006*d*).
90. Author's interviews with David Vivas Eugui, IP Programme Manager, ICTSD and Ricardo Meléndez-Ortiz, Chief Executive, ICTSD, Aug 2007.
91. Several studies highlight how lack of policy capacity and internal coordination in many developing countries adversely impacts both national and international IP standard-setting. See Abdel Latif (2005), Correa (2003), Drahos (2004*b*), Petit et al. (2001), and Helfer (2004).
92. Abdel Latif (2005).
93. For an interesting account of the coordination role of foreign ministries in adapting to the challenges of globalization, see Hocking (1999).
94. Other countries to have done so include Jamaica and Barbados.
95. For analysis of socialization as a mechanism through which power is exercised, see Ikenberry and Kupchan (1990).
96. For background on the Andean region's approach to IP, see Abbott (1989) and Adler (1987).
97. See note 77.
98. Author's interview with Miguel Rodriguez, former Venezuelan Minister of Industry and WTO Deputy Director, Mar 2007.
99. Andean Community Decisions related to TRIPS implementation include Decisions 486 on industrial property (which replaced Decision 344 in 2000), 391 (on access to genetic resources), 345 (on plant variety protection), 351 (on copyright), and

291 (Regime for the Common Treatment of Foreign Capital and Trademarks, Patents, Licensing Agreements, and Royalties).

100. Author's interview with Pedro Roffe, Senior Fellow, ICTSD, Aug 2007.
101. See note 77.
102. The sixteen members of ARIPO are Botswana, the Gambia, Ghana, Kenya, Lesotho, Malawi, Mozambique, Sierra Leone, Somalia, Sudan, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe. For more information on ARIPO, see Kongolo (2000*a*: 269–70), Seyoum (1985), and http://www.aripo.wipo.net.
103. Author's interview with Sisule Munsugu, IP Programme Coordinator, South Centre, Oct 2006.
104. Musungu and Oh (2006).
105. Thorpe (2002).
106. Al-Hajeri (2006).
107. The ASEAN members are Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam.
108. Mercosur is an acronym derived from the Spanish title: Mercado Común del Sur. The members of Mercosur are Brazil, Argentina, Uruguay, Venezuela, and Paraguay with Bolivia, Chile, Colombia, Ecuador, and Peru as associate members.
109. See http://www.caricom.org/expframes2.htm, accessed on 1 Feb 2008.
110. Fink and Reichenmiller (2005), Krikorian and Szymkowiak (2007), Oxfam (2004*a*), and Roffe (2004).
111. For texts of these letters, see http://www.ustr.gov.
112. Author's interview with Hanan Sboul, the Jordanian Association of Pharmaceutical Manufacturers, Oct 2005. Also see Malkawi (2004).
113. See ALCS (2004), Ahmad (2004), Human Rights Watch (2004), Laghdaf (2004), and 3D (2006*a* and *b*).
114. Krikorian et al. (2007).
115. Author's interview with Carmen Dominguez, Chilean delegate to the TRIPS Council, Feb 2005. Also see Roffe (2004).
116. Author's interview with a senior official from the Peruvian IP office, Sept 2005. Also see INDECOPI (2005*a*, 2005*b*).
117. Author's interviews with Carlos Correa, University of Buenos Aires, Dec 2005 and a senior official from the Peruvian IP office, Sept 2005.
118. Ibid.
119. The issue was taken up in a leading national newspaper, *Diario El Tiempo*, which conducted an interview with Correa. See Gil (2004). German Velasquez, a leading figure in the global debate on access to medicines and the coordinator of the WHO's work on IP, also spoke out in an interview with *El Pais*. See Fuentes (2004). For the public statement by the Colombian trade ministry, see República de Colombia (2004).
120. For newspaper accounts of these debates, see Gil (2004), AZ Central (2005), and Xinhua (2005). This account also draws from the author's interviews between 2005 and 2007 with Carlos Correa (see note 117); Frederick Abbott, Professor of Law, Florida State University; and Ricardo Meléndez-Ortiz, Chief Executive, ICTSD.

121. Ibid.
122. See *Diario El Tiempo* (2005). The members of the Colombian negotiating team were Gilberto Alvarez Uribe, Luis Guillermo Restrepo Velez, and Juan Fernando Garcia Echeverria.
123. BBC News (2007).
124. Vivas-Eugui and von Braun (2007).
125. Roffe (2006), Vivas-Eugui and von Braun (2007), and Krikorian and Szymkowiak (2007).
126. Krikorian and Szymkowiak (2007) and Roffe (2008).
127. BRIDGES (2005*b*), Mokhiber and Weissman (2005), MSF (2005), and New (2005*a*). This analysis also draws from the author's interviews in 2005 with staff of MSF and Carlos Correa, who provided legal advice to the Guatemalan health ministry.
128. MSF (2005).
129. Mokhiber and Weissman (2005).
130. Oliva (2003).
131. Author's interviews with Frederick Abbott and Carlos Correa, both of whom served as advisors to the Colombian government during its trade negotiations with the United States. See footnotes 117 and 120.
132. In these cases, IP was one of many concerns which fuelled public opposition to the FTA negotiations, including concerns about agriculture and rural livelihoods. For press reports of the collapse of the negotiations, see Prensa Latina (2005) and Xinhua (2005).
133. Smith (2007).
134. Markandya (2001) and Oxfam (2004*b*).
135. Ibid.
136. Krikorian (2008).
137. BRIDGES (2005*a*).
138. Author's discussions with Faizel Ismail, Head, South African Delegation to the WTO, Apr 2004 and Tenu Afavia, IP expert, Trade Law Centre of Southern Africa (TRALAC), Dec 2005.
139. *Business Day* (2004) and *Sunday Times* (2005).
140. Rosales (2003).
141. Andersen (2006*a*). Also see AGILE (2001).
142. Cited in Andersen (2006*a*).
143. Ibid.
144. UPOV (2007: 2).
145. The following analysis draws from a timeline of the South Africa dispute prepared by the Consumer Project on Technology (CPTech) in Aug 1999, available at http://www.cptech.org/ip/health/sa/sa-timeline.txt (accessed 1 May 2007).
146. Cited at http://www.cptech.org/ip/health/sa/sa-timeline.txt.
147. Ibid.
148. All letters and reports not otherwise cited in the remainder of this section are available on CPTech's website. See note 145. At http://www.cptech.org/ip/health/sa/sa-timeline.txt.
149. PMA (1997).

150. Cited at http://www.cptech.org/ip/health/sa/sa-timeline.txt
151. *Business Day* (1998*a*).
152. Marc (2001).
153. PhRMA (1988).
154. USTR (1998*a*).
155. See documents related to South Africa's Trade Policy Review at http://www.wto.org.
156. *New York Times* (1998).
157. WHO (1998).
158. USTR (1998*b*).
159. *Business Day* (1998*b*).
160. Marc (2001).
161. *Business Day* (1999).
162. USTR (1999).
163. Goozner (1999).
164. Marc (2001).
165. Ibid.
166. The following analysis draws directly from a summary regarding the use of compulsory licences in Love (2007). It also draws on analysis by Oh (2006), Khor (2007), and Yoke Ling (2006).
167. Oh (2006).
168. Beattie et al. (2006).
169. Gilead Sciences, Inc., SEC Form 10-Q, Quarterly report pursuant to Sections 13 or 15(d) of the 1934 Securities Exchange Act, for the period ended 30 September 2005.

7

TRIPS Implementation in Francophone Africa

In 1999, the sixteen members of the African Organization for Intellectual Property (OAPI) revised their joint, regional legal framework for IP protection (the Bangui Agreement), with the aim of complying with TRIPS.[1] In so doing, this group of francophone African countries significantly strengthened IP standards in their countries.[2] Curiously, in revising the Bangui Agreement, the OAPI members forfeited many of the legal options and safeguards available under TRIPS, and went beyond the minimum TRIPS requirements. Further, for the twelve least developed country (LDC) members of OAPI, the entry into force of the revised Bangui Agreement in 2002 brought most of their IP laws in line with TRIPS over a decade in advance of their extended deadline.[3]

Some observers welcomed the revised Bangui Agreement as an admirable symbol of francophone Africa's commitment to economic modernization. The OAPI Secretariat predicted, for instance, that the revised Agreement would make the economic environment of its members 'attractive to investments and suitable for technology transfer'.[4] Several scholars from the region enthused that the revised Bangui accords should serve as a basis for further harmonization of laws across the African continent.[5] Yet other scholars objected, describing the Agreement as everything from 'curious'[6] and 'dubious' to 'hasty' and 'regrettable'.[7] Concerned NGOs criticized the revisions as 'premature'[8] and 'unacceptable'.[9]

Why did the OAPI countries implement such strong IP standards and, in the case of LDCs, so much earlier than required by TRIPS? To date, no systematic scholarly analysis of the Bangui revision process exists. The revised agreement has, however, stimulated analyses by legal scholars, official statements by the OAPI Secretariat, and a series of NGO policy papers and press releases. From these sources, three core explanations for the revised Bangui Agreement emerge.

On the one hand, the OAPI Secretariat explains its members' approach to TRIPS implementation as the product of a member-driven process through

which each country considered its needs, priorities, and interests. NGO critics, on the other hand, attribute the revised Bangui Agreement to TRIPS-plus pressures on OAPI members from powerful international actors, such as the World Intellectual Property Organization (WIPO), the Union for the Protection of Plant Varieties (UPOV), France, and multinational corporations.[10] In 2000, Médecins Sans Frontières (MSF) alleged, for instance, that the revised Agreement was 'inspired by the World Intellectual Property Organization whose budget is partially funded by industrialists' and 'revised under pressure exerted by pharmaceutical industries of the North'.[11]

A third explanation offered by some commentators is that the revised Bangui Agreement emerged in the form it did, with all of its flaws, because the officials involved knew it would have little practical impact. Here, some argue that the revised Agreement was in fact an 'empty promise', which states had no intention or capacity to enforce, and so the specificities of its provisions mattered little to them. To support this view, some cite the fact that governments in the region import medicines (and turn a blind eye to illegal third-party imports of medicines) that contradict the Agreement. They add that even if francophone African countries were to violate TRIPS obligations, their status as poor countries would dissuade more powerful countries from retaliating against them.

In this chapter, I show that while each of these explanations contributes a part of the story of TRIPS implementation in francophone Africa, neither is sufficient by itself. I show that reference to national interests cannot provide a compelling explanation for the decisions taken. On the contrary, as some of the world's poorest countries, with limited industrial development, low technological capacity, and high reliance on imports of technology and knowledge-related goods, one would expect the OAPI member states to have maximized their use of TRIPS flexibilities, particularly the transition periods for implementation. Indeed, at the WTO, African countries consistently called for the application of 'special and differential treatment' in respect of their TRIPS obligations, namely more flexible rules and more time for TRIPS implementation.[12] I also show that the OAPI approach to TRIPS implementation demands a more nuanced account of the power of multinational companies, developed country governments, and international organizations. I detail the interplay of a subtle set of international pressures and national dynamics, and highlight how the OAPI Secretariat intervened. Further, I show that the forces driving the revision of the Bangui Agreement were more complex than that of an 'empty promise'.

My argument has five components. First, the post-colonial legacy of deference to France rendered the OAPI countries heavily dependent on external technical and legal advice. At the time of the Bangui revisions, technical knowledge at the national level on IP issues and TRIPS obligations was extremely limited.

Second, attention to IP issues was frequently delegated to small national IP offices within government with little substantive oversight from other parts of government or engagement with stakeholders. The passivity, autonomy, and isolation of IP offices with limited financial resources and technical expertise meant that TRIPS implementation occurred in a policymaking vacuum at the national level and that OAPI members were deeply susceptible to external pressure.

Third, having delegated substantial responsibility for IP protection to the regional level, national IP offices were too weak to properly oversee the OAPI Secretariat. Conversely, financial independence from member states combined with superior technical expertise and institutional capacity gave the OAPI Secretariat an authority that enabled it to dominate member states.

Fourth, the combination of weak national capacity and delegation to the OAPI Secretariat rendered decision-making in the region highly vulnerable to capture by donors, most notably the French IP office, WIPO, UPOV, and the WTO, which used capacity-building to secure rapid and strong implementation of TRIPS. The promise of donor assistance and fees from users of the IP system assured national governments that they would not have to bear the fiscal costs of administering and enforcing the TRIPS-plus laws.

Fifth, TRIPS implementation in the OAPI countries was shaped by a pro-IP and 'compliance-plus'-oriented political environment. Through technical assistance, monitoring, public outreach, and diplomatic channels, progress on IP protection was presented by developed countries and key international organizations as a central component of the domestic reforms francophone African countries needed to advance in order to secure broader political rewards. Among the anticipated benefits were foreign aid, trade and investment, as well as support for their political regimes. In this context, NGO efforts to dissuade officials ignorant of the technical details and implications from moving ahead with the revised Bangui Agreement, and to raise awareness about other possible options, had little prospect of success.

This chapter begins by reviewing the socio-economic context for TRIPS implementation in francophone Africa, contrasting the high standards of the revised Bangui Agreement with what the economic circumstances of the region would lead us to expect. Second, I provide an overview of the political context for IP decision-making in francophone Africa and a history of IP regulation in the region. Third, I summarize the core features of the revised Bangui Agreement, with particular attention to those elements which exceed minimum TRIPS requirements. Fourth, I analyse the Bangui revision process, tracing how the five factors introduced above shaped TRIPS implementation in the OAPI region through three phases: the emergence of the text (1994–9); the ratification process (1999–2002); and the debate after entry into force of the revised Agreement (2002–7). This process highlights where intersections existed between TRIPS implementation efforts in the region and ongoing

international negotiations on TRIPS and public health, and TRIPS Article 27.3(b), as well as regional efforts to advance a distinctive African *sui generis* approach to plant variety protection. Fifth, I elaborate on some of the core themes that emerge, particularly with respect to the roles that the weak technical capacity of IP offices, delegation to a regional organization, and capacity-building played in the implementation process.

7.1. IP Reforms in the Poorest Countries: Expectations and Reality

The economic and social circumstances of OAPI countries would lead us to expect them to have made full use of TRIPS flexibilities. Similarly, the economic literature on IP and development suggests that the interests of poor countries, such as those in francophone Africa, would favour IP laws that would keep the costs of buying and licensing imported technology low, enable the imitation and adaptation of foreign technologies, and facilitate transfer of know-how to local producers.[13]

All but three OAPI members have annual per capita incomes of less than US$2 per day and twelve OAPI LDCs rank among the world's poorest countries.[14] In 2002, the year that the revised Bangui Agreement came into force, the smallest three OAPI economies had a GDP of just US$200 million (Guinea-Bissau) and US$1 billion (Mauritania and the Central African Republic).[15] With a total population in the region of 100 million, seven of the OAPI members have populations of less than 5 million.[16] The OAPI countries each face public health challenges, including high and growing rates of HIV/AIDS (approximately 17 per cent of the combined populations of the OAPI countries are infected), malaria, and other infectious diseases. Within the region, there is no economic or productive capacity to manufacture generic medicines for public health emergencies such as HIV/AIDS, forcing public health administrators and relief organizations to import medicines from beyond the region or to rely on donations. Low literacy rates and weak secondary and tertiary school enrolments, particularly in technical subjects, are core national challenges.[17] In addition to strong dependence on foreign development assistance (described in more detail below), most OAPI countries receive food aid from the UN World Food Programme and are extremely vulnerable to external shocks and changing climatic conditions.[18]

The primary source of employment in the OAPI region is the agricultural sector; the majority of people rely on informal, subsistence farming for their livelihoods. The OAPI countries are all net importers of technology and there is low manufacturing, processing, and industrial capacity in any of the countries. The largest industrial sectors are those concerned with oil and mineral extraction. The OAPI countries are also among the world's weakest performers in terms of domestic innovation, technological activity, research

and development (R&D), and foreign direct investment (FDI).[19] With the exception of Equatorial Guinea and Congo, FDI flows to OAPI countries were less than US$250 million per country in 2002, and were largely of French origin.[20]

The ownership of IP rights in francophone Africa has long been dominated by non-African firms. The vast majority of patents registered in the region are related to pharmaceutical and medicinal purposes. Most patents have been used to secure an import monopoly on the part of owners for their products rather than for local industrial exploitation or production in the country of registration; in other words, the patents have not been 'worked' in the region.[21] These facts have prompted several reviews of IP protection in the region to observe that francophone Africa has derived few benefits from its IP laws.[22] OAPI countries have had significant difficulties administering and enforcing IP laws and any benefits have accrued primarily to foreign IP right-holders.[23]

Little changed in the aftermath of the Bangui revision process. In 1999, OAPI received 341 patent applications (over 90 per cent from abroad) and 1,751 trademark applications (97 per cent from abroad).[24] After the revised Bangui Agreement came into force, patent filings in the OAPI region grew but only marginally. In 2005, for instance, 374 patents were issued of which only 42 were to nationals of OAPI member states and of 2,031 trademarks registered, only 616 were for applicants in OAPI member states.[25]

For the OAPI countries, as for the sub-Saharan African region as a whole, outflows of royalties and licensing fees from the region far exceed inflows. From 1997 to 2002, royalty and licence payment outflows from the sub-Saharan region to the United States increased by over 33 per cent, from US$72 million to US$109 million. Conversely, inflows of such payments to sub-Saharan African countries decreased by almost 17 per cent over the same period, from US$6 million to US$5 million.[26] By 2007, the gap between outflows and inflows had further widened.[27] Between 2002—when the Bangui revisions came into force—and 2007 there was no significant change in flows of FDI to the region (beyond the oil sector in selected countries). This outcome is predicted in the economic literature which suggests that in the poorest countries, IP protection alone is unlikely to generate a significant pull for foreign investors.[28]

Experience to date should not, however, suggest that francophone Africa has nothing to gain from improved IP laws and policies. There are indeed innovators in the region, including local scientists, some of whom may seek IP protection.[29] Small and medium-sized enterprises in francophone Africa conduct a range of small, incremental, innovative activities that may be bolstered through some forms of protection and improvements in licensing options.[30] It may also make sense for African countries to seek proper rewards for their creative activities and traditional knowledge, particularly in music,

textiles, and literature, where they are often under-compensated in both domestic and foreign markets.[31] (Note that the greatest gains for *African*, not foreign, works will depend on greater protection in foreign markets where few African innovators or creators have the capacity to claim or enforce rights in the face of unauthorized use of their works).

The puzzling reality is that in areas where the OAPI countries might be poised to derive some benefits from improved and properly tailored IP protections, their implementation efforts have been least effective.[32] Further, the TRIPS-plus provisions in the revised Bangui Agreement seem to fly in the face of the socio-economic realities. In particular, the public health and educational challenges in the region give OAPI countries a strong interest in ensuring rapid, affordable access to medicines and knowledge, either through cheap imports or through copying and local production.

In short, one would expect OAPI countries to make full use of TRIPS flexibilities, particularly those relevant to public health; the accessibility of educational materials and software; and the ability of farmers to save, sell, and exchange their seeds. One would also expect that OAPI countries had joined most other LDCs in delaying TRIPS reforms for as long as possible.

7.2. From Colonization to the Revised Bangui Agreement

Explaining the TRIPS-plus provisions of the revised Bangui Agreement demands an appreciation of the political context in francophone Africa and the history of IP protection in the region. The legacy of the colonial era and a consistent dependence on external advisors and assistance emerge as two dominant themes.

7.2.1. *The Political Context for IP Reforms*

Despite decolonization, the prevailing view of scholars studying francophone Africa is that they remain economically, politically, and intellectually dependent on France and a range of foreign donors.[33] The weak position of OAPI countries in the international system renders them 'price takers' in most aspects of their international relations and compromises national decision-making autonomy in many areas of domestic policy.

A central aspect of the 'dependent independence' of francophone African countries stems from their relationship with France.[34] Not only did the French colonial *mission civilatrice* leave 'indelible marks on its former territories', France maintains a 'web of connections, links, agreements, and pacts' with its African *chasse gardée* to protect her enduring political and economic interests.[35] While there is heterogeneity among the various countries in the region, decades of French political, educational, linguistic, and intellectual

influence has socialized officials to concur with, or defer to, French policy advice and expertise.[36] In practical terms, administrative systems in francophone African countries were based on the French model. More generally, the French colonial legacy bred a culture of perceived inferiority and passivity in the face of external expertise on a broad spectrum of policy, public administration, and legal matters.

Even as some countries in the region, such as Côte d'Ivoire and Senegal, diluted French influence by deepening relationships with other powers such as the United States, the reality of neo-colonial trade, aid, and intellectual ties with richer powers persists. Most of the OAPI countries are highly indebted and heavily dependent on development assistance from France, the International Development Association (IDA) (the World Bank's concessional lending window), and the European Union.[37] Indeed, so deep is the dependence of most francophone African countries on foreign donors for the basic functioning of government,[38] a small but growing literature on Africa's international relations persuasively depicts francophone African countries as 'quasi-states',[39] with tenuous sovereignty.[40] As aid dependence and donor coordination have increased, international networks of advisers, donor-financed consultants, and policy conditionalities play an intrinsic, and often dominant, role in economic, administrative, and political decision-making in the region, from broad priority-setting to the smallest details and day-to-day operation of the state.[41]

The influence of foreign donors on national decision-making is bolstered by (and arguably perpetuates) the distinctive nature of statehood and government in the region.[42] Independence in Africa spawned the formation of states misaligned geographically with prior ethnic and cultural frontiers, and governments with tenuous control of their borders.[43] Political instability associated with the rise of military regimes, dictatorships, civil wars, and famine since independence further strained the affinity of many citizens with their state and government.[44] In many francophone African states, the central preoccupation of elites for several decades has been their own political security and economic survival.[45] Despite the push for democratization and stronger electoral politics in Africa in the 1990s, long-standing political patterns persist, namely corruption, clientelistic practices, low political participation, limited vertical and horizontal accountability mechanisms for the executive, and presidential dominance.[46] Weak public administration undermines the prospect of coherent decision-making on complex regulatory issues. While the intensity of the challenges vary by country, the result is often a vacuum on critical policy issues.[47]

The vulnerability of OAPI countries to external pressures when it came to TRIPS implementation was compounded by the low accountability of political elites to their citizenry on matters of foreign affairs, the authority for which was generally delegated to the executive branch of government or directly

to the President.[48] Across francophone Africa, governments had few formal processes for public comment or consultation on proposed national laws and regulations. Institutions for aggregating political interests were also weak, and lack of literacy among the majority of the population limited public participation in detailed policy debates.[49] With only a few exceptions,[50] there was minimal oversight from parliaments or the public of the positions that francophone African governments advance in international organizations and at treaty negotiations. Further, once signed, international treaties rarely incited meaningful debate in francophone African parliaments or among the domestic public when presented for ratification.[51] This deficit was particularly striking on topics such as IP where the issues were presented as highly technical and the practical implications were not widely understood.

The approach of OAPI countries took to TRIPS implementation was also shaped by the legacy multiple regional arrangements among them, which to varying degrees had long compromised the development of national capacity and policy autonomy on key regulatory issues.

The OAPI member states further shaped by the multiplicity of regional arrangements among them. After independence, the new francophone African governments pursued regional cooperation as a way to build a stronger regional economy, leverage greater collective power in international economic negotiations, and promote regional security.[52] Early initiatives post-independence were infused with the spirit of pan-Africanism among African elites and a determination, spurred by the broader non-aligned movement of developing countries, to demonstrate that they could act on their own.[53] While their positions on regional integration varied over time, the key powers in the region, namely Nigeria, Senegal, and Côte d'Ivoire manoeuvred to bolster their respective regional standing, including by securing the headquarters of the various regional initiatives they created.[54] In the aftermath of independence, France's position on regional coordination varied. In some cases, it perceived regional integration efforts as mechanisms through which it could channel its interests in the region. In other instances, France worked behind the scenes to play countries off one another where regional collaboration might threaten her interests (e.g. Côte d'Ivoire against Mali and Senegal when the latter created a federation). Subsequently, France, the United States, and the World Bank encouraged and financed a suite of regional economic policy coordination mechanisms to boost the effective use of donor resources, improve regulatory cooperation, and create a more attractive investment climate.

Further, the era of cold war politics set the foundations for ongoing collaboration with external powers on matters of political security and for deference on economic relations. In both areas, francophone African governments have forged deals that circumscribe the scope of domestic decision-making over which they retain authority.[55] In the area of trade, OAPI countries have

concluded deals accompanied by conditions that constrain domestic policy autonomy,[56] such as the U.S. Africa Growth and Opportunity Act (AGOA) and the EU's Cotonou Agreement. Many governments in the region also know that strategic cooperation with foreign powers can secure them access to military resources and expertise useful for protecting and consolidating their regimes – albeit at the cost of some policy autonomy.

Larger strategic interests also shaped how external powers acted in the region. From the late 1990s, France tussled to maintain francophone Africa as her political sphere of influence,[57] particularly as post-9/11 priorities spurred the United States to expand its military presence in the region, control terrorist threats, and protect strategic and commercial interests in oil reserves in the region.[58] Beyond its historical interest in francophone Africa, France (and the EU) wanted to leverage its influence there to gain access to larger neighbouring markets in the ECOWAS region, such as Ghana and Nigeria. Francophone Africa was a soft entry point for non-U.S., non-UK interests to gain a foothold in parts of neighbouring Africa where they had no historical linkage. The European Union's insistence that francophone African countries collaborate with other partners in the ECOWAS region in their negotiations for Economic Partnership Agreements (EPAs) was an illustration of this strategy.[59]

Two final aspects of the political context for TRIPS implementation were the pro-IP global political environment and the interest of OAPI countries in bolstering their international image. Political leaders in francophone Africa have long understood the importance of a positive international reputation for securing investment, foreign aid, and trade deals. Political elites often, for instance, aligned themselves with prevailing global discourses about what constitutes appropriate economic policy, professing, for example, their commitment to modernization, good governance, the rule of law, engagement in the global economy, and the fight against corruption.[60] (Setting aside the fact that foreign powers frequently turned a blind eye to such considerations when commercial and strategic interests were at stake.[61]) Similarly, a positive commitment to IP protection was perceived by political leaders in francophone Africa as part of a bundle of measures they must pursue in order to acquire highly prized political and economic benefits from more powerful players in the international system.

7.2.2. *The Colonial Legacy and IP Protection in the OAPI Region*

OAPI countries have little experience of independent decision-making on IP matters. Across the developing world, the introduction to western IP systems began only with colonialism (see Chapter 2). In francophone Africa, the history of IP protection has been a particularly externally driven affair.[62]

Before the arrival of colonial powers, countries in francophone Africa relied on a range of indigenous concepts, laws, and enforcement mechanisms to

govern social relations; these operated on a tribal or local basis, were derived from ancient custom, and were largely unwritten (except, for example, where laws were influenced by Islam). The transposition of laws by the major colonial powers in the region (i.e. France, Belgium, Portugal, and Spain) interrupted the evolution of indigenous customs and laws.[63] Many of the legal concepts and assumptions embedded in the new laws, particularly their emphasis on individual rights and ownership, diverged significantly from African customs and cultures that emphasize community rights and collective heritage.[64]

In francophone Africa, the expansion of French involvement in the late 1800s spurred the creation of administrative organizations and services, increased the number of European residents, and broadened the range of commercial activities in the region.[65] From the mid-1890s, the expansion of France's control in the region prompted the imposition of French laws on the various occupied territories of the *Union Française* in French West Africa (completed by 1904) and then in French Equatorial Africa (completed by 1910).[66] French colonial law had several levels: laws of France that were extended to the colonies (with little or no changes); local enactments made by authorities designated by the French in the respective colony; and customary laws as practiced by the local people.[67] IP laws fell into the first category, reflecting France's strong philosophical commitment to strong IP protection. In France, IP rights had long been considered 'natural rights', to which inventors and creators had a natural entitlement. This position was reflected in the way France administered IP in its colonies. The transposition of French IP laws on the colonies was also consistent with developments at the time in international IP laws. Under its terms of accession to the 1886 Berne Convention, for instance, France was obliged to extend copyright protections to its colonies.

Throughout the colonial era and until 1962, patent rights in the OAPI region were governed by French law and the French *Institut national de la propriété industrielle* (INPI) served as the national IP authority. The French priority was to ensure the protection of the intellectual assets of their nationals within their territories. Local populations had no access to the IP system. With little need for, or investment in, local IP expertise, the French colonial era laid the foundations for a long-standing reliance on external actors.

By 1960, francophone African countries achieved independence and formal metropolitan legal authority was removed. Yet the nature of the relationship between France and its former subjects changed little.[68] Cold war politics reinforced the French push to retain authority in the region as it sought to prevent countries from allying with the USSR and China.[69] Post independence, France was keen to retain an effective system to protect and attract investment by French companies and investors in its former colonies and neighbouring countries.[70] As decolonization advanced, it thus largely involved the substitution of national for colonial control of similar or identical juridical

institutions, laws, and statutes, with marginal efforts to adapt them to local development needs.[71] The legacy of French influence on the structure of legal systems in general, and on IP laws specifically, continued. Copyright laws in the OAPI countries were modelled on French legislation. Further, between 1962 and 1964, France persuaded eleven francophone African states to join the Berne Convention (the international convention regarding copyright protection for literary and artistic works).[72] France also supported the move to a regional approach to IP protection, the foundations for which were laid in the early 1960s when twelve francophone countries gathered for a meetings hosted by the Union Africaine et Malgache (UAM) and its successor, the Organization Commun Africain et Malgache (OCAM).[73]

7.2.3. *The Emergence of a Regional Framework for IP Protection*

In September 1962, twelve francophone African countries signed the Libreville Agreement, thereby creating the Office Africain et Malgache de la propriété industrielle (OAMPI) (based in Yaoundé, Cameroon), the institutional precursor to OAPI and the world's most comprehensive and unified regional IP agreement.[74] OAMPI was designed to be a single regional body to act as the central authority for managing the protection of industrial property in francophone Africa.[75] The French IP Office (INPI) was actively involved in the formation of the regional arrangement and alongside BIRPI (WIPO's predecessor) and UNESCO, was represented at the founding meeting.[76] Until 1965, OAMPI operated under the ambit of OCAM. OAMPI became fully independent when OCAM moved to Bangui (after the withdrawal of Cameroon from the organization). OAMPI stayed in Yaoundé and in 1965 its first Director-General was elected.

Drafted with technical advice from INPI and BIRPI, the substance of the Libreville Agreement mirrored French legislation of the era and covered patent rights, trademarks, and industrial drawings. The Agreement advanced three core principles of regional cooperation, each of which remain in operation today: (*a*) the adoption of a uniform system of industrial rights protection based on uniform legislation; (*b*) the creation of a common authority to serve as the office for protection of industrial property for each of the member states; and (*c*) the application of common and centralized procedures such that a single title issued by OAPI would be valid in all member states. With this agreement, francophone African countries paved the way for delegating responsibility for IP administrative decisions to the regional level.

In March 1977, the Bangui Agreement superseded the Libreville Agreement and expanded the scope of regional coordination to include literary and artistic property. Marking the withdrawal of the Malagasy Republic, OAMPI also became the Organisation Africaine de la propriété intellectuelle (OAPI) at that time (and remained headquartered in Yaoundé, Cameroon).[77]

By this time, the membership of OAPI had expanded to fifteen countries. The copyright provisions of the Bangui Agreement again took French law as their legal foundation.[78] The close link to INPI was formalized with a cooperative agreement in 1982. Reflecting on the creation of OAPI, one of its former Directors-General described the decision by members to cooperate on IP as an 'act of faith'.[79]

Since its inception, OAPI has consisted of three main organs: the Administrative Council (composed of the representatives of OAPI member states, usually Ministers), the Organization (OAPI's Secretariat that executes the directives of the Council and administers the Bangui Agreement and its Annexes), and the High Commission of Appeal.[80] The Council is the political head and highest authority of OAPI. Its responsibilities include: regulating and controlling all aspects of the organization; approval of the annual OAPI programme, budget, accounts, and report; appointing the Director-General; establishing fees for OAPI services; and making decisions regarding membership and any contributions to be made by member states. The Director-General is appointed for a five-year term (renewable once) and is responsible for the budget, the work programme of the OAPI Secretariat, and relationships with member states.

Since 1999, the OAPI Secretariat has maintained a staff of around seventy to eighty, including twenty-five professionals (i.e. scientists, lawyers, and other experts).[81] The OAPI Secretariat carries out novelty examinations for trademarks, but in the area of patents is essentially a registering office. WIPO provides patent searches for OAPI free of charge and other aspects of patent examinations are generally outsourced to the EPO. Each OAPI member designates a national liaison office ('*structure nationale de liaison*' (SNL) – usually its national industrial property office) to maintain the link with the OAPI Secretariat between the annual ministerial-level meetings of the Administrative Council.

In ten of the sixteen OAPI members, the national industrial property office is located within the Trade Ministry. In the other six it is located in separate ministries charged with the promotion of industry, craft, employment, or other tasks (see Table 7.1). The main tasks of national industrial property offices are to educate the public about the IP system, provide for enforcement of rights, review and forward applications to the OAPI Secretariat, and serve as a liaison with the OAPI Secretariat and international donors. While some national industrial property offices in the region had up to five or six professional staff (e.g. Senegal) at the time of the revisions, others had just three staff (e.g. Mauritania).[82] Copyright offices, to whom the task of ensuring effective administration of copyrights fell, were usually located separately in Ministries of Culture. The number of professionals in copyright offices was generally also between five and ten. In most cases, national collecting societies were located within these copyright offices as well. In both copyright and industrial

Table 7.1. Ministries responsible for industrial property in OAPI members

Country	Responsible ministry
Benin	Ministry of Industry and Smaller Businesses, National Intellectual Property Centre
Burkina Faso	Ministry of Trade and of the Promotion of Business and Artisans, Directorate-General of Industrial Property
Cameroon	Ministry of Industrial and Commercial Development, Directorate of Industrial & Handicraft Development, Industrial Property Service
Central African Republic	Ministry of Industry, Commerce and Small and Medium-Sized Businesses and Industries, Directorate of Industrial Development and Handicraft, National Industrial Property Service
Chad	Ministry of Commerce, Industry and Handicrafts, Division of Industrial Property and Technology
Congo	Ministry of Industrial Development, Directorate-General of Industry, National Directorate of Industrial Property
Côte d'Ivoire	Ministry of Industry and Private Sector Development, Ivoirien Office of Industrial Property
Equatorial Guinea	Presidency of the Government, Council of Scientific and Technological Research, Office of Industrial Protection
Gabon	Ministry of Trade and Industrial Development, Directorate-General of Industrial Development, Centre of Industrial Property of Gabon
Guinea	Ministry of Trade, Industry and Small and Medium-sized Business, Industrial Property Service
Guinea Bissau	Ministry of Economy and Finance, Directorate General of Industry, Industrial Property Directorate
Mali	Ministry of Industry and Trade, Malien Centre for the Promotion of Industrial Property
Mauritania	Ministry of Mining and Industry, Directorate of Industry
Niger	Ministry of Commerce, Industry and Private Sector Development, Office of Industrial Development
Senegal	Ministry of Mining, Handicrafts and Industry, Industrial Property and Technology Service
Togo	Ministry of Industry, Trade and the Development of the Franc Zone, National Institute of Industrial Property and Technology

property offices, the budget and staff resources fell far short of those necessary to fulfil their objectives.

7.3. The Revised Bangui Agreement

7.3.1. *The Core Provisions of the Revised Agreement*

In 2002, the revised Bangui Agreement entered into force, thereby introducing a significant set of changes to OAPI's legal framework for IP protection. The goal, as recounted by the OAPI Secretariat, was to make the Bangui Agreement 'consistent with the requirements of international intellectual property treaties to which the member states belong, in particular the TRIPS Agreement; to simplify procedures for issuing titles; to broaden the scope of protection; and to make good certain legal gaps'.[83] Like the 1977 Bangui Agreement, the

revised text is a regional instrument that applies automatically as national law in each of the OAPI member states that ratifies the agreement.

The revised text has two parts: the Agreement that sets out the general terms and obligations of its members (and came into force on 28 February 2002) and ten Annexes that specify the substantive obligations in the following areas: patents (Annex 1), utility models (Annex 2), trademarks and service marks (Annex 3), industrial designs (Annex 4), trade names (Annex 5), geographical indications (Annex 6), literary and artistic property (Annex 7), protection against unfair competition (Annex 8), layout designs (topographies) of integrated circuits (Annex 9), and plant variety protection (Annex 10).[84] All but two of these Annexes came into force at a meeting of the OAPI Administrative Council held later in 2002. The Annex on plant variety protection came into force on 1 January 2006.[85] The Annex on integrated circuits is yet to enter into force.

To bring the OAPI framework into line with TRIPS, the revised Agreement extends the term of protection for patents and copyright, and also expands the scope of patent protection (e.g. to pharmaceutical products). The revised treaty increases, for instance, increases the term of patent protection to 20 years (from 10 years with the possibility of extension) and grants an automatic extension of the patent term to 20 years for patents that had already been granted under the previous 1977 accord. In addition, the revised Agreement introduces new copyright protections for computer programs and the related rights of performers of performances, producers of phonograms, and for broadcasting organizations; adds new annexes for the protection of layout designs (topographies) of integrated circuits and plant varieties (which had hitherto not received any protection in OAPI countries); and also adds special protections for geographical indications related to wines and spirits (Table 7.2 summarizes these amendments).[86] The revised Bangui Agreement also maintains and expands several distinct features of the 1977 Agreement, such as protections for utility models and for cultural heritage and folklore, neither of which are subject matter addressed in TRIPS.[87]

The revised Bangui Agreement retains the OAPI Secretariat's status as the equivalent of the national industrial property service for each of its members. The OAPI Secretariat thus holds responsibility for the administration and management of protection relating to patents, utility models, product or service marks, industrial designs and models, trade names and geographical indications, as well as for the collection of all related application fees for industrial property applications and renewals.[88] As under the earlier Agreement, the issue of a title by the OAPI Secretariat automatically gives rise to rights valid in all its member states. The OAPI Secretariat is also responsible for administrative procedures regarding the implementation of international treaties to which its member states have acceded.[89]

Table 7.2. Comparison of the 1977 and 1999 Bangui Agreements

	Bangui Agreement (1977)	Bangui Agreement (1999)
Patents	10 years, renewable for maximum two further periods of 5 years[a]	20 years
Utility models	5 years	10 years
Trademarks or service marks	10 years, renewable every 10 years	10 years, renewable every 10 years[b]
Industrial designs	5 years	5 years, renewable twice for 5 years[c]
Trade names	10 years, renewable every 10 years	10 years, renewable every 10 years
Copyright		
• General	Lifetime of author + 50 years	Lifetime of author + 70 years
• Photographs	25 years	25 years
• Films, radio, & audio-visual work	50 years	70 years
Related rights	n.a.	
• for performances		50 years
• for phonograms		50 years
• for radio broadcasts		25 years
Layout designs of integrated circuits[d]	n.a.	10 years
Plant variety protection	n.a.	25 years
Geographical indications	No special protections for wines and spirits	Added special protections for wines and spirits

Source: WTO (2005e)

[a] For a renewal, the applicant had to prove to OAPI's satisfaction that the invention was being worked in one of the member states.

[b] Under the revised Agreement, the use of the trademark is no longer a requirement for its renewal.

[c] The revised Agreement removes the possibility of compulsory licensing of industrial designs.

[d] This annex to the revised Agreement is not yet in force.

No domestic legal instrument is required to enact the Bangui Agreement as national legislation. The regional Agreement may, however, coexist with national laws in each member state.[90] Such coexistence is the exception, however, and occurs only in the area of copyright.[91] The expectation is that governments should adopt or upgrade national copyright legislation to meet or supplement the standards of the revised Bangui Agreement. In addition, the revised treaty calls on members to establish national collecting societies to manage the administration, exploitation, and protection of authors' moral and economic rights.[92]

The revised Bangui Agreement also meets TRIPS requirements for greater specificity on several matters related to the administration and enforcement of IP protection in the region. The revised Agreement extends the grace period for patents from six to twelve months and, for the first time, introduces clear instructions with respect to novelty and a definition of an invention and industrial design.[93] It reverses the burden of proof in infringement disputes launched by holders of process patents, such that the burden falls on the alleged infringers to prove their innocence. The revised Bangui Agreement also increases fines for infringement of IP rights (from a maximum

of approximately US$210 to a maximum of US$6,250),[94] lengthens terms of imprisonment for infringement, and bolsters the potential for criminal sanctions. Responsibility for the implementation of these enforcement provisions rests at the national level. Similarly, certain legal questions, such as those concerning infringement of patents or requests for non-voluntary licences, are regulated at the national level (i.e. by civil tribunals in each member state).

7.3.2. *TRIPS Flexibilities and TRIPS-plus Reforms in the Revised Bangui Agreement*

In revising the Bangui Agreement, the OAPI countries took a mixed approach to the use of TRIPS flexibilities. On the one hand, the revised Agreement includes several exceptions to IP protection that were not in the original accord, including exceptions to patent rights for experimental purposes in the course of scientific and technical research. In addition, the revised Agreement adds exclusions from patentability for methods of medical treatment (such as diagnostic methods), matters of discovery, literary, architectural and artistic works, and also new plant varieties.[95] The revised Agreement also includes limitations on the rights of copyright holders (to allow, inter alia, for private use, quotation, scientific use, teaching, libraries, and news purposes).[96] Further, the revised Agreement strengthens provisions against unfair competition.[97]

On the other hand, the revised Bangui Agreement features a range of commitments that exceed TRIPS requirements. In addition to early TRIPS implementation, these include failure to take full advantage of available TRIPS flexibilities and the adoption of standards of protection higher than those required by TRIPS. Table 7.3 presents a summary of the range of TRIPS-plus standards in the revised Bangui Agreement. There are five particular TRIPS-plus aspects of the Agreement where, based on the assessment of economic and social interests, one would logically expect the countries to have acted differently: (1) timing, (2) patents, (3) plant variety protection, (4) copyright, and (5) international agreements.[98]

7.3.2.1. TIMING

TRIPS required the four developing country members of OAPI to have new laws in place by 1 January 2000, but granted LDCs extra time. When the revised Bangui Agreement was signed in 1999, OAPI's twelve LDC members had until 2006 to implement TRIPS-related legislative reforms, with the possibility of further extension.[99] Despite this flexibility, the OAPI members did not take any measures to postpone the deadline for the entry into force of the Bangui Agreement for its weaker members. Even when the 2001 Doha Declaration on TRIPS and Public Health granted LDCs until at least January 2016 to implement patents on pharmaceuticals products and related provisions on

Table 7.3. Examples of TRIPS-plus standards in the revised Bangui Agreement

Subject matter	TRIPS flexibilities	TRIPS 'plus' provisions of revised Bangui Agreement
Deadlines	LDCs had until 2006 for the implementation of patent protection. This deadline was then extended to 2016 in the case of pharmaceutical products, and to mid-2013 for TRIPS as a whole	Provides TRIPS-consistent patent legislation from 2002, including in the area of pharmaceutical products
Exhaustion regime	Countries can choose any regime of exhaustion – international, regional, or national	Provides for regional exhaustion
Compulsory licences	The TRIPS Agreement explicitly allows for use without the authorization of the rights holder. It provides a series of conditions and limitations but does not limit the grounds which such licences may be granted	Provides a series of conditions and limitations for compulsory licensing from 2002. It also limits the grounds for compulsory licensing in ways not required by TRIPS
Protection of undisclosed test data	TRIPS affords states the flexibility to decide how to protect test data against unfair commercial use and disclosure. LDCs were granted until 2016 to provide such protection in the Doha Declaration on TRIPS and Public Health	Provides strong general protection for confidential data from 2002
Copyright	Life of the natural person or no less than 50 years from the end of the calendar year of authorization publication, or failing such authorized publication within 50 years from making of the work, 50 years from the end of the calendar year of making	Provides protection for the lifetime of the author + 70 years
Radio broadcasting	At least 20 years from the end of the calendar year in which the broadcast took place	Provides for 25 years from the end of the calendar year in which the broadcast took place
Plant variety protection	Provides countries choice of system for plant variety protection: either by patents or by an effective *sui generis* system. No term of protection is specified	Incorporates UPOV 1991 plant variety protection and obliges OAPI member states to join UPOV 1991. The term of protection is set at 25 years
Requirements to accede to international conventions	No accession to additional international conventions required	Commits members to accede to 11 international IP agreements

exclusive marketing rights, no action was taken to postpone the application to LDCs of the Bangui Agreement (which had not yet been ratified by all of its signatories) (see Table 7.4).[100] Similarly, no such action was taken after the WTO TRIPS Council agreed in late November 2005 to grant LDCs a collective extension for the *entire* TRIPS Agreement of an additional seven-and-a-half years, giving LDCs until 1 July 2013 to implement TRIPS, again with the possibility of further extensions.[101] The terms of the WTO's LDC extension prevents countries from reducing or withdrawing existing protections thus

Table 7.4. Dates of ratification of the revised Bangui Agreement by OAPI members

OAPI member	LDC OAPI member	Ratification date
Cameroon	–	9 July 1999
Gabon	–	27 December 1999
Senegal	X	9 March 2000
Côte d'Ivoire	–	24 May 2000
Mali	X	19 June 2000
Equatorial Guinea	X	23 November 2000[a]
Chad	X	24 November 2000
Burkina Faso	X	8 June 2001
Mauritania	X	5 July 2001
Guinea	X	13 July 2001
Congo	–	19 October 2001
Togo	X	29 November 2001
Niger	X	28 May 2002
Guinea Bissau	X	14 August 2003
Benin	X	18 December 2003
Central African Republic	X	24 April 2004

[a] Equatorial Guinea also joined OAPI on this date.

locking countries into the revised Bangui Agreement, which otherwise states that any country can exit from their obligations under the treaty.[102]

While the extended transition period for TRIPS implementation protects OAPI LDCs from WTO disputes alleging lack of enforcement, the OAPI countries' early and TRIPS-plus approach to implementation nonetheless risked significant social and economic costs, particularly in the area of public health. Specifically, the decision to extend protection to pharmaceutical products and to increase the term of patent protection rendered OAPI LDCs vulnerable to higher prices and licensing costs for technologies some eleven years earlier than TRIPS required, and fourteen years earlier in the case of pharmaceutical products.

7.3.2.2. PATENTS

Several aspects of the revised Bangui Agreement contradict the letter and spirit of the rights countries acquired in the 2001 Doha Declaration on TRIPS and Public Health. The revised Bangui Agreement's provisions on the use of compulsory licences by third parties (described in the Agreement as 'non-voluntary' licences) or by governments (ex-officio licences)[103] impose more stringent conditions than TRIPS, thus sacrificing the full use of flexibilities affirmed by the Doha Declaration. It demands, for instance, a judicial procedure in national civil courts before licences to third parties can be granted.[104] The revised Bangui Agreement also omits several of the possible grounds for compulsory licences, such as the existence of import monopolies.[105] Further, the revised Agreement counts importation of patented products as one

method of 'working' a patent. Under the 1977 Bangui Agreement, a non-voluntary licence could be issued if imports of the patented product prevented or hindered 'working' of the invention. Pre-TRIPS, this legal strategy of limiting the rights of the IP holder in the absence of domestic 'working' was used by many countries as a tool for promoting national industrial and scientific capacity. Where demand is being met through imports, the 1999 Agreement eliminates the option of compulsory licensing and thus one of the tools governments might have used to build production capacity and expand affordable access to medicines in the region.[106]

While TRIPS provides for countries to choose any exhaustion regime (national, regional, or international) the OAPI member states retain a regional approach.[107] This decision means that parallel imports are only possible from among the OAPI member states, despite the fact that medicines can often be found at lower prices outside the OAPI region.[108] In 2002, for instance, one tablet of GlaxoSmithKline's Combivir, a one-pill combination of two antiretrovirals, cost US$1.96 in Togo and US$0.94 in Senegal (the lowest price within the OAPI region), but only US$0.65 in India. If OAPI countries had chosen international exhaustion, Togo could have imported Combivir from India. Instead, Togo imported Combivir from Senegal at a price that was 45 per cent higher.[109]

The revised Bangui Agreement also introduces for the first time in the region, protection for second-use patents (which is not required by TRIPS)[110] and data submitted for regulatory approval purposes. These protections can serve respectively to extend the length of patent protection and slow the marketing of generic versions of products such as medicines. While Article 39.3 of TRIPS does call for countries to provide some form of data protection, the revised Bangui Agreement provides stronger standards than those necessary to meet the vaguely stated minimum TRIPS obligation.[111] In addition, the patent provisions of the revised Bangui Agreement do not provide for any exceptions for experimental or research purposes. Finally, by extending the new twenty-year protection to patents claimed under the prior regime, the revised Agreement also deprives member states of the possibility to exploit patents that would otherwise have fallen into the public domain after ten years.[112]

7.3.2.3. NEW PLANT VARIETIES

The revised Agreement also provides TRIPS-plus protections for new plant varieties in the form of provisions consistent with the 1991 Convention of the Union for the Protection of Plant Varieties (UPOV)[113] and commits OAPI countries to joining that Agreement.[114] By adopting the UPOV 1991 approach to fulfilling their commitments under TRIPS Article 27.3b, the OAPI members legally constrain the freedoms of their farmers to plant, sell, and exchange seed.[115] While the precise impact of UPOV 1991 on farmers' livelihoods is

debated, the choice of UPOV 1991 does clearly contradict the African Group's efforts at the WTO to revise the terms of Article 27.3 (b) to ban the possibility of private rights over life forms (such as plant varieties) and promote stronger provisions for the protection of farmers' rights through non-UPOV 1991 *sui generis* frameworks.[116] In lieu of the UPOV 1991 approach, OAPI countries could have advanced an alternative *sui generis* system for plant variety protection, such as one modelled on UPOV 1978[117] or the African Model Law for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources, which had already been developed by the Organization of African Unity (OAU),[118] endorsed by the OAU Heads of State in 1998, and actively promoted at the WTO by the African Group.[119]

7.3.2.4. COPYRIGHT

The 1999 Bangui Agreement extends the scope and terms of copyright protection beyond TRIPS obligations. At the time of the 1999 revisions, all but four of the current OAPI member states had copyright laws in place but they complied to varying degrees with the original 1977 Bangui Agreement.[120] To meet TRIPS standards, these laws also needed to be revised. For books, pictorial works, sculpture, music, films, radio, and audiovisual programmes, the revised Agreement adopts a general term of protection of the life of the author plus seventy years, representing an increase of twenty years over both the 1977 Bangui Agreement and TRIPS requirements. The new version of the Agreement also removes prior flexibilities regarding the translation of foreign works into local languages for educational purposes (a flexibility TRIPS provides) and also fails to take advantage of the Appendix to the Berne Convention (which offers special provisions for developing countries to enable them to improve the availability of translated works).[121] Further, the revised regional text also provides for TRIPS-plus sanctions to punish circumvention of technological protection devices.[122]

7.3.2.5. INTERNATIONAL AGREEMENTS

The revised Bangui Agreement requires members to accede to eleven additional international conventions (and also to the WTO in the case of Equatorial Guinea), whereas no such obligations exist in TRIPS area.

Why did the OAPI countries adopt TRIPS-plus provisions in the revised Bangui Agreement in these five areas? Why was there no effort in the Bangui Agreement to follow the TRIPS model of distinct implementation deadlines for developing countries and LDCs? Why did the OAPI members fail to incorporate the same TRIPS flexibilities they fought to affirm in the 2001 Doha Declaration on TRIPS and Public Health? Why did the OAPI members

agree to an approach to plant variety protection that contradicts principles of the OAU model law and their own international position on the issue? What prompted governments to opt for copyright protections that exceeded TRIPS requirements?

It is already clear that national economic interests fail to explain the TRIPS-plus approach taken by the OAPI countries. Neither are general allusions to international pressures enough to account for the specifics of the Bangui outcome. In the remainder of this chapter, I argue that the institutional arrangements for IP decision-making in the region and pro-IP capacity-building, were the decisive variables. To make this case, I trace the Bangui revision process through three phases: (*a*) the emergence of the text (1995–9); (*b*) the ratification of the text (1999–2002); and (*c*) debates after the entry into force of the revised Agreement (2002–7).

7.4. The Bangui Revision Process

7.4.1. *The Emergence of the Revised Bangui Agreement (1995–9)*

The text of the revised Bangui Agreement emerged after the entry into force of TRIPS in 1995. According to the OAPI Secretariat, the revision process began with investigations it carried out in member states in 1994. In 1995, studies conducted by the Secretariat compared TRIPS with the 1977 Bangui Agreement, revealing those aspects of the regional legal framework that would require amendment in order to meet TRIPS obligations. To draft a revised Bangui Agreement, the OAPI Secretariat engaged a Cameroonian national as an independent consultant (reportedly, this consultant was Denis Ekani, who had served for nineteen years as OAPI's first Director-General from 1965 to 1984).[123] While an official announcement calling for bids to complete this task was published in national newspapers in the region, the decision to hire Ekani preceded the deadline for tender submissions.[124] During 1996 and 1997, the preliminary texts of a revised Bangui Agreement were drafted by Ekani in close collaboration with the OAPI Secretariat, and with input from staff of WIPO, UPOV, and INPI, which also hired an external consultant to provide assistance with legal drafting.[125]

The OAPI Secretariat has consistently argued that governments carefully considered the implications of the revisions, including 'the problem of knowing whether it is the absence of protection of intellectual property rights or the reinforcement of their protection which can encourage technology transfer necessary for development'.[126] According to the Secretariat, the draft instruments were submitted in 1997 to governments for comments, suggestions, and further elaboration, and also to other partners, such as WIPO, UPOV, the EPO, and INPI. This process was combined with meetings of experts

from OAPI member states and partners in Conakry (November 1997), Abidjan (February 1998), Ouagadougou (July 1998), and Nouakchott (November 1998).[127] The definitive text was adopted by national IP officials at a further meeting in Nouakchott (Mauritania) at the end of December 1998. From 22 to 25 February 1999, the revised Bangui Agreement was opened for signature at a Diplomatic Conference in Bangui and signed on 24 February by the plenipotentiaries of fifteen member states.[128]

At no point in the Bangui revision process was there any formal interstate negotiation of the draft text.[129] Within the OAPI countries, there was no substantive parliamentary discussion about the proposed revisions to the Bangui Agreement. Parliamentarians had little knowledge of IP issues or of the revision process and thus limited capacity to monitor or participate in matters of IP policy and decision-making. Indeed, during this phase of the revisions, four of the OAPI countries were in the midst of civil wars or other domestic political unrest, precluding the possibility for meaningful engagement in regional IP decision-making.[130]

At the time the OAPI countries signed the Bangui Agreement there were no national or regional IP policy strategies through which countries could formulate their effort to comply with TRIPS. Within OAPI governments, IP decision-making was perceived as a technical domain, the legal details of which could be left to experts from OAPI or donor agencies such as WIPO or INPI, rather than a policy issue worthy of explicit integration into a broader national development policy. There was thus no coordination within OAPI member states to respond to TRIPS requirements and limited appreciation of the range of potential public policy implications for countries, or of the available TRIPS flexibilities. This policymaking vacuum meant that any national participation the Bangui revision process was left in the hands of a small group of staff in national IP offices.

At best, IP officials in a few of the OAPI member states discussed the revisions with a handful of actors from other government offices or from outside government. Limited expertise on the particulars of the TRIPS and its flexibilities restricted the potential for substantive debate on tailoring implementation to meet the region's development needs. There is no evidence of any formal or informal *public* consultations with relevant local stakeholders either by the OAPI Secretariat or national governments during the revision process.[131] Though legal expertise in the region grew over the past decade, there were few experts on international trade or TRIPS in the OAPI region at the time of the Bangui revisions. Beyond the professional staff at OAPI, a review of the scholarly literature on IP protection in the region reveals that there was at best a core group of ten local scholars (either living in the region or abroad) who were qualified and engaged in any technical, legal, or economic analysis of the issues at stake.[132] When the revised Bangui text was drafted there was not a single university in the region which offered IP law

at a graduate level.[133] (As of late 2007, at least one university had a graduate programme in IP law.)[134]

Within IP offices, the perspective of staff on the technical aspects of TRIPS tended to focus narrowly on compliance. Officials in IP offices were the product of training by INPI, European universities, WIPO, or U.S. universities, which conveyed pro-IP views regarding the importance of strengthened IP protection. By contrast, they lacked detailed knowledge of the politics of the TRIPS negotiations and the ongoing international debates regarding flexibilities. Those with critical concerns about IP protection were in the minority.[135]

There were also few NGOs able to engage substantively in national or international debates on IP policy. In addition, low investment in R&D and technological development in the region meant there were no organized domestic stakeholders from industry or in the scientific community with economic interests in advocating for stronger IP protection. The only professional community with ongoing engagement with IP offices and the OAPI Secretariat consisted of IP attorneys. Comprised of no more than twenty individuals across the region, the main activities of private IP attorneys were to register and file applications for IP rights, and to represent the interests of IP rights, and to represent the interests of IP right-holders.[136] There was no equivalent community of IP experts with IP users, consumers or public interest perspective.

Neither the OAPI Secretariat, member states, or international donors undertook any substantive empirical assessments to substantiate expectations about prospective gains or to identify the distribution of potential losses from the revised Agreement. While it is true that the OAPI Secretariat forwarded the draft text to national IP offices for comment, there is no record of any substantive written comments from member states to the OAPI Secretariat or any evidence of coordination among member states in responding to the draft text. As observed by a leading law professor in the region, 'you cannot request a member state with very few experts to have a sound opinion'.[137] Weak national capacity, he argued, made it obvious that there would be no substantive feedback, and that 'the opinion of the Secretariat would prevail'.[138]

Substantive debate in francophone Africa on the Bangui revisions was further constrained by the fact that Geneva-based diplomats from the region had only marginally participated in the Uruguay Round of GATT negotiations and were absent from the TRIPS discussions. Most of the OAPI countries maintained only a very small permanent representation to the WTO in Geneva (with just one or two professional staff to cover all WTO issues), and five of the OAPI countries had no permanent representation to the WTO at all.[139] Many national IP offices did not have consistent Internet connections through which to access information about debates at OAPI, WIPO, or the WTO. In the period under study, only four Geneva-based diplomats from the OAPI region devoted particular attention to TRIPS, notably two consecutive delegates from

Senegal (1999–2002), a delegate from Mauritania,[140] and the Ambassador of Benin (2000–2005).[141] At WIPO, francophone African governments tasked national IP offices, rather than Geneva-based diplomats, with managing their relationship with an IGO which they perceived as primarily 'technical'. When officials from national IP offices visited WIPO, usually only once a year for the WIPO Annual Assemblies, the main focus of their attention was the renewal and expansion of capacity-building, and other technical and financial support to their offices. Francophone African governments thus could not turn, as some other developing countries had, to diplomats monitoring IP negotiations at the WTO or WIPO for technical expertise or political advice on their options with respect to TRIPS implementation. When IP officials from the OAPI region were in Geneva to attend WIPO meetings few met with or received political guidance from their country's diplomats monitoring the work of the WTO on TRIPS.[142] Further, there was also no systematic engagement between the OAPI Secretariat and the various permanent missions in Geneva, despite the frequent visits of OAPI staff to Geneva.

Weak national capacity on IP issues left the OAPI Secretariat and international donors to drive the TRIPS implementation process. The OAPI Director-General stated that it was precisely the inefficiency of institutions and decision-making processes in member states that prompted the Secretariat to take the lead.[143] In his view, the time and effort required to fully involve OAPI members in negotiating transition periods, adapting draft texts, or designing new approaches (such as a *sui generis* rather than UPOV 1991 approach to plant variety protection) would have rendered the revisions and TRIPS implementation process too unwieldy.[144] Regarding the absence of differential treatment for LDCs in the revised Bangui text, the OAPI Director-General argued that broader values of solidarity were deemed more important by member states: '[t]he regional system for the protection of intellectual property used by OAPI has always operated according to the principle of solidarity'.[145]

Alongside the OAPI Secretariat, international donors stepped up their activities in the region. WIPO provided training, legal advice, and institutional support. In 1997, for example, WIPO hosted two major meetings for national IP officials in the OAPI region: one for heads of SNLS in Gabon and a regional WIPO Workshop on IP for magistrates in Cameroon. It also supported and co-organized other meetings in the region jointly with the EPO, INPI, and OAPI.

UPOV was also active during this time promoting UPOV 1991 as the ideal approach to the implementation of TRIPS Article 27.3(b) on plant variety protection. At that time, UPOV 1991 had attracted only eleven members, none of which were developing countries.[146] If the OAPI countries agreed to a UPOV 1991 approach, UPOV stood to gain sixteen new members in a single swoop. On 15 February 1999, just ten days before the OAPI member states were scheduled to sign the revised Bangui Agreement, there was a joint UPOV–WIPO–WTO workshop for developing country delegates in Geneva

Table 7.5. Timing of WTO Trade Policy Reviews of OAPI members (1995–2007)

WTO member	Date of trade policy review
Benin	15–16 September 1997, 28–30 June 2004
Burkina Faso	18–20 November 1998, 28–30 June 2004
Cameroon	13–14 February 1995, 18–20 July 2001, and 1–3 October 2007
Central African Republic	11–13 June 2007
Chad	22–24 January 2007
Congo	27–29 September 2006
Côte d'Ivoire	4–5 July 1995
Gabon	26–28 June 2001, 1–3 October 2007
Guinea	24–26 February 1999, 12–14 October 2005
Mali	18–20 November 1998, 28–30 June 2004
Mauritania	11–13 September 2002
Niger	22–24 September 2003
Senegal	22–24 September 2003
Togo	27–28 January 1999, 3–5 July 2006

regarding Article 27.3(b) of TRIPS, at which the organizers conveyed a clear recommendation for UPOV 1991 as the most expeditious and appropriate option for governments to fulfil their obligations under Article 27.3(b).[147] Meanwhile, the OAPI Secretariat advised its members that UPOV offered a law that member states could take 'off the shelf' and that the development of an alternative *sui generis* law, would be a time-consuming and impractical endeavour.[148] France also expressed its preference for a UPOV 1991 approach (and for the protection for geographical indications) to the various agriculture, trade, and foreign affairs ministries in the region.[149]

The WTO Secretariat reinforced the pressure for a swift compliance-plus approach to TRIPS implementation. Using the monitoring power entrusted to it through the WTO Trade Policy Review (TPR) process, the WTO Secretariat reminded OAPI countries of their TRIPS deadlines and noted a range of areas where the national and regional laws fell short of TRIPS requirements. Six of the OAPI countries were subject to TPRs during the first phase of the revision process: two developing countries in 1995 (Cameroon, the first WTO member to be scrutinized under the TPR procedure, and Côte d'Ivoire) and four LDCs in 1997 and 1998 (Mali, Benin, Burkina Faso, and Togo) (see Table 7.5). In its 1995 Report on Côte d'Ivoire, the WTO Secretariat referred to TRIPS deadlines, noting that compliance by Côte d'Ivoire would require joint action among countries in the region and that the government had 'generally speaking, a period of five years in which to review the Bangui Agreement with its partners in order to bring it into conformity with TRIPS'.[150] There was no mention that the majority of Côte d'Ivoire's partners were LDCs with longer deadlines for TRIPS implementation. The Secretariat also highlighted shortcomings in terms of the duration of patent protection and weak enforcement. In none of its four LDC TPR reports did the WTO Secretariat include any mention

of the extended deadline available to them. By contrast, it did emphasize the importance of strengthening administrative and judicial capacity.[151] In a 1997 TPR Report, for example, the WTO Secretariat reminded Benin that TRIPS 'also implies the development of judicial procedures and the substantial strengthening of administrative and training capacity in order to ensure that the IP laws can be implemented effectively'.[152] No mention was made of challenges that IP reforms might bring for other public policy objectives. Japan and the United States also took advantage of the TPR process to pose questions at meetings in Geneva on the protection of IP in the OAPI countries and on the progress of the effort to upgrade the 1977 Bangui Agreement to meet TRIPS requirements.[153]

From the start of the revision process until February 1999, there was no public debate on the revised Agreement, no press releases from NGOs, and no media coverage. The silence was broken on the 17 February, less than a week before the Agreement was signed when the Canadian-based NGO, the International Rural Advancement Foundation (RAFI),[154] became aware of the text during meetings in East Africa.[155] With just days to organize, RAFI worked to warn representatives from OAPI countries about to meet in Bangui. Along with GRAIN,[156] an international NGO headquartered in Spain, RAFI appealed to the media, issuing a series of press statements expressing concerns about the UPOV 1991 approach to plant variety protection. They also worked to reach NGOs and government officials in the OAPI countries, sending a briefing note to each of the OAPI Ministers of Agriculture and to Ministers responsible for patent offices.[157] RAFI and GRAIN each emphasized that TRIPS did not oblige WTO members to adopt a UPOV 1991 approach and urged countries not to sign the Bangui Agreement. They argued that the adoption of UPOV 1991 would be premature: '[n]ot only is it out-of-step with other developments in Africa, it would lock governments into legislation that no other developing country has adopted, and which is far more restrictive than is necessary to meet their international obligations'.[158] These NGOs also stressed that WTO members were poised to conduct a review of Article 27.3(b) and that new opportunities to revise TRIPS could emerge in future WTO negotiations. They noted that 'African patent offices are being asked to climb on a wagon other countries in other regions may never accept'.[159] Calling attention to the fact that LDC members of OAPI had until at least 2006 to comply with TRIPS, NGOs highlighted that the Bangui text contradicted the position advanced at the WTO by the foreign affairs and trade ministries of the same countries. In mid-1998, for example, the OAU's Scientific, Technical, and Research Commission had issued a declaration expressing concerns about Article 27.3(b). African heads of state had also agreed to develop an African common position in favour of revising TRIPS.

Further, alongside the Diplomatic Conference where OAPI members were scheduled to adopt the revised Bangui Agreement, national environment and

agriculture officials attending meetings on the UN Convention on Biological Diversity (CBD) took action. Spurred by RAFI and GRAIN, they sent a fax to their capitals calling on their governments not to sign the Agreement.[160] This was all to no avail; the Agreement was signed. In March, the first piece of international media coverage appeared in the scientific magazine *Nature* (and remained the only story published by any mainstream international reporting service on the Bangui revision process).[161]

Even though some agriculture and environment officials in the region continued privately to express sympathy with NGO concerns about the newly signed Agreements, they remained largely silent. There were several reasons for this: lack of technical expertise, the clear preference for UPOV 1991 on the part of national IP offices, WIPO and France (upon which they would rely for financial and technical support for administration of the Agreement), and the difficulties of coordinating a distinctive national position far less a common position with other governments. Within days, the OAU advised national IP offices in writing that the Bangui revisions contravened a Heads-of-State decision of January 1998 to create an Africa-wide strategy for plant varieties based on the African Model Law that would integrate the region's political commitment to farmers' rights with the interests of plant breeders.[162] Further, in anglophone Africa, ARIPO pre-emptively announced that its meeting the next month would stand by the OAU position and not endorse any specific IP regime for plants.[163]

Statements from several IP officials reveal that some had become aware of the concerns raised by NGOs. Moreover, their statements reveal the extent to which officials understood the importance of toeing the line on IP protection to their relations with developed countries. Defending the text, several officials repeated the logic espoused by advocates of UPOV 1991. A senior official from Benin's national IP office stated, for instance, that the UPOV Convention is important insofar as it protects inventions coming from Western countries that are much more able and equipped in research, especially in genetic engineering: 'Those who have something are scared. Infringements are occurring more and more, and if Western inventions are not protected, they will be investing in research at a loss', he said. '[I]f one does not create that trust, there will not be any kind of technological transfer'.[164] Similarly, a senior official from Burkina Faso's IP office stated that '[i]f after investment-financed research someone finds varieties of millet or corn (suitable) for the Sahel, they must be compensated for their discovery'. Alluding to the debate on the issue, an official from Burkina Faso's Ministry of Agriculture insisted that the OAPI region's decision to adopt a UPOV 1991 approach was like adding a 'voice of reason'. 'It's a necessity. African nations have ample knowledge of UPOV, so they have nothing to worry about'.[165] While it possible that some of these officials were indeed convinced their decisions would help farmers in the region, their statements suggest not a technical assessment or interest in the

merits or risks of the revised Agreement but rather a desire to be perceived as committed participants in the global IP system.

Ultimately, the OAPI countries revised the Bangui Agreement without a detailed review of the flexibilities available to them under TRIPS, or of the potential positive or negative impacts. With little input from parliament, domestic experts, interest groups, or other parts of government (and negligible effort to acquire it), IP offices proceeded unsupervised. National IP officials relied in turn on leadership from the OAPI Secretariat and advice from their core, namely INPI, WIPO, the WTO, and UPOV. The result was a revised Agreement that reflected the advice of external experts with no consideration of how to tailor TRIPS implementation to suit local needs. The collective message from these advisors was that swift compliance with TRIPS would bring reputational rewards. Further, OAPI countries were assured they could rely on donor support for the administration and enforcement of the revised Agreement.[166]

7.4.2. *The Ratification Phase (1999–2002)*

The second phase of the Bangui revision process lasted for three years, from the signing of the revised text in 1999 until its entry into force in 2002. During this period, a range of actors, including international and national NGOs, some African scholars working within and outside the region, and representatives of several IOs (namely the OAU, UNAIDS, and the WHO) raised concerns about the high standards in the revised Agreement and criticized it for inadequate attention to African needs.[167] Two separate campaigns emerged: one focused on the public health implications of the revised Agreement and another on potential impacts on agricultural livelihoods (discussed below). While both campaigns called on governments to postpone the ratification of the revised Bangui Agreement and to undertake revisions, there were few linkages between campaigners working on each (as was also generally the case of international compaigners on public health and plant variety protection).[168]

Meanwhile, at the OAPI Administrative Council meetings, national Ministers rarely mastered the technical details under discussion.[169] In most cases, Ministers rotated frequently and lower-level staff in IP offices were unable to brief them adequately. The articulation and assertion of national interests thus suffered with respect to the activities of OAPI and the Bangui revisions. Further, while representatives of the SNLs usually met the week before the Administrative Council, they were not present with Ministers in the Council meetings. Together, these factors hampered the ability of Ministers to present and gather support among other members for positions that contradicted or challenged those advanced by the far better technically informed staff of the OAPI Secretariat. The Secretariat was thus the key force influencing the

direction and outcomes of Council meetings; it prepared the agenda, proposed decisions, managed discussions, and compiled documentation.

WIPO, the WTO, UPOV, and bilateral IP donors continued to be active throughout the ratification phase, both in respect of the OAPI Secretariat and national governments. In 2000, WIPO helped to establish a quadripartite agreement to promote cooperation between WIPO, OAPI, the African Regional Intellectual Property Organization (ARIPO – the regional IP organization of anglophone African countries), and the African Regional Centre for Technology (ARCT)[170] with a view to increasing their usefulness to the technological development efforts of their member states. To oversee this Agreement, the four organizations formed a Consultative Committee to meet annually.[171] The Consultative Committee meetings were attended each year by the heads of OAPI, ARIPO, and the Africa Bureau of WIPO, sometimes with additional staff or guests from OAPI and WIPO. None of these Committee meetings (held annually in Cameroon) involved more than nine participants and no representatives of the OAPI member states ever attended. A review of the minutes of these meetings confirms that through this Committee a relatively small group of international bureaucrats exercised decisive leadership and influence on IP decision-making and capacity in the region. In particular, this Committee was central to the collaboration among each of its members and to the coordination of their priorities and activities in the region.[172]

During the ratification period, the WTO Secretariat again reminded the OAPI member states of their TRIPS obligations. In its 2001 TPR Reports on Gabon and Cameroon, the WTO Secretariat noted the differences between the original Bangui Agreement and TRIPS. After observing that Cameroon's deadline for TRIPS implementation had already passed, the Secretariat again highlighted that for OAPI's developing countries TRIPS implementation would rely on ratification of the Bangui Agreement by a further three members.[173] In its report on Gabon, the WTO Secretariat acknowledged for the first time in a TPR since 1995 that 'certain Members of OAPI are least-developed countries, which enjoy longer transition periods under TRIPS than developing countries'.[174] None of the WTO's reports on any OAPI country acknowledged that the Bangui Agreement in fact went beyond TRIPS requirements; instead, the reports referred to the Bangui Agreement as harmonizing the regional legal framework with TRIPS. The WTO Secretariat reports also advanced WIPO's interests, highlighting that countries had not yet met their Bangui commitments to accede to several WIPO Conventions.[175] While the reports devoted attention again to the risks of piracy and counterfeit goods, no mention was made of the risks higher IP standards might pose to health, education, and agricultural interests in the region. While the TPR reports may not have had a decisive impact on the ratification decision by governments, the content of reports did reinforce pressures for a swift and compliance-plus approach to

TRIPS implementation rather than one of strategic reflection on how to tailor compliance to regional needs.

Also in the Bangui ratification phase, the United States and European Union made their first explicit post-TRIPS efforts to link IP protection to the prospect of improved trade benefits for the region. At the same time as the Bangui Agreement was open for ratification, foreign affairs and trade officials from the OAPI region were involved in negotiations related to the EU's Cotonou Agreement and U.S. AGOA.[176] By pushing for the inclusion of IP provisions in each of these trade arrangements, the two trade powers sent a clear signal that they viewed IP protection as an integral component of the 'rule of law' and 'good governance', progress on which was vital to maintaining trade preferences, even in the poorest countries.[177]

AGOA made U.S. preferences in this respect explicit by incorporating the potential for disqualification from trade benefits on IP grounds. The stakes for many OAPI countries were high, as AGOA had considerably increased the value of exports eligible for preferential market access to the United States.[178] Among AGOA's eligibility criteria was the requirement that the country has 'established or is making continual progress toward [. . .] the elimination of barriers to United States trade and investment, including by [. . .] *the protection of intellectual property*'. While these provisions are far more general than in U.S. FTAs, and no OAPI country has yet been disqualified on IP grounds, public health advocates and several members of U.S. Congress expressed alarm about the linkage of IP protection to trade. In response to AGOA, several U.S. Senators expressed fears that USTR would use the AGOA language to push for TRIPS-plus standards in sub-Saharan Africa *and* that African governments may perceive the need to meet USTR demands.[179]

Meanwhile, a growing chorus of NGO critics compaigned to encourage OAPI governments to postpone ratification and to revisit the revised Bangui Agreement to take full advantage of the flexibilities available to them under TRIPS, particularly in the areas of agriculture and public health.

7.4.2.1. THE DEBATE ON PLANT VARIETY PROTECTION

Having failed to prevent the signing of the Bangui Agreement, NGOs concerned about its provisions on plant variety protection actively lobbied governments and parliaments not to ratify the decision signed by IP officials and instead to revise the text.[180] The central thrust of their campaign was that the UPOV 1991 approach had been 'impressed upon Francophone Africa'[181] by UPOV and WIPO 'without any consultation with or participation of farmers', despite its 'direct implications for them',[182] and that an approach based on the OAU model law would be 'much more attuned to the realities of the continent'.[183] The combined efforts of NGOs and officials from the OAU Secretariat were, however, ultimately overwhelmed by the superior financial and organizational resources of UPOV, INPI, and WIPO, all of which favoured

the UPOV 1991 approach and exercised considerable leverage over national IP offices through the provision of technical and institutional support.

Several dynamics were noteworthy amongst those opposing ratification. First, there were growing collaborations between international and local NGOs and experts. RAFI and GRAIN, along with international NGOs such as the GAIA Foundation, Third World Network, and Solagral, forged alliances with local NGOs, such as a regional affiliate of Friends of the Earth, on core issues of common concern. Such issues included the inconsistency of modern IP protections for seeds with African tradition and culture; the failure of the revised Agreement to offer protection for traditional varieties developed by local communities that might be misappropriated by foreign companies;[184] restrictions on the rights of the region's millions of smallholder farmers to save and exchange crop seed from their harvests; and opposition to the introduction of royalty payments to a seed industry dominated by foreign multinational companies. These NGOs sounded the alarm that the underlying purpose of the reforms set out in the revised Agreement was to facilitate the introduction of genetically modified crops in the region and to accelerate the privatization of agricultural research.[185] To raise awareness about their concerns, the groups organized studies, press releases, and workshops with government officials, local experts, officials, the media, scholars, and local civil society groups.

Second, the OAU Secretariat joined NGO campaigners and some local scholars continued to actively promote a non-UPOV 1991 *sui generis* approach to plant variety protection, reaching out to trade, agriculture, and environment ministries in the OAPI governments. Collaboration within the OAPI region was complemented by broader efforts to develop a regional strategy for Africa and to advance an 'African position' on Article 27.3(b) at the WTO and beyond. RAFI, for instance, worked with NGO colleagues in Africa to promote a strong OAU position against patents on life and UPOV 1991.[186]

Across these efforts, a small network of enterprising individuals took the lead. Johnson Ekpere, an official charged with the OAU's activities in the area of science and technology, sent letters to a range of national ministries and travelled widely in the region to advise national officials of the contrast between UPOV 1991 and the OAU model law. Dr Tewolde Egziabher, head of the Ethiopian Environment Ministry, also played a leading role as a champion of the OAU model as an alternative for Africa.[187] At the international level, a collaboration was forged between Francis Mangeni, a counsellor in the OAU office in Geneva, Johnson Ekpere at the OAU Secretariat, and representatives of international NGOs, such as RAFI, TWN, and the Center for International Environmental Law (CIEL).[188] Together, they reached out to national diplomats with experience at the WTO and in environmental negotiations related to the UN Convention on Biological Diversity (CBD). In June 1999, for instance, Jean Christie from RAFI held a seminar on plant variety protection

for francophone delegates to the Convention on Biological Diversity meeting in Montreal.[189]

The culmination of these efforts emerged during June 1999 at an African Regional Workshop on Understanding Biodiversity-Related Instruments, organized by the OAU. In their recommendations, the sixty African government officials who had participated in the meeting advised African countries to 'develop *sui generic* [...] legislation' for plants such as those included in the OAU model law that would be compatible with TRIPS, to protect farmers' rights, and to 'exercise their *ordre public* options under TRIPS to prevent privatization of plants and biodiversity'.[190] Further, in August 1999, the African Group submitted a joint regional proposal to the WTO, which called, amongst other items, for the postponement of the implementation deadline for Article 27.3(b).[191]

Together, efforts to challenge OAPI's UPOV 1991 approach did attract sympathy from national officials in some agricultural and environmental ministries. However, any efforts by these concerned government officials to propose reconsideration of the revised Bangui Agreement gained little traction. There were no national or regional consultative processes through which experts or NGOs could express their reservations. At the same time, their effort to promote the OAU Model Law as an alternative to UPOV 1991 suffered due to long delays in financing a translation of the law into French. The efforts of UPOV critics were further frustrated by the fact that staff of national IP offices, who were those most directly involved with the revision process, were already the captive audience of the OAPI and UPOV Secretariats. Furthermore, the two secretanats were also actively reaching out beyond IP offices to reassure officials in Ministries of agriculture of the benefits of a UPOV 1991 approach.

On 28 July 1999, the UPOV Secretariat transmitted an aide-mémoire to OAPI governments regarding the ratification of the revised Bangui Agreement and the accession to the UPOV Convention. In September, during the sessions of the WIPO Assemblies, delegates from a number of OAPI SNLs visited the UPOV Secretariat to discuss the steps to be taken for accession. From 24 to 26 November 1999, UPOV's Vice Secretary General participated in a technical and ministerial meeting of the Conference of Ministers of Agriculture of West and Central Africa (CMA/AOC) held in Côte d'Ivoire. Among the conclusions of the Conference was a recommendation that OAPI member states ratify the revised Bangui Agreement. In the following years, UPOV wrote to several countries in the region, including Côte d'Ivoire (1999), regarding the procedure for accession to UPOV.[192]

In May 2001, a conference in Addis Ababa highlighted the growing tensions between those in favour of the OAU model law and the preferences of WIPO and UPOV. The OAU hosted the conference to seek comments on the OAU Model Law.[193] WIPO and UPOV each submitted substantive

documents expressing concerns about the principles embedded in the Model Law approach and its practical implications.[194] Arguing that many provisions of the OAU Model Law were either 'too vague' or 'ineffective', UPOV's ten-page submission to the conference reworked more than thirty of the provisions in the Model Law with the goal of making them more practical and usable.[195] This effort raised concerns among critics that UPOV was simply redrafting the Model Law to match UPOV 1991 standards, thus effectively asserting its own Convention as the 'one and only "model" for the implementation of TRIPS'.[196] Frustrated by the WIPO and UPOV submissions, the conference Chair, Dr Egziabher, reminded each of the agencies that they had not been invited 'to change the essence of the Model Law'. He called for the support and recognition of 'the OAU's right to lead Africa, especially on emerging critical issues'.[197] In a press release after the meeting, GRAIN complained dramatically of 'an undisguised attempt from the side of industrial interests to subvert the whole OAU process' and UPOV's 'iron-fisted bash' on the OAU initiative.[198]

In late 2001, GRAIN hired a full-time member of staff to lead its work on IP and biotechnology-related issues in the region, and started producing a monthly publication *Essences de la Biodiversité* from early 2002.[199] As NGOs called on several parliaments to get involved, some concerned officials in environment and agricultural ministries posed questions to IP offices about the appropriateness of the UPOV 1991 approach. In February 2002, GRAIN again issued a press release calling on governments to defer the enactment of the revised Bangui Agreement and to consider the OAU Model Law instead.[200] These efforts failed, however, and the Agreement entered into force several days later.

7.4.2.2. THE DEBATE ON PUBLIC HEALTH

Public health advocates became engaged in debate on the Bangui accords only after the revised Agreement was signed. Since 1999, debate between IP rules and access to medicines had been gathering pace at the international level, but few health ministries or NGOs in francophone Africa were active on the issues. While the scale of health challenges such as HIV/AIDS were high, few of the OAPI countries had developed a national strategy to secure adequate supply of essential medicines. Attention to policy debates on access to medicines among local or international NGOs involved in health projects on the ground in the OAPI region was limited. Only Médecins Sans Frontières (MSF) was directly active in international IP debates and also on the ground in the region.[201]

In February 2000, a joint mission to the region by representatives of MSF, WHO, and UNAIDS sparked a debate about the implications of the revised Bangui Agreement for access to HIV/AIDS drugs and other essential medicines in the region. The report of the joint mission expressed a series of reservations about the Agreement, including that it sacrificed the TRIPS transition periods

for LDCs.[202] In a press release in May, MSF argued that the Agreement's TRIPS-plus provisions would constrain the availability of generic drugs in the region with the risk that essential drugs could become 'ten to twenty times' more expensive.[203] MSF then launched a campaign calling on the twelve OAPI member states that had not yet ratified the Agreement to postpone or refrain from so doing,[204] and to revise the Agreement to take full advantage of the TRIPS transition periods for LDCs and the available TRIPS safeguards.[205]

Side-stepping the OAPI Secretariat, concerned NGOs and staff from UNAIDS and the WHO made numerous visits to national governments in the region to provide advice, training, and analysis to decision-makers about the implications of different approaches to TRIPS implementation for public health. Together, a coalition of WHO, MSF, and the Health Action International (HAI) affiliates in the region, as well as international NGOs, such as the AIDS Coalition to Unleash Power (ACT UP) and CPTech, began to lobby OAPI government officials in Geneva and in capital cities, to raise public and media awareness, and to publish research.[206] NGOs also financed several conferences on issues related to TRIPS and public health in the region. In April 2001, MSF brought together thirteen Ministers and thirty officials from health and trade ministries in the OAPI countries, who issued a joint resolution stating that the revised Bangui Agreement should be amended to make better use of the TRIPS flexibilities and to take public health considerations into account.[207]

At WHO's 2001 Annual World Health Assembly (WHA), the Ministers of Health from the OAPI region, with the support of MSF, reiterated this proposal. Simultaneously, international debate on the relationship between public health and IP protection intensified. While the local media still remained largely silent on the subject, MSF's campaign for a boycott of the revised Bangui Agreement prompted the OAPI Secretariat to issue a formal public statement to 'reassure the general public', that the conclusions drawn by MSF and UNAIDS were 'erroneous'.[208] The Secretariat argued that the provisions of the revised Bangui Agreement were 'in no way incompatible' with TRIPS and that OAPI countries do indeed have the possibility 'to grant non-voluntary licences'.[209]

Still not satisfied that OAPI countries had the legal security and flexibility needed to spur them to use compulsory licences to address public health needs,[210] MSF and its allies sustained their call for a boycott of the revised Bangui Agreement throughout 2001. Concurrently, they helped to galvanize the call by African countries for WTO action on TRIPS and public health in Geneva and in developed country capitals.[211] Where possible, representatives of NGOs, UNAIDS, and the WHO participated in conferences sponsored by WIPO and bilateral donors in order to convey a public health perspective. While these efforts did generate some debate, the public health advocates could not match the scale of training, financial aid, institutional resources, and legal support supplied by WIPO and bilateral donors. In October, when

only two more ratifications were needed to achieve the two-thirds of the membership required for the revised Agreement to enter into force, MSF called for no further ratifications.[212] In November, with the 2001 Doha Declaration on TRIPS and Public Health in hand, MSF again called on the OAPI countries to delay ratification of the Agreement and to ensure that countries could benefit fully from the flexibilities affirmed in the Declaration (in respect of compulsory licences and parallel imports) and the extended deadlines for LDCs.

Despite the efforts of public health advocates, only in Senegal and Cameroon did health ministries publicly take up their cause. Even in these countries, the challenges of coordination frustrated the ability of health ministers to gain traction with the relevant IP and trade officials, or with their counterparts in other countries on the issue.[213] To diffuse tensions, the OAPI Secretariat continually reassured IP officials, prompting the leader of a local NGO in Burkina Faso to lament that IP officials in the region seemed captivated by the 'simple mission of protecting the works of patent holders'.[214]

7.4.2.3. THE ENTRY INTO FORCE OF THE REVISED BANGUI AGREEMENT

By February 2002, ten countries had ratified the revised Bangui Agreement, allowing it to come into force: the supporters of early and strong TRIPS-plus implementation had prevailed. All that remained was a decision by the OAPI Administrative Council, scheduled to meet that May, on which Annexes would enter into force and their implementation date.[215]

NGOs were still not yet ready, however, to concede. They used the period before the meeting of the OAPI Administrative Council to continue to push their case. Health groups active in the region called on the governments they judged to be most sympathetic to their cause, such as Burkina Faso, to refuse implementation of the revised Agreement, arguing that the '[t]he accomplishments of Doha risk being dashed'.[216] In Burkina Faso, for instance, MSF joined with a coalition of 150 local and international health groups to issue a press release petitioning the Burkinabe President and Government to reject the revised Bangui Agreement. Burkinabe President Blaise Compaore was known in the region for a personal commitment to the fight against AIDS in Burkina Faso – one of the three countries with the highest HIV/AIDS infection rates in francophone Africa.[217] Accusing the OAPI governments of bowing to industry pressures, ACT UP similarly called on the OAPI Administrative Council to 'cancel the implementation' of the revised agreement, arguing that the revised Agreement threatened to reduce the Doha Declaration 'to nothing'.[218] The OAPI Secretariat responded by publishing a second information memo on its website.[219] In this note, the Secretariat reiterated its scepticism about the usefulness of compulsory licences to the region, and declared that there was

'no risk of conflict between the revised Bangui Agreement and any possible laws ensuing from the Doha Declaration'. The OAPI Secretariat insisted that 'the revised Bangui Agreement enables each OAPI member state to take measures likely to enhance the protection of public health in general and facilitate access to medicine in the light of the Doha Declaration'.[220]

Ultimately, the concerns raised by critics regarding the revised Bangui Agreement's potential impact on public health and farmers' livelihoods did not result in any substantive changes to the content of the revised Agreement or to its Annexes. With time, concerned government officials outside IP offices recognised that their call for substantive debate would bear little fruit, particularly as the IP offices responsible for liaising with OAPI on the issues expressed minimal interest in contradicting the advice of the OAPI Secretariat and the preferences of donors.

When the OAPI Administrative Council met in mid-2002, one of their decisions stood out. Namely, the Ministers decided to delay the entry into force of the revised Bangui Agreement's annex on plant variety protection and its annex on integrated circuits. In both cases, the Secretariat cited institutional, technical, and financial constraints, and recommended a delay in order to develop the necessary procedures and expertise within the region.[221] Notably, the decision to postpone was not linked to the force of advocacy calling to question the Agreement's provisions on plant variety protection or to any other substantive concerns about the text. Rather, the delay was motivated by the fact that the lack of expertise and experience on the subject matter of these two Annexes was total rather than marginal, both in national governments and in the OAPI Secretariat.

7.4.3. *The Post-ratification Phase (2002–7)*

After the entry into force of the revised Bangui Agreement, debate on OAPI's approach to TRIPS implementation continued. A number of IP scholars in the region published critiques of the Agreement.[222] The number of NGOs active on the issues in the region began to multiply.[223] In July 2002, a policy dialogue in Senegal co-sponsored by Geneva-based and local NGOs brought together for the first time the range of groups and experts with concerns about public health, agriculture, environment, and traditional knowledge in the revised Bangui Agreement.[224]

In 2002, the efforts of NGOs and the WHO to raise awareness in national governments about the implications for public health of the Bangui Agreement's TRIPS-plus standards for public health also began to gain traction with several Geneva-based diplomats from OAPI countries. Two Geneva-based trade delegates, from Mauritania and Senegal, participated in the 2002 meeting in Senegal and published their remarks in *Passerelles*, the most widely read French-language review of news on trade and sustainable development

in the region.[225] They each drew attention to the inconsistency of the Bangui Agreement with the Doha Declaration and called for the OAPI member states to take advantage of the flexibilities for which they had fought at the WTO. In his article, the Mauritanian diplomat emphasized the need not just to defend the Doha flexibilities at the international level but to take advantage of them nationally, and noted the 'problems posed by the revised Bangui Agreement in bringing it into conformity' with the flexibilities affirmed in the Doha Declaration.[226]

In 2004, these pressures intensified when diplomats from the OAPI region held a meeting in Geneva where they emphasized the need to reconsider the Bangui Agreement in light of the Doha Declaration.[227] In the meantime, while NGOs such as MSF maintained that the Bangui Agreement should be amended to better reflect the Doha Declaration, the focus of their activities shifted from lobbying for revisions to helping countries use the flexibilities that the OAPI Secretariat insisted were available under the Bangui Agreement.[228]

In 2005, collaboration between local and international NGOs yielded the first request for a TRIPS-compliant compulsory licence for three patented AIDS drugs under the revised Bangui Agreement. The petition was made by a U.S. non-profit pharmaceutical company, Essential Inventions, Inc., with close ties to two of the key U.S.-based NGOs active on TRIPS issues (i.e. Essential Action and the Consumer Project on Technology (CPTech)).[229] (The request was still pending at the time of publishing.)

From 2006, representatives of several SNLs finally began openly to press the OAPI Secretariat to facilitate a revision of the Agreement that would ensure full use of the Doha flexibilities regarding the patentability of pharmaceutical products, and remove other TRIPS-plus elements of the Agreement (including several of the limitations it poses in the area of compulsory licensing and provisions that enable second-use patents).[230] According to these delegates, the main impediments to such revisions were resistance from the OAPI Secretariat and their own difficulties briefing Ministers about the importance of the matter given the technical legal issues involved.

A second dynamic was that OAPI countries attracted greater attention from U.S. trade officials in the post-ratification phase. While the United States did not subject any OAPI countries to its Special 301 process or make any specific criticisms of TRIPS implementation efforts in the region, several new trade arrangements reinforced the compliance-oriented atmosphere.[231] In April 2002, eight of the OAPI countries that comprised the West African Economic and Monetary Union (WAEMU) signed a Trade and Investment Framework Agreement (TIFA) with the United States. In the agreement, they recognized 'the importance of adequate and effective protection' of IP rights and noted that 'for the purposes of further developing their trade and investment . . . they may conclude further agreements, particularly in the areas of commerce, taxation, *intellectual property*, labor, and investment (emphasis added)'.[232]

When AGOA entered into force in 2002, the inclusion of IP protection as one of the eligibility criteria for maintaining preferences under that scheme reinforced the pressure on OAPI countries not to raise questions or take actions on the IP front that might antagonize powerful trading partners.[233] While no OAPI countries have yet had their AGOA preferences withdrawn on the grounds of IP, the fact that several countries were disqualified for other reasons reinforced the perception that domestic actions that displeased foreign trading partners could indeed put a range of economic, trade, and environment interests in jeopardy.[234] Recall here that the OAPI countries were all small players in the global trading system. Heavy dependence on exports as a proportion of GDP, and on just one or two export products, rendered OAPI countries very vulnerable to changes in access to export markets and policy shifts in key trade partners.[235] When debate on TRIPS and Public Health intensified at the WTO in 2002, the United States made its preferences clear. On 25 October, African trade ministers received letters from the Assistant U.S. Trade Representative for Africa, Rosa Whitaker, the same U.S. official responsible for the AGOA arrangements, calling on them to instruct their Geneva delegations to support the U.S. position in the ongoing negotiations on TRIPS and public health at the WTO.[236]

The WTO Secretariat's continued monitoring of IP reforms by OAPI members reinforced the pressure on governments to push ahead with ratification. In its TPR reports between 2002 and 2007, the WTO Secretariat noted that two of the Bangui Annexes were not yet in force, emphasized weak enforcement of IP laws in the region, and highlighted the need for countries to join the various WIPO treaties.[237] Despite completing six TPRs on OAPI countries after the 2001 Doha Declaration, the 2005 TPR report on Guinea was the first to mention the extended deadline it grants LDCs for patent protection of pharmaceutical products.[238] In 2006, interviews with the heads of three SNLs revealed that none of them were aware of the fact that their countries had, in November 2005, been granted a further extension until 2013 for their implementation of the entire TRIPS Agreement.

In the post-ratification phase, WIPO, OAPI, bilateral donors, multinational companies, and industry associations all actively supported the creation of new constituencies and interest groups supportive of stronger IP protection in the region, including groups of local musicians and publishers, as well as users of the IP system, such as patent attorneys, and inventors keen to develop and commercialize their works. The results of such efforts included the formation of a regional network of authors' societies,[239] an association of patent attorneys (l'Association pour la promotion de la propriété intellectuelle en Afrique – APPIA).[240] At the national level, groups such as l'Association Nigérienne pour la promotion de l'invention et de l'innovation (ANPII) expanded their activities.[241] Notably, patent agents in the region became more vocal in favour of stronger IP protection; the more applications filed through national

IP offices or the OAPI Secretariats, the more business that patent agents would accrue. Together, the WIPO and OAPI Secretariats collaborated in hosting a series of regional meetings that brought together such stakeholders with government officials.[242]

In the meantime, the OAPI Secretariat, with the support of the French government and UPOV, set about building the necessary institutional and technical capacity to implement the Bangui Agreement Annex on plant variety protection. The need to put this protection in place was reinforced by multinational seed companies, such as Monsanto, Syngenta, and Dow Agrosciences, which insisted that plant variety protection was essential to their efforts to introduce biotechnology products in the region.[243]

In September 2005, the UPOV Secretariat reported to its members that OAPI's Annex 10 would come into force on 1 January 2006, noting that this would put the OAPI members in a position to join the Convention (as their regional standards would now be equivalent to those set out in UPOV 1991).[244] Surprisingly perhaps, this statement came some three months *before* the OAPI Administrative Council formally made a decision in December 2005 to approve entry into force of the Annex. The exclusive nature of decision-making was such that neither OAPI nor any member state issued a public statement of the decision beyond the minutes of the Council meeting available on the OAPI website. There was no public reaction from the media or NGOs. Recalling that the delayed entry into force of the Annex on plant variety protection had been justified on the grounds of need to bolster technical capacity, rather than to consider the need for substantive revision, NGOs concluded that further campaigning to revise the Agreement would be futile. They turned instead to focus on issues such as biopiracy,[245] the growing presence of biotechnology companies in the region, and the introduction of GMOs without adequate regulatory systems and public consultations.[246] The OAPI countries subsequently made contact with the Council of UPOV to initiate the procedure for becoming members of the Union.[247]

7.5. Capacity-building and Delegation in a Policymaking Vacuum

Among the factors that impacted TRIPS implementation in francophone Africa, the process-tracing above has highlighted the primary role that capacity-building and delegation to a regional organization had on the Bangui revision process. This section offers a deeper exploration of how these two factors operated and reinforced each other and why they exercised so much influence over national IP offices and the ultimate outcome.

7.5.1. *The Power of Capacity-building*

The core providers of capacity-building in the region – WIPO, INPI, the EPO, the WTO, and UPOV – pursued two goals: (*a*) early and swift compliance with TRIPS and (*b*) to promote the importance of IP protection generally.[248] Their efforts were effective because they combined superior technical knowledge, infrastructural support, and know-how with direct financial support to government offices and officials in the region. The combination of training, legal advice, seminars, and conferences enabled donors to influence staff of the OAPI Secretariat and national IP offices through socialization (through repeated participation in seminars and conferences); conversion (through training); co-option (through personal or institutional incentives); or a combination thereof. Together, donors cultivated a community of IP experts and officials at OAPI and in the SNLs that supported stronger IP protection, either because they believed it would be good for national development or because it was what they thought their donors would reward.

At both the national and regional levels, individual civil servants from IP offices and the OAPI Secretariat perceived good relations with donors as a means to sustain a range of personal benefits. Attached to technical assistance and capacity-building were professional and financial incentives for institutional loyalty and cooperation. National IP officials were usually mid- or junior-level professionals. The highest salaries that IP officials in the region could expect to make were around US$3,000 per year, and many earned far less. Personnel of the OAPI Secretariat earned far better salaries than most of the citizens in their region. But these salaries were still lower than those available to IP practitioners in developed countries or in international organizations, such as WIPO. Individual financial and career aspirations thus became a weak point for soft pressure and co-option by donors.[249] At the national and regional level, training and travel opportunities yielded lucrative per diems and career advancement prospects in Geneva and beyond.[250] WIPO financed, for example, the participation of SNL officials in its annual General Assemblies. Without this support, most SNLs would not otherwise have been able to send their officials. For most SNL delegates, the cash per diem they received for this annual two-week event would almost have matched their annual salary. Further, the prospect of consultancies and/or future employment at WIPO was extremely enticing to many OAPI Secretariat officials, as to SNL staff, and staff of diplomatic missions in Geneva. Not surprisingly, many national IP officials expressed strong sympathies with the purpose and goals of stronger IP protection in the region and offered support for WIPO initiatives in Geneva and at the regional level.[251]

The policymaking vacuum on IP issues in OAPI governments heightened the vulnerability of SNLs to preferences articulated by external donors. External support was often a significant source of funding for national IP offices and

national copyright offices. Indeed, technical assistance, capacity-building, and training were vital to the operation of these offices and to the expansion of their size, activities, and staffing over the revision period. At the same time, IP offices attracted little oversight from other government departments. As noted earlier, IP was considered a technical issue with little relevance to core policy challenges facing the country. Minimal financing from central governments shielded IP offices from the scrutiny that might otherwise have arisen during national budget debates. Instead, national governments left IP offices largely to their own devices in terms of financing, TRIPS implementation, and the negotiation of capacity-building for IP reforms. Not surprisingly, IP offices were the central focus of donor support for IP issues within OAPI countries.[252]

The single biggest supplier of capacity-building to national IP offices in the OAPI region was WIPO, operating primarily through its Economic Development Bureau for Africa. Industrial property and copyright offices were not only the primary interface between WIPO and national governments for capacity-building, but also for matters related to the negotiation and implementation of IP treaties and issues related to the governance and management of WIPO. In conjunction with WIPO's LDC division, the Africa Bureau worked to modernize IP offices in OAPI countries and to support infrastructure and human resources development.[253] WIPO was also involved in human resources development, providing study visits, training courses (in the region and at WIPO's Worldwide Academy in Geneva), workshops, and seminars at the national, sub-regional and regional levels for national policymakers and administrators, judges, law enforcement and customs officers, police, as well as business people, IP professionals and lawyers, researchers, performers, creators, and academics.[254] WIPO's Africa Bureau also provided resources to improve enforcement of IP standards and conducted activities in the region to promote the development and commercialization of IP assets, inventive activity and innovation, and the use of the IP system by cultural industries.

The key bilateral providers of capacity-building to national IP offices were patent offices, namely INPI, the EPO, and the USPTO. INPI and the EPO were the most active, providing training to IP staff in the region and general support to national IP offices. Each year, an INPI expert visited the different national offices of OAPI countries, gathering data and reviewing procedures. The USPTO's involvement in IP policy in the region was more limited, but included the provision of training courses and seminars in the region and in the United States with the involvement of USAID, the U.S. Department of Commerce, and USTR.[255]

Staff in national IP offices perceived cooperation with donors and their IP priorities to be critical to maintaining external institutional and financial support at the organization level. This cooperation also included support for

the institutional priorities of WIPO. The decision by francophone Africa LDCs to accede to WIPO's 1996 WIPO Internet Treaties emerged from the perception that support for the treaties clearly favoured by the Secretariat was a necessary quid pro quo for capacity-building.[256] Of all the possible signatories to these new conventions, LDCs had the least capacity to implement them and little to gain economically from their implementation.[257] Nonetheless, six LDCs from the OAPI region were among the first countries to sign and ratify the Internet Treaties.

Capacity-building also influenced the revision process by reinforcing the technical authority of the OAPI Secretariat over its member states, and consolidating its close but opaque relationship with the WIPO Secretariat. The ties between the OAPI Secretariat and its donors further undermined the accountability of the OAPI Secretariat to its members and bolstered its autonomy from them. Through its capacity-building, WIPO maintained the OAPI Secretariat as its client and quasi-subsidiary at the regional level.

The OAPI Secretariat has depended on organizational, technical, and financial support from BIPRI and then WIPO since its inception.[258] During his thirty-four-year career with BIPRI and WIPO, Arpad Bogsch (who served as WIPO's Director-General from 1973 to 1997), actively supported a strong link between the two organizations by supporting the development of the OAPI Secretariat, and built a strong professional rapport with OAPI's first Director-General, Denis Ekani.

During the Bangui Agreement revision process, the WIPO Secretariat financially supported the upgrading of much of OAPI's institutional infrastructure, including computerization of their administration procedures, establishment of collections of patent documents of developed countries, and connections to international patent facilities and databases. WIPO also provided legal advice to the OAPI Secretariat, supplied free-of-charge patent searches, and hosted OAPI's website.

The special relationship between the OAPI and WIPO Secretariat was sustained through regular contact between their staff. Each year, the OAPI Director-General and selected senior staff attended the annual WIPO General Assemblies and other major WIPO committee meetings and conferences in Geneva, such as the Standing Committee on Patents, the Standing Committee on Copyright, and the Permanent Committee on IP and Development (PCIPD). By contrast, national IP offices could far less afford to attend WIPO meetings; national IP staff only travelled to key meetings such as the General Assemblies for which WIPO covered their expenses. The OAPI Director-General also liaised with WIPO staff in the preparation of the agenda for OAPI Administrative Council meetings and for advice regarding relations with SNLs and national ministers.[259] The close links were further demonstrated in 2007 when OAPI's membership elected Paulin Edou Edou, formerly the head of the LDC Division at WIPO, to be the new OAPI Director-General.

In collaboration with WIPO, bilateral donors also provided significant assistance to the OAPI Secretariat. From 1985, the EPO forged cooperative agreements with OAPI to improve its institutional, administrative, human resource, and information technology capacities.[260] The French INPI provided training, legal expertise, and financial support to many OAPI projects through bilateral means, and also multilaterally through WIPO and the EPO.[261] INPI placed particular emphasis on IP issues of strategic interest to France, such as a project for the promotion of African geographical indications in collaboration with OAPI, WIPO, and the French *Institut national des appellations d'origine* (INAO). Bilateral donors forged numerous partnerships to improve the efficiency and effectiveness of their support to the OAPI Secretariat, including joint training courses, regional seminars, and conferences.[262]

7.5.2. *The Downside of Regional Delegation*

Delegation to the OAPI Secretariat was a second critical factor in the TRIPS implementation story in francophone Africa. In theory, under the terms of the Bangui Agreement, the work of the OAPI Secretariat was governed by its member states. In practice, however, the ability of OAPI member states (the principals) to monitor and manage the Secretariat (their agent) was undermined by lack of budgetary control, low national expertise, limited articulation of national priorities, and weak processes for ensuring internal accountability and coordination within OAPI countries. Further, the institutional design of the OAPI system frustrated the prospects for member state control. Decisions made in the 1960s about how OAPI member states would delegate to the OAPI Secretariat served over time to consolidate the Secretariat's technical capacity and authority. Arguably, this is precisely what France had in mind from the outset, a strong regional authority capable of protecting French investment in the region. With significant institutional resources, financial autonomy, and superior financing to its members, the OAPI Secretariat became the authority and leader on IP decision-making in the region and consequently dominated national IP offices. Moreover, it became the voice and force for stronger IP protection in the region.

A central source of the OAPI Secretariat's power in relation to national IP offices was its financing. In most IOs, member state control of the budget is a critical, albeit imperfect, tool for promoting accountability. In contrast to most agreements establishing IOs, the Bangui Agreement does not call for annual financial contributions from OAPI member states.[263] Rather, like WIPO, the OAPI Secretariat raises the majority of its revenue from fees charged for services to IP right-holders. An average of 95 per cent of OAPI's revenue is derived from fees charged for patent and trademark applications and renewals, with 60 per cent coming solely from trademark-related services. As 85 to 90 per cent of applications are filed by foreign companies,

OAPI is largely financed by foreign private companies. OAPI's remaining revenue, and significant in-kind institutional support, comes from foreign donors. In 1999, for instance, the OAPI Secretariat received over US$850 000 in donor support. Between 1993 and 2007, the Secretariat's revenues grew and its annual budget quadrupled from less than US$2 million to over US$8 million.[264]

The OAPI Secretariat also made annual financial contributions to the national IP offices of each of its member states (generally around 7 per cent of its revenue, that is, around US$250,000 per country).[265] As most national IP offices received little support beyond staff costs from national budgets, financing from the OAPI Secretariat was critical to their operations. In some years, this amount was far lower (i.e. contributions dropped significantly in 1996 in response to a spike in OAPI expenses, largely due to personnel costs).

The implications of these financial arrangements for the Bangui revisions were stark. The principals (OAPI member states) were dominated by their agent (the OAPI Secretariat) throughout the revision process. Lack of IP policymaking capacity in OAPI members meant that principals did not articulate clear positions. Rather than working to rectify this shortfall, the OAPI Secretariat and foreign donors exploited it. The absence of clear leadership from principals subsequently made it more difficult for them (and other external critics) to claim their agent was deviating from their preferred course. Several SNL representatives described the OAPI Secretariat and its former Director-General in 'regal' terms. Evidence cited to illustrate OAPI's arrogance with respect to its members included difficulties extracting information from the OAPI Secretariat, and the Secretariat's control of the agenda and discussion in annual Administrative Council meetings with national ministers. In the wake of the 2001 Doha Declaration, some SNL representatives expressed frustration with their inability to push the OAPI Secretariat to respond to their call for reforms to the revised Bangui Agreement so that it better incorporates TRIPS flexibilities. From 2002, the inversion of control between the OAPI Secretariat and its member states was further illustrated by disputes regarding the Secretariat's refusal to provide on a full basis the annual payments due to each of the SNLs for them to conduct their activities. In some cases, national IP officials resented the regional arrangement on the grounds that revenues from IP protection accrued directly to the OAPI Secretariat rather than to national IP offices.

To illustrate the significance of regional delegation to how OAPI countries responded to TRIPS implementation, the area of copyright protection provides a useful counterfactual example. Copyright is the only issue covered by the Bangui Agreement for which administrative responsibility lies at the national level, not the OAPI Secretariat, and where national governments must supplement the regional legal framework for copyright protection with

parallel national copyright legislation. In contrast to those areas of TRIPS implementation where the OAPI Secretariat was responsible, national governments progressed far more slowly on copyright reforms. The irony is that of all the areas covered by TRIPS, enhanced copyright protection is one of the areas where OAPI countries were most expected to gain some national economic benefits.[266] To aid countries' efforts in copyright reform, WIPO submitted draft copyright laws for consideration to the Congo, Guinea, and Mali, and provided general legal advice on copyright issues to Benin, Cameroon, and the Congo. The WIPO Secretariat also presented comments on draft laws prepared by Côte d'Ivoire, Congo, Gabon, and Niger to help them put new copyright laws in place.[267] Despite these efforts, in late 2007, several OAPI members still had no copyright laws at all (Guinea Bissau, Mauritania, and Equatorial Guinea), and only three OAPI members (Burkina Faso, Cameroon, and Chad) had amended or adopted new legislation to harmonize their domestic law with the revised Bangui Agreement. Several of the remaining countries (including Benin, Mali, and Senegal) have been discussing draft laws for several years. As observed by the former OAPI Director-General, the processes for upgrading national laws in francophone African countries were time-consuming and unwieldy. The slower pace of change on the copyright front highlights how central the OAPI Secretariat was to the pace of the Bangui revisions. Despite WIPO's efforts, the absence of a regional focal point around which to mobilize for copyright reform meant that capacity-building did not have the same traction.

Similarly, national performance in the administration and enforcement of copyright laws also lags behind the performance on industrial property for which the OAPI Secretariat holds most responsibility. In 2007, the OAPI Secretariat, together with counterparts in the ARIPO Secretariat, generated a first draft regional law on traditional knowledge – an outcome which would otherwise have taken several years to emerge from an intergovernmental negotiation among OAPI members. In short, IP reforms advanced fastest where the OAPI Secretariat was in the lead. Further, the efforts of donors in favour of strengthened IP protection were most effective when the OAPI Secretariat was harnessed as their partner.

The significance of regional delegation is also illustrated by the case of compulsory licensing. According to the Bangui Agreement, compulsory licensing is a domestic issue in which the OAPI Secretariat is not involved. To date, no OAPI country has actually issued a compulsory or government-use licence (although, as noted above, Cameroon did declare its intention to do so). The constraints, according to officials in the region, have been fourfold: the fact that the revised Bangui Agreement limits their potential to import generic drugs from beyond their region; the difficulty of finding manufacturers within the region able to take up the production of generics; the fact that no national authority has yet felt itself competent technically and legally to actually issue

such a licence; and lack of assistance from OAPI, WIPO, or any bilateral donors.

To exert greater control over the OAPI Secretariat, strategies that OAPI members might have pursued was to bolster collaboration among themselves, and to harness any political expertise on TRIPS held by Geneva-based government delegates. But the potential to replicate the coordination that had emerged at the international level, notably through the Africa Group at the WTO, was circumscribed by several factors. IP offices had only sporadic contact in between OAPI meetings. Telephone and internet connections were too unreliable to facilitate ongoing interaction. The fact that responsibility for IP matters rested with different ministries depending on the country in question further limited the prospect that Ministers might discuss matters when they met on other occasions.[268] Collaboration between the staff of national IP offices and Geneva-based diplomats familiar with international IP debates was also constrained by inadequate resources, scant political leadership, and the difficulties of interdepartmental coordination within governments. In general, national Geneva-based diplomats, such as those covering the WTO, were not invited to meetings between the Secretariats, OAPI and WIPO, or between SNLs and WIPO. Geneva-based diplomats rarely made official visits back to their capitals and were often housed in ministries other than those responsible for IP.

Finally, over the course of the Bangui revision process, the socialization of regional and national IP officials into the global IP profession and pro-IP community diminished the prospect of any fundamental backlash. Public statements by OAPI government officials that mirror the ideas, assumptions, and logic advanced by donors highlight how successful the latter were in promoting a pro-IP logic in the region and instilling the idea that IP protection was a necessary downpayment for future political and economic favours. Like staff from the WIPO Secretariat, the OAPI Secretariat's senior leadership made frequent public assertions about the importance of stronger IP protection as a tool for a broad range of national goals, including industrialization, innovation, FDI, technology transfer, and development. In 2001, for example, the OAPI Secretariat enthused that stronger IP protection would help to 'enhance creativity, protect the inventor's rights, guarantee investments [and] facilitate technology transfer', as well as to 'fight against poverty, and see to the well-being and security of the population of member states'.[269] SNL staff were also frequently heard espousing the benefits of FDI for national development and of IP protection for stimulating innovation and attracting investment, even though the evidence remains deeply contested for the poorest countries.[270] Setting aside the question of whether these officials actually believed what they said, they were certainly cognisant that rhetorical support for strengthened IP was good for national branding and might also bring personal professional rewards.

7.6. Conclusion

Throughout the process of revising their joint regional IP framework (the Bangui Agreement), the OAPI Secretariat operated without effective oversight from its member states, granting it considerable room for independent action. This autonomy was bolstered by its financial independence and its special relationship with international partners, particularly its core donors WIPO, the EPO, and the INPI. The OAPI Secretariat was able to set positions for national IP officials through a combination of technical ability, financial resources, and regional coordination. Together, the OAPI Secretariat and these donors pushed through a TRIPS-plus agreement and then went about building the organizational capacity for its administration and enforcement.

National IP officials only spoke publicly in favour of altering the revised Bangui Agreement to better respond to public health needs *after* the Agreement entered into force, and even then, largely upon prompting from health ministries, NGOs or Geneva-based diplomats. Notably, there were important developments in national IP capacity in several of the key OAPI states in the post-ratification phase, but this did not translate into any deeper or broader questioning of the TRIPS-plus Bangui revisions. At least three OAPI countries developed a formal inter-agency coordination process to guide their responses to WTO obligations, including international IP obligations: Senegal, Togo, and Cameroon. In each case, cordination was promoted to assist with the implementation, enforcement, and revisions of IP laws *after* the Bangui Agreement process was completed. The impetus appears to have been twofold: to generate some local benefits from the IP system and to respond to international demands to better fight piracy. Several national governments also increased their contributions to growing national industrial property and copyright offices. Higher technical and institutional capacity of these IP offices, and stronger awareness of international IP debates, prompted stronger interest in the protection of traditional knowledge and folklore, as well as promoting greater commercial use of the opportunities presented by IP. Starting in 2006, national IP offices also began efforts to exercise greater member-state control over the budget and activities of OAPI, including with respect to the appointment of the new Director-General for the organization.[271]

Notes

1. The members of OAPI are Benin, Burkina Faso, Cameroon, the Central African Republic, Chad, Congo, Côte-d'Ivoire, Gabon, Guinea, Guinea-Bissau, Equatorial Guinea, Mali, Mauritania, Niger, Senegal, and Togo. Of these, Equatorial Guinea is not a WTO member and thus has no obligations to implement TRIPS.

2. OAPI is usually described as organization of francophone African countries. French is widely an official language, sometimes alongside local languages. This does not, however, imply that French is the primary language or a well-understood language in the region. In addition, two OAPI countries were never ruled by France, namely Guinea Bissau (formerly a Portuguese colony) and Equatorial Guinea (formerly a Portuguese then Spanish colony).
3. Eight of its ten annexes also came into force in 2002, as discussed below.
4. See OAPI (2001).
5. Adewopo (2003) and Ngombé (2005, 2006). For praise of the revised Bangui Agreement, also see Gazaro (2006).
6. Nnadozie (2003).
7. Kongolo (2000*a*).
8. RAFI (1999*a*).
9. GRAIN (2002*b*).
10. See GRAIN (2001). For similar arguments see Gavin (2002*a*), MSF/WHO (2000), and MSF (2003).
11. MSF (2000).
12. WTO (1999*a*).
13. Maskus (2000*a*) and UNCTAD (2007).
14. The seven poorest countries (e.g. Burkina Faso, the Central African Republic, Chad, Mali, Niger, Togo, and Guinea Bissau) all share annual per capita incomes of under US$1 per day and rank among the lowest on the UN Human Development Index. Oil revenues play a large role in the higher GDP per capita of Cameroon, Equatorial Guinea, and Gabon. See UNDP (2007).
15. In 2002, the richest countries in the region were the Côte d'Ivoire and Cameroon with US$11.7 billion and US$9.1 billion respectively. Between 1999 and 2002, the national income of Equatorial Guinea more than doubled due to the discovery and exploitation of new oil reserves. See UNDP (2004).
16. Côte d'Ivoire has the largest population with around 16 million people. See UNDP (2007).
17. UNDP (2007).
18. A list of WFP food aid recipients is provided at http://www.wfp.org/country_brief/index_region.asp.
19. Ibid.
20. In 2002, only one OAPI member, Equatorial Guinea, was among the top five African recipients of FDI, receiving US$1.7 billion, largely for investment in oil and mining. In 2005, the African region as a whole attracted just 3 per cent of global FDI, primarily in the natural resources sector for oil and mining. See UNDP (2002, 2003*a*), and UNCTAD (2005).
21. In a review of OAPI statistics of the 6,004 patents registered by the OAPI during the years 1971–90, a 1995 study found that only forty-one patents had been exploited in the region. See Yusef (1995). Also see World Bank (1996).
22. See, for example, Kongolo (2000*c*) and Sakho (2003).
23. See Sakho (2002) and Tankoano (2003).
24. Karachalios (2002).
25. OAPI (2005*a*).

26. These figures exclude South Africa and are drawn from the annual reports of the US Department of Commerce's International Trade Administration on U.S. trade and investment with sub-Saharan Africa, available at http://hotdocs.usitc.gov.
27. Ibid.
28. UNCTAD (2007).
29. In 2002, for example, local scientists approached OAPI to patent five drugs for the treatment of HIV/AIDS and diabetes based on traditional medicines. Similarly in 2004, a Burkinabe herbal healer patented one of his drugs, also based on traditional medicines, for the treatment of stomach ulcers. See PANA (2002, 2004).
30. Endeshaw (1996: 122), Kongolo (1998), and Verma (1996).
31. Kongolo (2000*a*: 286), for example, highlights the need to 'combat the widespread piracy and counterfeiting of *African* traditional and modern intellectual property assets' (emphasis added).
32. Ringo (1994).
33. See for instance, Bayart (2000), Clapham (1996: 180–1, 201–7), Mosley et al. (1991: 136), and Wallerstein (1986).
34. Houngnikpo (2005: 212). Le Vine (2004) and Oyono (1993) make similar arguments.
35. Houngnikpo (2005: 212). The importance of the region to France is signalled by the fact that it attracts around 22 per cent of French aid flows. By contrast, in 2002, aid to the region accounted for less than 2 per cent of U.S. development assistance, around 7 per cent of Germany's, and almost 9 per cent of the EU's. See http://www.oecd.org/dataoecd/61/5/2068096.pdf/
36. For a discussion of the ways in which France continues to exert educational and culture influence in the region, including through organizations such as l'Agence pour la Francophonie and l'Agence Universitaire de la Francophonie, see Maack (2001).
37. In 2002, seven OAPI members had ODA/GDP ratios higher than 10 per cent which earned them the designation as 'highly aid dependent'. These countries included Burkina Faso (15.1 per cent), Chad (11.6 per cent), Guinea-Bissau (29.2 per cent), Mali (14 per cent), Mauritania (36.7 per cent), and Niger (13.7 per cent). See UNDP (2006). For critical analysis of this dependence, see Bayart (2000).
38. van de Walle (2001).
39. Williams (2000: 572). See also Stewart (1994).
40. Cruise O'Brien (1991) persuasively describes the sovereignty of West African states as 'a political drama with an audience more or less willing to suspend its disbelief'.
41. Williams (2000: 570–2). See also Harrisson (2004), Plank (1993), and Williams (1996). Amprou et al. (2001) offer case studies on aid and reforms in specific African countries. The push for increased donor coordination is described in OECD (1988, 2003).
42. Mustapha and Whitfield (2008).
43. Boone (2003), Dunn (1978), and Dunn (2001: 4).
44. Examples of instability include a civil war in Côte d'Ivoire starting in 2002, a military coup in Burkina Faso, fighting in neighbouring Sierra Leone and Nigeria, rebellion in Niger and Mali in early 1990s, a dictatorship in Togo which lasted until 2005, and famine in Niger and Mali.

45. See Bayart (1993), Clark and Gardinier (1997), Cruise O'Brien et al. (1989), and Bergamaschi (2007).
46. See Mustapha and Whitfield (2008). These authors observe that despite continuities, moves towards greater electoral competition and the growing activity of non-government actors in African societies have altered the way in which practices such as clientelism occur.
47. For critical perspectives on the limited attention of IR scholars to the African continent, see Brown (2006), Clapham (1996), and Lavelle (2005).
48. For further discussions of African foreign policymaking and the international relations of African states, see Clapham (1996), Clark (2001), Harbeson and Rothschild (1995), Khadiagala and Lyons (2001), Lavelle (2005), Lemke (2003), and Taylor (2004).
49. See Mustapha and Whitfield (2008) and Manning (1988).
50. Where oppositional parties and active NGO communities have emerged in the wake of democratic reforms, governments have faced criticism of their international economic relations. See Delgado and Jammeh (1991) and Weissman (1990). In Senegal, for example, civil society groups actively criticized the government in the late 1980s and early 1990s for acquiescence to the onerous policy conditions attached to structural adjustment programmes and other donor assistance. See, for example, Taylor (2004). Similarly, some national NGOs campaign warned against onerous concessions in international trade negotiations. In addition, concerns about WTO negotiations on cotton have stimulated heated parliamentary debate in Senegal and Mali about the trade-offs of WTO membership.
51. The limited engagement of the domestic public and parliaments in the process of trade decision-making in francophone Africa is discussed in Oyejide (1990) and Soludo et al. (2004). Further, Musungu (2004*a*) highlights that while African governments have increased their participation in international IP policymaking over the past decade, in only a few countries has this been matched by expanding efforts to consult with domestic constituencies.
52. For background on the origins of the first regional economic organizations in the region, see Ajomo (1976).
53. The OAPI countries participate in several pan-African political, security, and economic initiatives, including the African Union, NEPAD, and the African Development Bank as well as the African Group at the WTO. Countries in the region have a common currency (the CFA franc) pegged to the euro and managed through two separate central banks, the West African Economic and Monetary Union (UEMOA) and the Central African Economic and Monetary Community (CEMAC). Other examples of regional cooperation include the Economic Community of West Africa States (ECOWAS), (established in 1975 and headquartered in Nigeria); the Organization for the Harmonization of Business Law in Africa (OHADA) (agreement signed in 1993); the Economic Community of Central African States (CEEAC) (created in 1983 and headquartered in Gabon) and the Community of Sahel-Saharan States (COMESSA) (created in 1998).
54. In the early years of independence, for instance, Côte d'Ivoire was reluctant to advance some aspects of regional integration, particularly those which required it

to help pay for the weaker countries in the region, and preferred to enjoy a special relationship with France.

55. Reno (2001).
56. See South Centre (1999), Bilal and Grynberg (2007), and Santa Cruz (2006).
57. This effort had been ongoing for several decades, particularly because in several individual countries in the region, historical loyalties were divided. In Cameroon, for example, Germany, France, and the UK all had significant historical involvement. See Manning (1988).
58. While the United States was not a major aid donor to the OAPI countries during the period under review, U.S. military aid to the region increased from 1998 and significantly outweighed development aid. Prompted by concerns that terrorist groups would recruit and train in the region, the U.S. military focused on training, military preparedness, and the provision of weapons. From 1999 to 2003, for example, Mali received annual support from the U.S. International Military Education and Training (IMET) programme. In addition, from 2002 to 2004, the U.S. Pan-Sahel Initiative (PSI) provided training and equipment to the security forces of Mauritania, Chad, Niger, and Mali. For a review of the evolution of U.S. military engagement in the region, see ICG (2005), Roan (2006), and Williams (2006).
59. Bilal and Grynberg (2007).
60. This effort is exemplified by the launch by African leaders of the New Economic Partnership for Africa's Development (NEPAD). See Taylor (2005).
61. For an analysis of the history and asymmetric nature of these agreements, see Cosgrove-Sacks (1978), Frey-Wouters (1980), Hurt (2003), Long (1980), and Zartman (1971).
62. Cazenave (1989) and Endeshaw (1996: 154).
63. See Allot (1996) and Endeshaw (1996: 155).
64. Nnadozie et al. (2002) and Okediji (2003*a*).
65. For a broader history of colonial legal arrangements in Africa, see Roberts and Mann (1991).
66. Endeshaw (1996: 151–2) and Salacuse (1969: 21, 10).
67. Even within that format, the state and format of laws differed across the French colonies. See Endeshaw (1996: 155) and Salacuse (1975: 156).
68. See Endeshaw (1996).
69. Of particular concern was that countries might follow the Malian independence strategy whereby Mali had sought alliances with the USSR and China, and to break ties with its former colonial ruler.
70. Endeshaw (1996).
71. According to Seidman, 'save for the constitutional provisions, the legal order at Independence remained unchanged' (1969: 37).
72. Lazar (1971).
73. This UAM meeting spawned several additional regional institutions, including Air Afrique (based in Abidjan) and a regional postal authority (based in Brazzaville). The UAM, founded in 1961, became the OCAM between 1965 and 1966. See Mytelka (1974) and Tall (1972).
74. Meyo-M'Emane (1990).

75. Anderfelt (1971). The twelve countries that signed the Libreville Agreement were Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Dahomey (now Benin), Upper Volta (now Burkina Faso), Gabon, Mauritania, Senegal, Niger, and the Malgasy Republic.
76. This point was made in a 2005 speech by INPI Director-General, Benoit Bastelli. See EPO (2005).
77. For historical background on OAPI, see Bogsch (1992), Camara (1987), Cazenave (1989), and Mossinghoff and Kuo (1998: 544). See also http://www.oapi.wipo.net.
78. For reviews of copyright in the 1977 Agreement, see Kingué (1985), Kongolo (1999*a*), and Ndiaye (1982).
79. See interview with former OAPI Director General Denis Ekani in ICICEMAC (2005).
80. The High Commission of Appeal is composed of three members (selected by the drawing of lots) from a list of representatives designated by member states. The Commission is charged with ruling on appeals following the rejection of applications for industrial property protection, for the maintenance or extension of terms of protection, for the reinstatement of rights, and for decisions on opposition requests.
81. Leesti and Pengelly (2002).
82. Teyib (2004).
83. OAPI (2001).
84. Article 43 of the revised Bangui Agreement states that the treaty will come into force two months after ratification by at least ten (two-thirds) of the contracting members of the 1977 Bangui Agreement (which had fifteen members). In addition, it states that the various Annexes to the Agreement will come into force upon a decision of OAPI's Administrative Council. While the Agreement provided members two years (until 24 February 2001) to ratify the new Agreement, nine of the countries ratified after that deadline.
85. This followed a Council decision in December 2005, described in more detail below. See OAPI (2005*b*).
86. The original Bangui Agreement included indications of source or appellations of origin as subjects for protection. See Kongolo (1999*b*). For a broader discussion of geographical indications in the African region, see Grant (2005).
87. Article 67 of the revised Bangui Agreement defines folklore as the 'literary, artistic, religious, scientific, technological and other traditions and productions as a whole created by communities and handed down from generation to generation'. For a summary of the Agreement's provisions in this respect, see Kongolo (1999*b*).
88. For OAPI's procedures in this respect, see http://www.oapi.wipo.net. For applicants living outside the OAPI member states, applications are submitted to OAPI either through an agent appointed in one of the member states or through WIPO using procedures laid down in the Patent Cooperation Treaty (PCT). In the latter case, applicants pay a fee to WIPO, part of which is retained by WIPO as part of its PCT applications, and part of which is passed on to OAPI to cover its application fee. For those living in the OAPI member states, applications are filed either through the SNL, directly with OAPI, or through an agent appointed in one of the member

states. In the case of applications made through SNLs, the fees are levied by OAPI directly on the applicant. If the patent is issued, the relevant rights remain in force subject to payment to OAPI of annual fees.

89. The revised Bangui Agreement states that OAPI members can also take advantage of provisions in the Paris, Berne, and Universal Copyright Conventions, as well as TRIPS, 'in all cases' where such provisions are more favourable 'in protecting the right deriving from intellectual property', but makes no accompanying mention of the flexibilities and options available in those agreements.
90. Article 3(1) of the revised Bangui Agreement affirms that the various rights arising from the Annexes are 'independent national rights subject to the legislation of each of the Member States in which they have effect'. See Kingué (1985: 36) and Ngombé (2006).
91. See Verbauwhede (2002) and Ngombé (2006).
92. Kongolo (2000*c*: 725).
93. The Agreement states that novelty can be destroyed by publication anywhere (whether in writing or orally), by use, or otherwise such that the disclosure is sufficient to enable the invention to be worked.
94. This figure reflects the exchange rate in August 2007 for 3,000,000 CFAF.
95. Kongolo (2000*c*).
96. For reviews of the revised copyright text, see Ngombé (2004: 123–35, 2005).
97. See Kongolo (2000*b*, 2000*c*: 726).
98. There is debate among legal experts about the actual legal effect and practical impacts of many of these provisions (particularly where the effect of provisions relies on subsequent enforcement or administrative decisions by member states or by OAPI). For a positive perspective, see Botoy (2001). For concerns, see Gavin (2002*a*), GRAIN (2002*b*), and RAFI (1999*a*).
99. Cameroon and Gabon ratified the revised Bangui Agreement by their 2000 TRIPS deadline while Côte d'Ivoire and Congo had both ratified by October 2001. (Table 7.4. lists the ratification dates for each OAPI country.)
100. WTO (2001*a*).
101. See WTO (2001*a*, 2005*c*).
102. According to Article 48 of the agreement, any member of OAPI may denounce the Bangui Agreement by written notification to the Director-General and thus exit from any obligations under it.
103. Article 56 of the Bangui Agreement provides that when a patented invention is of vital interest to national defence, public health, or the national economy, or where non-working or insufficient working of such patents seriously compromises the satisfaction of the countries' needs, the competent minister of the OAPI member state concerned can make an administrative decision to issue a non-voluntary licence.
104. The revised Bangui Agreement requires the member state to specify the beneficiary organization, the duration, conditions, and the scope of the non-voluntary licence as well as the amount of royalties. Applications for non-voluntary licences before the civil courts must be accompanied by evidence of the effort made by the applicant to obtain a licence agreement on reasonable commercial terms from the patent owner within a reasonable time. The granting of a non-voluntary

licence must be accompanied by 'equitable' compensation to the patent owner. See Kongolo (2000*c*).

105. The revised Bangui Agreement provides three grounds for compulsory licences: (*a*) if the patented invention is not worked on the territory of the member state at the time the request is made; (*b*) if the working of the patented invention does not meet, on reasonable terms, the demand for the protected product or if the patentee refuses to grant licences on reasonable commercial terms and procedures; and (*c*) if the establishment or development of industrial or commercial activities on such territory is unfairly and substantially prejudiced (unless the owner of the patent provides legitimate reasons for the non-working of the invention). A non-voluntary licence may also be granted in the case of dependent inventions that cannot be worked without infringing on each other.
106. The revised Agreement also omits clauses found in some other countries that subject the duration of a patent to its local exploitation. It also enables the patentee to preclude any person from stocking products for the purposes of use or sale. In addition, the revised Bangui Agreement removes prior working as a condition for the launching of an infringement action by either a holder of a patent right or utility model. See Kongolo (2000*c*: 720).
107. For further discussion of the issue of exhaustion of rights in the OAPI region, see Kiminou (2001).
108. Kiminou (2001).
109. See Gavin (2002*a*).
110. Second-use patents are also known as patents of addition and refer to patents for new uses of known products. See Tankoano (2001).
111. While the revised Bangui Agreement does not take the TRIPS-plus step of specifying a fixed period of data exclusivity, the revised Bangui Agreement may in fact provide even stronger protections because it offers an expansive prohibition on such use without any time frame attached. See Kongolo (2001*b*) and Samb (2002). According to the 2001 Doha Declaration on TRIPS and Public Health and a subsequent decision of the TRIPS Council, LDCs are not obliged to provide any such protection for pharmaceutical test data until 1 January 2016. See WTO (2001*a*, 2005*c*).
112. By slowing the entry into the market of cheaper, generic products, this automatic extension prevented a range of possible public health benefits in the region. In 1988, for instance, OAPI granted Pfizer a ten-year patent for the molecule azytrhomicine (commercial name is Zythromax). Once the patent expired in 1998, the company Wockhart produced a generic version lowering the price from $2.50 per treatment to $0.175, enabling treatment of fourteen times more patients. Under the new Bangui Agreement, this kind of price reduction on drugs patented under the terms of the original Bangui Agreement was postponed for an additional ten years. See Jourdain (2002). Also see ICAM (2002: 7).
113. Indeed, much of the text in the Annex on plant variety protection is the same as that found in the UPOV 1991 Convention and the related model law used by UPOV in its technical assistance. See Tankoano (2003).
114. The revised Bangui Agreement was found to be compliant with UPOV 1991 by the UPOV Council in April 2000. See UPOV (2000).

115. For a summary of these debates, see Correa (1999*a*), and Gaia Foundation and GRAIN (2000).
116. WTO (1999*a*). Also see Abass (2002). Equatorial Guinea, which is not a WTO member, is the only OAPI country which does not belong to the African Group.
117. While in general other countries can no longer formally belong to UPOV 1978, OAPI members could have used the 1978 Convention as a basis for their *sui generis* system even without being members of UPOV. Several other developing countries have taken this approach. (See Chapter 3.)
118. The OAU became the African Union in 2001.
119. See Cullet (2001: 103), Musungu (2004*a*), and WTO (2000*b*).
120. Chad, Guinea Bissau and Mauritania each had no national copyright laws. Equatorial Guinea was not yet a OAPI member at that time and also had no copyright law. Ngombé (2005) argues that in these cases the regional text would apply as law in those countries.
121. The conditions for translation were also limited under the original Bangui Agreement. The original Annex indicated that 'licences shall not be granted for the publication of literary or scientific works of which a French-language edition is available abroad unless such publication on the national territory has considerable advantages for the distribution desired'. See Kongolo (2000*a*, 2000*c*).
122. The national copyright law of Côte d'Ivoire has similar provisions.
123. Ekani completed a doctorate on industrial property in the region. After leaving OAPI, he held positions in the government of Cameroon and now practices as an attorney in the region. See Ekani (1973, 1982).
124. Author's interview with Ibrahima Camara, Professor of Law and Intellectual Property, University of Dakar, Senegal, May 2007.
125. Author's interviews with Jaqves Verone at INPI, Paulin Edou Edov at OAPI, and Michele Weil at WIPO, July 2008. The collaboration of WIPO, UPOV, and INPI in drafting the initial text was also affirmed through author's interviews with academics and NGO representatives involved in the subsequent debate on the revised Bangui Agreement.
126. Ibid.
127. OAPI (2001).
128. Equatorial Guinea joined OAPI in 2000.
129. Author's interview with Camara, see note 124.
130. From 1998 to 1999 Guinea-Bissau and Congo were embroiled in civil wars. Chad suffered political instability throughout the 1990s, and Côte d'Ivoire was afflicted with internal conflicts. For reviews of the political situation within and among countries in the francophone African region, see Herbst (2000) and Kaplan (2000).
131. This point was also made during author's interviews with officials involved in the process and by NGOs. See RAFI (1999*b*) and GRAIN (2002*b*).
132. Key scholars in this group included R. Kiminou, A. Tankoano (Professor in the Economics and Law Faculty of the Abdou Moumouni University of Niamey), T. Kongolo (who was at that time in Japan), L. Ngombé, and I. Camara. There was also a broader group of scholars focused on the issue of the protection of folklore in the region.

133. This conclusion draws from a review of WIPO's country briefs on member states. See http://www.wipo.int/members/en.
134. This programme is located at the University of Yaoundé II, which also has its own association of graduate IP law students (ADEPIY).
135. Author's interview with Falov Samb, former Senegalese TRIPS delegate, February 2006.
136. Patent attorneys had direct economic interests in boosting the use of the IP system as it would enable them to accumulate more fees.
137. Author's interview with Camara, see note 124 above.
138. Ibid.
139. The five OAPI countries without representation in Geneva are Central African Republic, Chad, Guinea Bissau, Niger, and Togo. In countries without missions in Geneva, responsibility for following WTO negotiations is usually allocated to their missions in Brussels.
140. The two individuals were Falou Samb and André Basse, both of whom worked at the Permanent Mission of Senegal to the United Nations in Geneva.
141. While francophone African countries have subsequently added their names to submissions on TRIPS matters by the African Group at the WTO, only a very small number of diplomats from the region have substantive capacity and time to engage actively with TRIPS matters. The more dominant players from the African region in the TRIPS discussions have been Egypt, Kenya, Morocco, South Africa, and Zimbabwe – all of which relied on collaboration with NGOs, IGOs, and external legal experts to make proposals at the international level.
142. Left alone to navigate the diplomatic manoeuvring of the WIPO Assemblies, author's interviews with several representatives of SNLS affirmed that their primary guides and interlocutors when in Geneva were WIPO officials with whom they negotiated technical assistance and capacity-building programmes, and other OAPI SNLs.
143. Author's interview with Anthoumiane Ndiayé, OAPI Director-General, Sept 2005.
144. Ibid.
145. OAPI (2001).
146. For information on the 1991 Act of UPOV and dates of accession see http://www.upov.int. At that time, of the twelve developing country members of UPOV 1978, the only African members were South Africa and Kenya (which joined the 1978 Act in May 1999 just before it was closed to further members).
147. The meeting documents are available at: http://www.wipo.int/meetings/en/details.jsp?meeting_id=3669.
148. Author's interviews with Professor Tshimanga Kongolo, WIPO Academy Geneva, Jun 2006 and Professor Johnson Ekpere, former OAU official responsible for the development of the OAU's model law, Feb 2006.
149. Interview with Johnson Ekpere, see note 148.
150. WTO (1995).
151. With the exception of its first WTO TPR report in 1995 (on Cameroon), the WTO Secretariat made no further mention of the LDC transition period for OAPI members until its 2001 report on Guinea. See WTO (2005*e*). See Table 7.5 for a list of the dates of the WTO TPR reports on OAPI countries.

152. WTO (1997*b*, 1998*a*, 1998*b*, 1999*c*).
153. Japan posed questions to Mali and Burkina Faso regarding measures taken to combat piracy and counterfeiting. The United States asked these countries and also Togo what steps they had taken to bring the Bangui Agreement into line with TRIPS. The United States also requested information on the legal framework for, and practical application of, Benin's intellectual property legislation. They asked 'when the draft copyright law would be ratified and how Benin intended to deal with the problem of informal trade in applying the measures for the protection of intellectual property rights at the border'. In the case of Togo, one of the three formal discussants also underscored the importance of implementing the Bangui Agreement, and in the case of Benin one of the formal discussants noted 'that violations of intellectual property law were not punished'. See WTO (1997*b*: 21; 1998*b*, 1999*c*).
154. The Rural Advancement Foundation International (RAFI) is an international civil society organization headquartered in Canada, dedicated to the conservation and sustainable use of biodiversity, and to the socially responsible development of technologies useful to rural societies.
155. See RAFI (1999*b*: 1). While it is possible that national newspapers provided some coverage, a search of all African and world newspapers in French and English available on LexisNexis for the revision period from 1 January 1995 to 30 June 2003 revealed only nine articles related to OAPI. Only three of these news stories were on the revision process, and only one appeared before the revised Bangui Agreement was signed.
156. GRAIN is an international NGO which promotes the sustainable management and use of agricultural biodiversity based on people's control over genetic resources and local knowledge.
157. RAFI (1999*e*).
158. GRAIN (1999*c*).
159. In 1999, in a RAFI (1999*b*: 1) press release, Hope Shand argued that '[c]onceivably, a new trade round could render compliance unnecessary'.
160. RAFI (1999*c*, 1999*f*).
161. Masood (1999).
162. RAFI (1999*f*).
163. Ibid.
164. Ngangoue and Oeudraogo (1999).
165. Ibid.
166. Interviews with Johnson Ekpere and Falou Samb, see notes 148 and 135.
167. See Kiminou (2001), Kongolo (2000*a*: 265–6), and Tankoano (2001, 2002).
168. MSF (2000), RAFI (1999*b*), and Mangeni (2003).
169. This analysis is based on author's interviews conducted with representatives of ten of the sixteen OAPI SNLs.
170. ARCT is an intergovernmental organization established in 1977 under the aegis of the United Nations Economic Commission for Africa (UNECA) and the African Union. Headquartered in Dakar, Senegal, ARCT has a membership of thirty-one African countries.
171. The minutes of these meetings are at http://www.wipo.int/africa/en/partners_org/quadripartite/index.html.

172. Ibid.
173. WTO (2001*c*).
174. WTO (2001*d*).
175. In the case of Mali, Benin, and Burkina Faso, the WTO highlighted those particular WIPO agreements to which the OAPI members had not yet acceded. See, for example, WTO (1997*b*: 55).
176. Among other elements, each agreement offered the exchange of trade preferences (such as duty-free and quota-free access to selected products) for a series of commitments by African countries to open up the regional economy and protect U.S. business and investment, including through IP protection. At that time, eight African Trade Ministers (including two OAPI countries) issued a joint statement welcoming the Act. See Trade Compass (2000). For a critical discussion of the Act and its history, see South Centre (1999).
177. Mkandawire (2004), Gray et al. (1990), and Williams (2000: 569).
178. At that time, while some OAPI member states already exported some products under GSP arrangements to the United States, many of the OAPI countries had not otherwise been beneficiaries of any U.S. GSP benefits.
179. The campaign that ensued resulted in an Executive Order on Access to HIV/AIDS Pharmaceuticals and Medical Technologies issued by President Clinton (discussed in Chapter 4).
180. RAFI (1999*f*).
181. GRAIN (2001).
182. GRAIN (2002*b*).
183. GRAIN (2001).
184. Seuret and Brac de la Perrière (2000). For further details of concerns about patents on local traditional knowledge from the region, see BEDE (2000), RAFI (1999*d*), and GRAIN (2002*a*). From 1993, the University of Wisconsin filed for patents related to brazzein sweetener, an ultra-sweet sugar replacement derived from the berry of a plant found in Gabon. The sweetener was subsequently licensed to biotechnology companies working to introduce the sweetener into fruits so that they taste sweeter with fewer calories.
185. Nnadozie et al. (2002), Zoundjihekpon (2001), GRAIN (1999*b*), RAFI (1999*d*), and APM (1999).
186. RAFI (1999*e*).
187. Egziabher (1999*a*, 1999*b*) and Ekpere (1999).
188. Author's interview with Matthew Stilwell, former Managing Attorney, Center for International Environmental Law, Geneva, October 2003.
189. RAFI (1999*e*).
190. Article 27.2 of TRIPS allows members to exclude from patentability inventions of which commercial exploitation is considered to go against 'public order' (e.g. social values or morality).
191. In their statement, the African Group cited two reasons for postponing the deadline for implementation of Article 27.3(b): (*a*) the ongoing debate on the issue in other forums, such as the FAO and CBD, and (*b*) in order to enable countries to set up the infrastructure required for implementation. For NGO statements of support for the African Group, see GRAIN (1999*c*), RAFI (1999*b*), and TWN (1999). For the

official text of the statement and a subsequent statement by Kenya on behalf of the Group, see WTO (1999*a*, 2000*b*).

192. WIPO (1997).
193. For a report on the OAU meeting, see GRAIN (2001).
194. WIPO noted, for example, that the OAU Model Law's prohibition of patents on life forms goes against TRIPS. While it is true that Article 27.3(b) requires patents on at least micro-organisms, this observation ignored the fact that the African Group at WTO had taken the position, formally endorsed by OAU, in the context of the TRIPS Council's review of Article 27.3(b) that TRIPS should instead ban the patenting of micro-organisms, as well as other life forms. WIPO warned against the model law's provision regarding bio prospecting and set out the difficulties in defining and operationalizing community rights. On neither issue did WIPO offer any suggestions for ways forward at that time. See GRAIN (2001).
195. Author's interview with Maurice Batanga, OAPI Secretariat, May 2007.
196. GRAIN (2001).
197. Ibid.
198. Ibid.
199. The newsletter had a distribution of around 700 stakeholders in the region.
200. GRAIN (2002*b*).
201. Boulet (2000), Boulet and Forte (2000), and MSF/WHO (2000).
202. MSF/WHO (2000).
203. MSF (2000).
204. Ibid. By May 2000, Cameroon, Côte d'Ivoire, Gabon, and Senegal had ratified the agreement.
205. Their core concerns were that the revised Bangui Agreement imposed more conditions on the use of compulsory licences than were required by TRIPS (such as the requirement for preliminary negotiations with patent holders even in cases of public health emergencies, and for a judicial procedure); prohibited parallel imports from countries outside the region (thus excluding the possibility of importing generic drugs from India and Brazil, the two principal producers of generic antiretrovirals); extended the duration of validity of a patent from ten to twenty years (not at that time required until 2006 for LDCs), and that it considered importation sufficient for a patent to be considered as exploited (rather, for example, than subjecting the duration of a foreign patent to its local exploitation). See MSF/WHO (2000) and MSF (2000).
206. To reach francophone experts, a senior WHO staff member published an article in a leading French-language law journal highlighting the importance of parallel imports and international exhaustion to access to medicines. See Velasquez (2000).
207. MSF (2000).
208. OAPI (2001).
209. Ibid.
210. Author's interview with Pascale Boulet, a legal advisor at MSF, Feb 2006 and Catherine Gavin, a former MSF legal advisor, Aug 2008.
211. Sell (2003*c*).
212. MSF (2000).
213. Author's interview with Falou Samb, see note 135.

214. Ibid.
215. Ouedraogo (2002).
216. Cited in Ouedraogo (2002).
217. Ibid.
218. ACT UP-Paris (2002).
219. OAPI (2002).
220. In the memo, the OAPI Secretariat noted that 'a patent may be exploited without the permission of its owner under certain conditions' and further explained that 'when a member State, for purposes of public health, deems that access to medicines should be improved, the competent Minister may, by an administrative decision, designate an administration or an organization to benefit from the non-voluntary licence regime to manufacture, import or sell products protected by patents'. See OAPI (2002).
221. Gazaro (2006).
222. See, for example, Abass (2002) and Sakho (2003).
223. In Cameroon, for instance, l'Initiative Camerounaise pour l'accès aux médicaments (ICAM) was launched in 2002. See ICAM (2002). In 2003, a Réseau Accès aux Médicaments Essentiels (RAME) was created in Burkina Faso, forming a network of people active in the battle for improved access to medicines. See http://www.rame-bf.org
224. The meeting was called the Regional Dialogue on Trade, Intellectual Property, and Biological Resources in Central and West Africa and was co-sponsored by ENDA Tiers Monde, ICTSD, and Solagral with the collaboration of Oxfam (West Africa) and the Quaker United Nations Office (QUNO).
225. Ould Hemet (2002) and Samb (2002).
226. Ould Hemet (2002). A similar view was expressed by Cameroon in 2004 in documents related to the TRIPS Council Review of its IP legislation. On the topic of patent protection for pharmaceutical products, Cameroon stated that 'studies are continuing to bring our legislation into line with the spirit of the Doha Declaration'. WTO (2004*a*: 19).
227. Interview with Falou Samb, see note 135.
228. Notably, MSF stepped back from its campaign for the reform agenda because for practical purposes many countries in the region allowed the import of generic drugs irrespective of the IP regime. MSF switched attention to encouraging countries to use the system. Catherine Gavin, a Legal Advisor to MSF's Campaign for Access to Essential Medicines claimed that OAPI's memo 'clearly indicates that imports of generics are possible in the OAPI countries, on the basis of a simple administrative decision from the competent Minister, so actually through governmental use'. See Gavin (2002*b*).
229. The petition called for the issuance of nonexclusive 'open' non-voluntary licences for all patents relevant to importation, manufacture, and sale of generic versions of nevirapine, lamivudine, and the fixed-dose combination of lamivudine and zidovudine, medicines used in the treatment of HIV/AIDS. Essential Inventions framed its request such that, when approved, 'licences would be available to any organization or business seeking to supply these AIDS medicines to patients in Cameroon'. See Essential Innovations (2005).

230. Interviews with Falou Samb and representatives of several OAPI SNLs in 2005 and 2006.
231. The U.S. National Trade Estimates routinely monitor and report on key U.S. trading partners, including the status of their IP protection. Among the OAPI countries, only Cameroon (from 1999 to 2006) and Côte d'Ivoire (from 2004 to 2006) have been the subject of such reports. While the reports on Cameroon included several factual errors about IP protection standards in Cameroon, there was no criticism of the standards of IP protection offered or regarding TRIPS implementation in the reports from 1999 to 2002. From 2003, however, the observations on Cameroon included concerns about piracy and counterfeit rates in the country, and the difficulty in attaining effective enforcement through the judicial system. The National Trade Estimate reports on Côte d'Ivoire expressed similar concerns and also included significant factual errors. In describing the revised Bangui Agreement, for example, the report detailed the provisions of the 1977 and not the 1999 Agreement. The full texts of all U.S. National Trade Estimate Reports from 1994 to 2006 are available at http://www.ustr.gov.
232. A copy of the TIFA is available at http://www.ustr.gov.
233. Three OAPI countries have faced the withdrawal of AGOA preferences for violating eligibility criteria, sending a signal that the United States would take the range of conditions for market access seriously (Central African Republic in 2004, Côte d'Ivoire in 2005, and Mauritania in 2006).
234. Author's interview with Samb, see note 135.
235. The nine most export-reliant countries are Cameroon, Côte d'Ivoire, Gabon, Guinea, Guinea-Bissau, Mali, Mauritania, Senegal, and Togo which rely on exports for 20 per cent or more of their GDP. Only the four non-LDC members of OAPI had exports worth over US$2 billion in 2002: Côte d'Ivoire (US$4.4 billion), Gabon (US$2.6 billion), Congo (US$2.2 billion), and Equatorial Guinea (US$2.1 billion). Countries in the region generally depend either on unprocessed agricultural exports (such as cotton) or just one or two raw commodities (such as diamonds, oil, and iron ore).
236. Raghavan (2002).
237. Of the required treaties, the Berne, Paris, and WIPO Conventions were already ratified by all OAPI members before the Bangui revisions. Few OAPI members have ratified the other required agreements and none have ratified either the UPOV 1991 Convention or the Budapest Agreement. Beyond those international IP agreements required by the Bangui Agreement, a handful of OAPI member states also belong to the Brussels Satellite Convention, the Film Register Convention, and the Patent Law Treaty.
238. WTO (2005*e*).
239. CISAC (2004).
240. In June 2005, APPIA held a conference covering issues from IP and public health to copyright, plant varieties and R&D in agronomy, and geographical indications. It was attended by around seventy people from various African countries including civil servants to WHO, artists, students, scientists, university professors and lawyers, MSF, and CPTech. See Gallochat (2005).
241. http://www.invention-ifia.ch/afriquefrancophone/Associations_inventeurs_Niger.htm.

242. These included a regional WIPO/OAPI Colloquium on IP and the Protections of Expressions of Folklore and Traditional Knowledge in Côte d'Ivoire (April 2002); a WIPO/OAPI Roundtable on legal options and general policy regarding the protection of traditional knowledge, genetic resources and expressions of folklore in Cotonou (December 2003), and a WIPO/OAPI Workshop entitled 'Intellectual Property: Tool for Economic, Social and Cultural Development' in Yaoundé, Cameroon (October 2004).
243. Specifically, multinational seed companies lobbied governments in Burkina Faso, Mali, and Côte d'Ivoire to allow the introduction of transgenic cotton. While Benin declared a five-year moratorium on GM crops and Mali banned their import, field trials of GM cotton later commenced in Burkina Faso, Senegal, and Mali with the assistance of USAID, Monsanto, Syngenta, and Dow Agrosciences. See IUB/BEDE/GRAIN (2002: 6), GRAIN (2004: 18), and GMO Indaba (2005).
244. UPOV (2005).
245. McGown (2006).
246. NGOs involved in these campaigns included GRAIN and RAFI as well as local NGOs such as Friends of the Earth. See IUB/BEDE/GRAIN (2002).
247. Email message from Yolanda Huerta, Senior Legal Officer, UPOV, 30 January 2008 (on file with author).
248. MSF (2003).
249. Abdel Latif (2005).
250. Bogsch (1992: 87).
251. The pervasiveness of such pressures on national IP officials was affirmed in author's interviews with a range of national delegations to WIPO as well as by current and prior WIPO employees.
252. In general, negotiations for IP-related capacity-building and technical assistance were handled by representatives of the national IP offices, which are also the key liaison between each country and WIPO.
253. According to its website, the work of the Africa Bureau is guided by decisions of WIPO's member states; the WIPO Permanent Committee on Cooperation for Development Related to Intellectual Property (PCIPD); a resolution of the Assembly of Heads of State of the African Union (AU); and the priorities set out in NEPAD. To guide its work, WIPO develops country or region-specific action plans with individual governments. See http://www.wipo.int/africa/en
254. The topics of the seminars varied from the economic impact of intellectual property, effective management and dissemination of intellectual property information, support of small and medium-sized enterprises, and training regarding licensing and distribution of royalties. See http://www.wipo.int/africa/en/activities/capbuild.htm
255. This information was derived from an online database of U.S. activities related to IP technical assistance, sponsored by the Bureau of Economic and Business Affairs of the U.S. Department of State. See http://www.training.ipr.gov.
256. Author's interviews with officials from SNLs and several former Geneva-based delegates of OAPI countries. When the first ratifications of the WIPO Internet Treaties occurred in 2002, four OAPI LDCs were among the first members. The OAPI members that belong to the WCT and their years of accession are as follows: Benin (2006), Burkina Faso (2002), Gabon (2002), Guinea (2002), Mali (2002),

Senegal (2002), and Togo (2003). The OAPI members that belong to the WPPT and their years of accession are: Benin (2006), Burkina Faso (2002), Gabon (2002), Mali (2002), Senegal (2002), and Togo (2003). Among these countries, only Gabon is not an LDC.

257. Okediji (2004*a*).
258. Bogsch (1992: 87) and Anderfelt (1971).
259. Authors' interviews with Falou Samb and Johnson Ekpere, see notes 135 and 148.
260. EPO activities in the OAPI region included a range of training activities, as well as support to develop and install hardware and software to aid in retrieving and evaluating patent documentation and to make patent information readily available to IP offices and the public. This included funding a link from OAPI to WIPOnet and to its own database system *esp@cenet*® and to establish an IT unit to handle the administration of IP applications. With WIPO, the EPO also completed the electronic publication on CD ROMs of OAPI patent data since the beginning of its operations. Information on EPO activities in the African region can be found at: http://www.epo.org/about-us/office/international-relations/projects/africa-middle-east_fr.html (accessed 1 February 2008).
261. A summary of these activities is provided in EPO (2005).
262. Konstatin Karachalios (2002), the head of the EPO's technical assistance activities, notes that 'EPO activities in the region are closely co-ordinated with INPI to achieve the best possible results and a regular exchange of information takes place'.
263. Beyond an initial contribution levied by the Administrative Council upon new members of OAPI, there is no further membership fee. If necessary to balance the budget, an exceptional contribution may be required of member states (Article 26).
264. OAPI (2005*a*).
265. See Article 38 of the revised Bangui Agreement, which provides that the Administrative Council may pay to each member state the share of any budgetary surplus that accrues. The Agreement further states that surpluses shall be shared equally among the states. In so doing, OAPI returns to national governments a portion of the potential revenues they might have received had industrial property administration been undertaken at the national level.
266. Okediji (2004*a*). Importantly, while improvements in copyright protection could offer potential benefits for national cultural industries, such as increased returns for local artists, creators, and national folklore, there is also a risk that increases in the scope and term of protection could simultaneously generate significant social costs, such as higher prices for educational materials.
267. WIPO (2005*a*).
268. Beyond the OAPI meetings, some SNL officials may otherwise have met annually at the WIPO General Assemblies in Geneva.
269. OAPI (2001).
270. Moran et al. (2005) and UNCTAD (2007).
271. Author's interviews with SNL officials in September 2006 and 2007 in Geneva and May 2007 in Dakar, Senegal.

8

The Implementation Game and the Variation Puzzle

The TRIPS Agreement reflects a global system in which unequal economic and political strength limits the capacity of developing countries to influence the outcomes of their international economic relations. The international IP rules that TRIPS established in 1994 were far stronger and more intrusive than any developing countries had previously encountered. To implement the Agreement, developing countries faced the challenge of undertaking major IP reforms at the national level.

In the period from 1995 to 2007, the approach developing countries took to TRIPS implementation varied widely. The timing of reforms differed as did the use of TRIPS flexibilities. Over half of the WTO's developing country members did not meet their 2000 deadline for TRIPS implementation. On the other hand, over half of the WTO's least developed country members implemented TRIPS in advance of their general 2013 deadline. Most developing countries included a mix of TRIPS-minimum and TRIPS-plus standards in their suite of IP laws. But the number of countries with TRIPS-plus standards grew steadily over the post-TRIPS decade. In many instances, the flexibilities for which governments fought (and are continuing to fight) at the international level were forfeited at the national level. At the same time, some developing countries did tailor TRIPS implementation to take advantage of specific TRIPS flexibilities. Further, some countries covertly tiptoed around implementation of particularly contested aspects of the Agreement.

The broad scope of TRIPS and the diversity among developing countries mean that there is no parsimonious explanation for how they behaved with respect to TRIPS implementation. In this book, I have argued that explaining variation in TRIPS implementation demands attention to the interplay of: (*a*) post-TRIPS global IP debates; (*b*) international pressures on developing countries; and (*c*) national economic and political factors within developing countries. This final chapter draws together my findings as to why developing countries drew the line differently. I summarize why so many countries, but

curiously not all, went beyond TRIPS-minimum requirements, and also why some countries did indeed use certain TRIPS flexibilities. I also review why some TRIPS flexibilities were used more than others. Stepping back from the variation puzzle, I then draw attention to the simultaneous fragmentation and consolidation of developing country perspectives on IP in the face of an increasingly complex global IP system. Looking ahead, I preview several emerging policy debates and trends likely to shape the environment for ongoing efforts to implement TRIPS and other international agreements. I conclude by distilling some of the policy implications of this research and propose five strategies for actors working to ensure IP reforms in developing countries advance development goals.

8.1. Global IP Politics

After a decade of tense North–South debates, TRIPS emerged a contested agreement. It was quickly apparent that far from a final deal, TRIPS was rather the starting point for further negotiations, sometimes in the spotlight of the international media but more often away from public scrutiny.

Immediately upon the conclusion of the TRIPS negotiations, developed countries called for faster implementation than the Agreement requires, more stringent enforcement, and even stronger international IP standards. By contrast, developing countries sounded a collective alarm at the scope of TRIPS obligations.[1] They called for the modification of TRIPS to better reflect their different levels of development and committed themselves to defending, and where possible expanding, TRIPS flexibilities.[2] Developing countries were joined by critics who questioned the legitimacy of TRIPS, raising concerns both about the coercive nature of the TRIPS negotiations and the terms of the final deal. The result was an ongoing, often acrimonious, debate about the impact of TRIPS on development and the appropriate scope of global IP regulation.

The TRIPS implementation process became an intense political game. The playing field was a global political arena in which countries fought to amend, twist, and duck TRIPS rules. Two teams, one of rich countries and one of poorer countries, were the key players, flanked by multinational companies and NGOs respectively. Each team had support from international organizations and a raft of experts. One team sought stronger IP protection and swift, compliance-plus approaches to TRIPS implementation, while the other team pursued a tailored, development-oriented approach to TRIPS implementation that made use of TRIPS flexibilities. The teams engaged in a globe-wide struggle to influence both international IP rules and the IP reforms developing countries undertook on the ground.

TRIPS implementation took place amidst immense changes in the global economy and the global IP system. Alongside the growing importance of IP protection to the profit margins of multinational companies in the pharmaceutical, software, agrochemical, entertainment, and manufacturing sectors, the technological possibilities of perfect imitation of many goods with high IP-content rose. The political and economic power of China, India, and Brazil was growing; and North Asia boosted its technology production. Between 1995 and 2007, the number of international IP agreements proliferated as the did the range of international fora where IP issues were discussed.

Changing commercial opportunities and the expansion of social movements concerned about TRIPS drew a multiplying array of players agitating for or against stronger IP protection into the implementation game. The contested nature of TRIPS spurred a dynamic interaction between implementation efforts and ongoing international negotiations where the competing teams sought to remake the terms of the original TRIPS bargain and assert their perspectives on the appropriate scope and nature of international IP regulation. The intensity of the implementation game was amplified by the fact that decisions in one country might set a precedent for others. Decisions developing countries took nationally fed back into international negotiations as governments used them to advance, dispute, or consolidate particular interpretations of TRIPS rules and flexibilities. At the WTO, for instance, some developing countries called attention to their national laws against the misuse of traditional knowledge to bolster their case for also including commitments to protect such knowledge in TRIPS. Using the same logic, developed countries worked to secure TRIPS-plus copyright laws in developing countries as a way to build momentum for the eventual incorporation of such standards into TRIPS. International IP debates were also harnessed by each team to challenge or defend controversial IP reforms taken on the ground.

8.2. International Pressures

This book has shown that accounting for variation in TRIPS implementation demands a nuanced account of power, one that delineates different kinds of power, specifies mechanisms through which it is expressed, and acknowledges a range of sources of countervailing power.

International pressure from developed countries and multinational companies was a consistent and omnipresent part of the context for TRIPS implementation for all developing countries. Developing country governments faced intense international pressures to go beyond minimum TRIPS requirements, limit their use of TRIPS flexibilities, and introduce IP protection at a faster pace than TRIPS requires.

Developed countries deployed a suite of economic pressures on developing countries, using bilateral trade, IP and investment deals, WTO accession agreements, trade sanctions, the threat of sanctions, and the WTO DSU process. In particular, developed country governments used the provision and withdrawal of market access and investment (or the threat thereof) to make developing countries undertake specific IP reforms they were unlikely otherwise to have pursued. The United States, for instance, frequently threatened to withhold market access, withdraw trade preferences, or retract foreign aid unless developing countries changed their IP rules. In some cases, actual sanctions followed. Multinational corporations with strong IP interests also worked to link progress on IP reforms to the global reputation of developing countries and their prospects for attracting foreign direct investment (FDI). For developing countries, the combination of economic dependence on U.S. and EU markets and the desire for good political relations with global powers limited, to varying degrees, their capacity to resist TRIPS-plus pressures.

The impact of the different economic pressure tools on how countries implemented TRIPS varied as well. Whereas bilateral IP agreements and threats of sanctions often took years to yield results, TRIPS-plus. WTO accession agreements and bilateral FTAs incorporated mechanisms to force swift TRIPS-plus reforms. If developing countries failed to fulfil their IP commitments in FTAs, for instance, the United States could credibly threaten to withdraw market access benefits. Even for countries not directly subjected to them, economic pressures reinforced an international policy climate in which it was clear that taking steps toward stronger IP protection would be favoured by powerful donors, foreign companies, and trading partners. Still, economic pressures did not always achieve the anticipated results. The fact that the terms of TRIPS-plus trade deals differed highlights the need to acknowledge how the intensity of economic pressures varied by country and how national politics in developing countries impacted their vulnerability. The focus of pressure varied according to the economic importance of different developing country markets (e.g., market size) and the profile of their economies (e.g., their role in the export of IP-related goods and services). The pressure was greatest where markets were most attractive or the threats to corporate profits were highest.

Importantly, several TRIPS-plus outcomes cannot be explained by reference to direct economic pressures, most notably where African LDCs went beyond TRIPS-minimum standards. No African LDC has ever been cited on the U.S. Special 301 list or subject to a WTO dispute. Further, no such country had a bilateral FTA with substantive TRIPS-plus obligations at the time TRIPS-plus laws were put in place. TRIPS-plus outcomes in these countries highlight the need for, a more nuanced approach to power, one that considers the role of ideational pressures.

Ideational pressures were a subtle but important complement to economic power in generating variation in TRIPS implementation. Ideational power operated through efforts to influence, build, or alter institutional capacities, ideas, and discourses. Both teams of players in the implementation game used ideational power to reframe global and national IP debates, transform national expertise and knowledge, and persuade developing country officials. To exert ideational power, governments, industry, international organizations (IOs), and NGOs used an array of tools, including training, research, monitoring, capacity-building, international conferences, public education, and outreach to international media. The ability of players to so exercise ideational power derived from factors like their technical knowledge of IP issues, access to information and financial resources, and links to communities of scholars and activists with shared assumptions and preferences.

An intense struggle to dominate international perceptions about the appropriate terms of TRIPS and global IP regulation ensued. IP-holding corporations, developed country governments, and IOs, such as WIPO, used training, research, and outreach to frame stronger IP protection as vital for economic development. The WTO's Trade Policy Review process and TRIPS Council meetings, together with bilateral and industry monitoring initiatives, reinforced a global policy environment that favoured rapid TRIPS compliance, strong enforcement, and TRIPS-plus standards.

During the Uruguay Round, TRIPS proponents had promoted IP protection as desirable in its own right, most notably as a stimulant for foreign direct investment (FDI), technology transfer, and innovation, and as a quid pro quo for trade concessions by developed countries. In the post-TRIPS political environment, the pro-IP team sustained the argument that IP and development goals were mutually supportive, but also went further. The push for ever-stronger IP protection was re-packaged as a precondition for political and economic benefits that went far beyond the trade arena. The pro-IP team now framed TRIPS-*plus* IP protection as the new basis for bargaining between developed and developing countries. This reinforced the compliance-plus political environment for TRIPS implementation. To signal their commitment to doing the 'right thing' in the global economy, many developing country governments had already embarked on a process of mimicking developed country policies on a range of issues, often without efforts to adapt them to national needs or to consider alternatives. Acquiescence to developed countries on IP issues was frequently a similar reputation-building gesture. Even in developing countries that were more sceptical, high dependence on access to developed country markets and development assistance reduced their perceived leeway for resisting TRIPS-plus pressures.

To challenge the IP-centric discourse, the pro-development team also used ideational tools. Their counter-discourse was a central part of the

implementation game: by maintaining a question mark over the fairness and legitimacy of TRIPS, and keeping alive the debate about the Agreement, the pro-development team hoped to make it more politically difficult for developed countries to push for early or strong implementation and enforcement. In addition, developing countries sustained a critical discourse about TRIPS in order to maintain a tactical bargaining chip in broader multilateral trade negotiations. By insisting that TRIPS was a bad deal (and that developed countries had not yet delivered on the trade concessions promised in exchange), developing countries hoped to bolster their negotiating power to extract concessions and resist pressures from developed countries. The idea that TRIPS already represented a deal that had gone 'too far' was also used to contest the push for TRIPS-plus commitments in bilateral and regional trade arrangements, and at WIPO.

Critical discourse about TRIPS was also considered vital to defending and affirming the flexibilities already in TRIPS (such as the right to use compulsory licensing), expanding those flexibilities (such as extensions to implementation deadlines), and amending the agreement to better protect their own intellectual assets (such as traditional knowledge associated with genetic resources). Even those developing countries that went beyond TRIPS-minimum standards in some aspects of implementation objected to the binding nature of TRIPS rules upon their policy options. They wanted to define and defend space within global regulatory frameworks to devise and implement policies necessary for national development.

Although NGOs and IOs such as UNCTAD and the WHO wanted to counter economic pressures and challenge the influence of pro-IP discourse on the media and public opinion, they could not match the financial resources and institutional capabilities of their opponents. The pro-development team's efforts to advance a countervailing agenda in favour of a tailored approach to TRIPS implementation and more balanced global IP rules did, however, yield important victories. Their first major success arose from their attention to the impact of TRIPS on the affordability and availability of essential medicines. In 2001, an international backlash provoked multinational pharmaceutical industries and the U.S. government to withdraw pressures on South Africa to alter its IP laws. An important lesson was that developing country diplomats learned was that international media attention and civil society allies could boost their political scope for using TRIPS flexibilities. Determined to defend developing countries from pressures against the use of TRIPS flexibilities related to compulsory licensing of drugs and data protection, the pro-development team also fought for and won the WTO's 2001 Declaration of the TRIPS Agreement and Public Health (the Doha Declaration), which confirmed and clarified the existence of flexibilities within the TRIPS Agreement. In 2004, the call by developing countries for a WIPO Development Agenda was another successful effort to reframe global IP debates.

By the end of 2007, the issue of development was firmly back on the global IP agenda.

Throughout the implementation game, IOs were active in both the pro-IP and pro-development teams. Equipped with distinctive mandates from member states, IOs used ideational power to project competing institutional priorities (i.e., in favour of public health, development, food security, or stronger IP protection). In so doing, IOs sometimes expressed the power of particular countries or interest groups. In some instances, they also advanced their own bureaucratic agendas or those of particular senior staff. The sources of IO influence included their legal and technical authority on IP issues, control over capacity-building resources, and ability to convene decisionmakers and define meeting agendas. Alongside developed country governments, companies, industry associations, and NGOs, IOs competed to use capacity-building to affect how developing countries implemented TRIPS. Here, WIPO emerged as a central actor. Urged on by the pro-IP companies that finance the majority of its budget, WIPO's capacity-building activities in developing countries generally focused on early and strict TRIPS compliance. By contrast, advice and technical assistance from IOs such as UNCTAD and the WHO prioritized development and health issues, and promoted the use of TRIPS flexibilities. In each case, the relationship between IOs and national governments was channelled through particular ministries and agencies. At WIPO, for instance, the main interlocutors were national IP offices, whereas WHO's main partners were health ministries.

8.3. The National Dimension

While developing countries usually worked collectively at the international level to advance their views on the reform of TRIPS, they largely stood alone when implementing TRIPS at the national level. Despite the efforts of the pro-development team to bolster developing country confidence in using the TRIPS flexibilities, the ability of countries to absorb that assistance and resist pro-IP pressures varied. Further, developing countries did not respond in identical ways to similar international pressures and such pressures did not always achieve the desired results. While, in many countries, international pressures clearly did impact the timing and strength of IP reforms, they cannot explain the range of variation, including for example, help explain why some countries did make use of TRIPS flexibilities, why the use of flexibilities varied by sector, or why some countries succeeded in delaying TRIPS implementation. To account for this variation, consideration of national circumstances and politics is also required.

In spite of the TRIPS-plus global political environment, several larger developing countries had sufficient economic independence and support from

domestic interest groups to resist some TRIPS-plus pressures. In addition, in some countries, changing economic opportunities and the reconfiguration of domestic industry interests gave rise to national lobbies in favour of stronger IP regulations in certain areas in concert with international pressures.

Internal political dynamics within developing countries also modified the influence of international pressures on how governments approached TRIPS implementation. Three elements of national politics were particularly relevant: government capacity on IP-related matters, the degree of public engagement with governments regarding TRIPS implementation and IP reforms, and government coordination with respect to domestic and international IP decision-making. Depending on the country at hand, these elements either amplified or diminished the influence of international power pressures on government decisions.

The technical expertise and organization of government institutions with respect to IP decision-making made a difference to how countries responded to TRIPS commitments. While a handful of developing countries emerged from the TRIPS negotiations with specialized knowledge of IP regulation, most only began the process of building such expertise during the implementation process. Most developing countries still lacked critical, development-oriented expertise on both public policy and technical/legal considerations at the time TRIPS implementation decisions were made. Only a few developing countries, such as Brazil, Argentina, South Africa, and India, had access to national or regional experts capable of tailoring the implementation of international IP obligations to foster national development objectives. Where IP experts were available in developing countries, they were usually part of the pro-IP community working for national IP offices, WIPO, multinational companies, or law firms with multinational clients.

National institutional arrangements also mattered. Within developing countries, decision-making on TRIPS implementation was usually left in the hands of technocrats in IP offices who were sympathetic to the push for stronger IP protection and separated off from broader national development policy debates and strategies. The deference of governments to legal experts in IP offices resulted in a concentration of power with respect to IP decision-making.

In most developing countries, governments also formally delegated significant authority to national patent and copyright offices. Such offices were simultaneously responsible for devising the legislative agenda for compliance with international treaties, policy advice, IP administration, adjudication of disputes, IP promotion and outreach, participation in international norm-setting negotiations, and securing technical assistance and capacity-building. The consolidation of expertise in IP offices in the absence of effective oversight from other parts of government exacerbated already weak public accountability. The strength of IP offices was reinforced by limited coordination on

IP matters across government ministries, either with respect to national IP reforms or positions taken in international fora. Few IP offices had processes for drawing on national expertise outside government such as from consumers, local innovators, or users of the IP system.

The IP community, where one existed within developing countries, tended to be trained narrowly in the technicalities of IP law, and had little exposure to broader public policy considerations. The result was an approach to IP decision-making frequently driven more by concerns for compliance with international law and by the expectations of trading partners and donors than by national development priorities.

In the context of weak IP expertise, concentrated decision-making, and policy-making vacuums in most developing countries, donor efforts to build capacity and provide technical advice had a significant impact on TRIPS implementation. Most national IP offices relied heavily on financing from external sources, namely fees paid by foreign IP rights holders and grants from international donors, such as developed country IP offices and WIPO. At the national level, it was usually IP offices that governments charged with negotiating technical assistance for implementing TRIPS and modernizing IP protection. Not surprisingly, the majority of aid and support from the larger IP donors, especially WIPO, was subsequently directed to national IP offices. The consistent supply of training, advice, and institutional support from such donors to IP offices bolstered the latter's dominance in national IP decision-making and reinforced a compliance-oriented approach to implementation.

Countries with the lowest technical capacity on IP were particularly vulnerable to pro-IP capacity-building. In cases where government institutions were generally weak or where elites were preoccupied with their own power, attention to coherent policymaking and implementation was minimal – thus heightening their vulnerability to international donors keen to 'fill the capacity gap' as a way to advance their particular objectives. Even in countries with greater IP expertise, officials generally had a positive disposition toward stronger IP protection. In these cases pro-IP capacity-building served to reinforce the dominance of technocrats in national IP debates and to consolidate a compliance-plus approach to TRIPS implementation. Over the period under study, IP capacity was strengthened in many developing countries, but the focus continued to be on building a proficient cadre of IP technicians rather than expertise and processes that would place IP laws in the context of public policy goals and development. Given the limited salaries and professional prospects in many developing countries, the influence of donors was not just institutional but also personal. Training, seminars, and international conferences provided attractive incentives for many developing country IP officials to advance the agenda of donors in their countries and, at the same time, were tools for the continual socialization of officials into the international

community of pro-IP professionals.[3] In some cases, officials were persuaded by arguments in favour of stronger IP protection, and in other instances officials perceived that they had little choice.

Even though NGOs and IOs, such as UNCTAD and the WHO, provided alternative advice and training to IP offices and to other parts of government, their budgets were far smaller than those of WIPO, industry, and pro-IP bilateral donors. Further, the pro-development team's efforts to encourage use of TRIPS flexibilities often came after the most significant pieces of legislation related to implementation had already been passed. That said, there were important cases where technical advice and legislative assistance from the pro-development team did result in the use of TRIPS flexibilities by developing countries. In addition, technical support from the pro-development team helped several developing countries defend the inclusion of particular TRIPS options and safeguards in their legislation against political attacks.

The existence or absence of a broader policy framework for IP regulation also made a difference to TRIPS implementation decisions. Where governments had the capacity to filter their decision-making on TRIPS implementation through a broader national policy framework, or through consultative processes with the parliament or interest groups, a more tailored approach to TRIPS implementation emerged. Most developing countries, however, lacked systematic processes for gathering expert and stakeholder input into their trade or IP decision-making.[4]

Those countries that accumulated institutional capacity and technical expertise on TRIPS during the negotiations (such as Argentina, Brazil, India, and Peru) were among those who demonstrated the greatest determination to tailor their national implementation efforts to address their development priorities, and to defend these actions in the face of external pressure. Among developing countries, Brazil stood out for having a strategic approach to TRIPS implementation based on a broad policy framework on development and industrial priorities. India has also had several decades of informed discussion about appropriate IP policies. More recently, after international pressure on South Africa to revise its Medicines Act provoked a national public outcry, it then helped stimulate a public policy framework and processes for future national debate on IP issues.

The degree of engagement by national parliaments and interest groups in the process of IP reform, and the responsiveness of governments to them, also impacted TRIPS implementation outcomes. Interest groups, both those in favour and those against stronger IP protection, sometimes enabled or pushed developing countries to resist external pressures. Developing country governments with the greatest access to expertise, receptiveness to citizen input were able, at the margin, to counterbalance the impact of compliance-plus pressures. In countries such as Argentina, Brazil, India, and South Africa, for instance, interest groups lobbied national parliaments and governments

agencies in response to national social challenges (such as high rates of HIV/AIDS infection) or to protect national industries (such as generic drugs industries). New interest groups also emerged with changing economic opportunities (such as the potential to conduct 'outsourced' research for multinational R&D companies). The role of local civil society groups and NGOs when developing countries in national IP debates varied. In some countries, NGO interest began with concerns about biopiracy and then moved toward issues such as access to medicines and educational materials. National debate on IP laws sometimes helped to generate and build capacity on the public policy implications of IP laws. In addition, interest group politics impacted the degree of enforcement governments pursued. In many cases, governments knew that tackling piracy and counterfeiting would impact on poor communities that relied either on cheap copies of foreign goods or on jobs linked to copying and imitation. By clamping down on piracy and counterfeit products and industries many governments would risk losing the support of national voting constituencies while the primary beneficiaries would be foreign companies. Developing country responses to TRIPS were also influenced by the broader politics of national trade policymaking. In the context of pressure for TRIPS-plus trade deals, the way governments made decisions on trade policy, and which, if any, interest groups they consulted in this process had important implications for IP laws and policies.

Within developing countries, the line between national and international interest groups was often blurred. 'National' interest groups often had alliances with international counterparts that shaped their perspective and activities. International NGOs and multinational corporations, for instance, forged ties with local affiliates, partners, and scholars. In many countries, 'domestic' industry groups had strong links with international lobbies working to advance their interests on the national political stage. International stakeholders undertook a range of activities within national borders as well – locating part of their activities in a country, engaging directly in national politics, pursuing legal challenges in national courts, and providing technical assistance. In some cases, national actors were in fact direct subsidiaries or members of international lobby groups or NGOs (such as the Business Software Alliance and Oxfam). Local scholars engaged by national governments to provide advice to regarding TRIPS implementation were sometimes simultaneously employed by foreign companies, NGOs, law firms, or IOs. Many national IP law firms and experts had multinational firms as clients, and represented their views in national IP debates. In some countries, national NGOs had interests that extended beyond national IP reforms and were part of transnational campaigns to influence international IP regulations.

The final aspect of national politics that influenced variation in TRIPS implementation was the degree of coordination among government institutions. In some countries, sporadic debates occurred between IP offices and

ministries of health, culture, or agriculture on the use of TRIPS flexibilities, but only occasionally did this spur collaboration in favour of their use. In most countries, mechanisms for internal coordination were absent, which eased the way for TRIPS-plus pressures to sway IP offices and overcome internal dissent.[5]

Developing country diplomats working on IP issues in Geneva frequently expressed frustration with IP reforms underway at home that sacrificed TRIPS flexibilities. In the absence of instructions from capitals, developing country diplomats sometimes forged collaborations with international NGOs to galvanize strategies for international negotiations and explore options for TRIPS implementation. In some cases, these individuals became influential players in global IP politics. Few Geneva-based diplomats succeeded, however, in bridging the communication gap with their capital-based counterparts from the same ministry, let alone overcoming the challenges of communication with officials in other ministries or in national IP offices. This lack of coordination worked to the advantage of those in favour of stronger IP protection. Armed with the resources to provide an extensive range of training, advice, and seminars at the national and regional level, donors such as WIPO bypassed more critical Geneva-based diplomats and focused their attention on national IP offices. Similarly, when contentious issues arose in international negotiations, the pro-IP team often sought to diffuse opposition by communicating with trade and foreign affairs ministries in capitals, sometimes calling on them to rein in diplomats in Geneva who expressed critical perspectives.

The degree to which governments coordinated their external and domestic affairs was particularly relevant where countries delegated significant responsibility for IP matters to the regional level. While over thirty African countries belonged to regional IP organizations, most members lacked the capacity to hold their secretariats accountable. Over time, delegation of technical matters relating to the granting of IP rights to the regional level also meant that national IP offices did not accumulate the expertise necessary to monitor, guide, and evaluate the work of regional secretariats. In francophone Africa, for instance, the combination of limited national capacity on IP issues, delegation to a regional organization over which members exercised little oversight, and the pressures of capacity-building from international donors resulted in a TRIPS-plus outcome. The scale of capacity-building needs among governments in the region and the IP policy vacuum at the national level gave donors considerable scope to influence national and regional IP officials. By consistently financing improved infrastructure, donors also diminished the ability of OAPI members to claim, as other countries had, that they lacked the resources to implement TRIPS quickly. Governments in the region were further swayed by the promise of a far larger bargain – that strong IP protection would bring reputational gains that could be used to secure foreign aid, investment, and trade deals.

8.4. Further Findings on Variation

This study has generated several specific findings regarding why countries used TRIPS flexibilities in one area of IP (such as copyright) or another (such as patent). The limited use by most developing countries of flexibilities in the copyright area was directly linked to the technical assistance and legislative advice offered by WIPO, which was a particularly dominant source of capacity-building on these issues. Many countries adopted wholesale draft laws prepared with the close assistance of WIPO, which based its interventions on model laws that did not fully reflect TRIPS flexibilities. In addition, the implementation of TRIPS-plus copyright provisions in some countries followed their ratification of TRIPS-plus multilateral treaties such as the WIPO Internet Treaties and bilateral pressures from the United States to implement them (and to sign the treaties where countries had not already done so).

In the area of plant variety protection, many developing countries expressed interest in adopting *sui generis* approaches. In practice, however, governments were constrained by limited expertise, institutional capacity, and experience in this area. In lieu of devising completely new laws, most countries were persuaded by technical assistance providers to adopt or adapt the 'off-the-shelf' solutions supplied by the Union for the Protection of Plant Varieties (UPOV). Many governments had also signed bilateral trade deals in which they committed to joining the UPOV system.

In the area of patents, the use of flexibilities was perhaps most widely debated. The interest of multinational pharmaceutical companies in developing country actions was particularly strong in the areas of data protection, exclusive marketing rights, and patent-related flexibilities, such as the use of compulsory licensing. Here, developing countries faced a full suite of economic and ideational pressures from the pro-IP team. In response, the pro-development team mounted countervailing pressure in favour of the use of flexibilities by providing technical assistance, campaigning to promote the political space for countries to use flexibilities and defending the rights of countries that had chosen to incorporate them. The intensity of the struggle over medicines and public health help explain why the use of the patent-related flexibilities in TRIPS was particularly varied.

Finally, the timing of reforms impacted the use of TRIPS flexibilities. In general, those countries that implemented reforms before 2000 omitted the use of many flexibilities in their laws, though some later revised their laws in this respect. After 2000, growing global IP debates produced more varied results. On the one hand, pressure on some countries via bilateral TRIPS-plus trade deals intensified. On the other hand, the pro-development team was now better organized to provide alternative advice and expertise to countries on their options with respect to TRIPS implementation, which some countries sought out and used in their decision-making.

8.5. Developing Countries in Evolving Global IP Debates

As TRIPS implementation advanced, there was a consolidation of developing country discourse in global IP debates. As the pro-development team became increasingly concerned about the rise of TRIPS-plus agreements at the bilateral level and at WIPO, diplomats, NGOs, and academics convened numerous meetings to consider appropriate responses to the 'forum shifting' strategy of the pro-IP team. A range of NGOs and scholars published papers to raise critical awareness of the politics of IP capacity-building, the challenges posed by bilateral trade agreements, and the push for TRIPS-plus standards. Together, these critics worked with a core group of diplomats to expand and coordinate the pro-development team's efforts beyond the WTO, including through the call for a WIPO Development Agenda.

With the proliferation of fora in which IP policy issues were discussed, fragmentation and contradictions in developing country discourse emerged as well. In the face of multiple negotiating processes, the coordination among and within developing countries often faltered.[6] There was weak communication among the many diplomats and branches of national government (foreign affairs, trade, environment, health, industry) that engaged with the growing array of international IP-related negotiations. While countries such as Brazil and Argentina expressed broadly consistent views across international fora, most governments could not coordinate so effectively. As proposals for strengthened IP protection emerged at WIPO, many developing countries expressed positions that contradicted the spirit of their statements at the WTO.[7] Some governments articulated positions on IP at UNESCO, FAO, and CBD meetings that diverged from those advanced by their negotiators at the WTO. A core reason for this was that government delegates to the WTO and other international fora often hailed from distinct ministries. In Geneva, for example, many developing countries maintained two separate missions, one for the WTO and one for the United Nations. Even where representation was combined in one mission, delegates to WIPO were rarely also those responsible for TRIPS. Diplomats covering TRIPS usually represented either the Department of Trade or Foreign Affairs, while representatives of national IP offices flew in periodically to WIPO meetings. The limited ongoing engagement of Geneva-based developing country diplomats in WIPO's work constrained effective and substantive engagement on new negotiations. Indeed, for most IP officials, the primary purpose of travel to WIPO meetings was to secure further capacity-building.

The fragmentation among developing countries was exacerbated by the growing number of bilateral IP agreements. While most developing countries continued at the multilateral level to question the legitimacy of TRIPS, those engaged in bilateral negotiations frequently used TRIPS as a defence against pressures for TRIPS-plus standards. By appealing to TRIPS as the maximum

international standard, they implicitly reinforced its legitimacy. Further, many LDCs, generally the least informed at WIPO meetings and the most dependent on WIPO capacity-building, frequently sided with the Secretariat and developed countries in supporting the promulgation of new TRIPS-plus multilateral agreements. Several African LDCs were, for instance, among the strongest proponents of a proposed broadcasting treaty and were among the first signatories of WIPO's 1996 Internet Treaties.[8]

Looking ahead, with billions of dollars at stake, the determination of the most powerful states to defend and advance their share of the global knowledge economy for key commercial interest groups will continue to translate into intense bilateral pressures on developing countries to defect from developing countries coalitions and/or adopt positions preferred by key developed countries and industries. Key strategies in these efforts will include promises of more IP assistance, informal diplomatic pressures, and efforts to sideline Geneva-based diplomats in favour of less politically aware technocrats in capitals.

As a greater number of developing countries acquire stronger national IP standards and move up the technological ladder, developing country coalitions may further fragment. Already, developed countries question the credibility and sincerity of some developing countries fighting against stronger international rules, particularly where governments have already eschewed flexibilities or adopted TRIPS-plus standards in their national laws. Further, as some developing countries become more active users of the global IP system and their companies generate economic returns, their support for agreements such as WIPO's Patent Cooperation Treaty (PCT) is likely to mount.[9] In 2006, developing countries comprised almost 80 per cent of the members of the PCT, but still only accounted for 8.2 per cent of all international patent filings.[10] (This small percentage included the patent filings by Brazil, China, India, Malaysia, Mexico, Republic of Korea, Singapore, and South Africa, among others. LDCs made very few filings). That said, WIPO estimated in 2007 that countries in North Asia (most notably China and South Korea) issued over 20 per cent of the world's patents and that the share of several of the stronger developing countries will continue to rise.[11]

Even with such changes, we can still expect most developing countries to continue arguing against *binding* international IP obligations that would disproportionately bolster richer countries. At the WTO, their critical discourse about TRIPS and calls for more flexibility will persist so that they can use IP protection as a bargaining chip in ongoing trade negotiations. More broadly, developing country diplomats will continue to refer to TRIPS as a symbol of imbalances in the rules governing the global economy. 'Southern solidarity' on TRIPS will remain a central theme in the larger political effort of developing countries to reform those rules and address the inequalities they generate.

Looking ahead, many of the debates that emerged when TRIPS implementation began will remain in play. Debates on compulsory licensing will likely arise each time a country attempts to use this mechanism to ensure low-cost access to essential medicines, technologies, or other knowledge products. With the introduction of patent protection for pharmaceutical products in India, groups like MSF express grave concerns about the cheaper, generic medicines. They also highlight that many second-line drugs for the treatment of HIV/AIDS now face patent protection.[12] Meanwhile, concerns about the skewed allocation of investment in scientific research remain (i.e. a small portion of medical research is devoted to addressing neglected diseases most prevalent in developing countries). Beyond public health, there is growing interest in questions regarding access to information and educational materials.[13] The issue of the relationship between TRIPS and the Convention on Biological Diversity remains unresolved as does the call by developing countries for amending TRIPS to better protect their genetic resources and traditional knowledge against misappropriation and/or uncompensated use. The support among a sub-set of developing countries for expanded rules on geographical indications signals the emerging nuances and tensions in developing country positions on IP regulation. Whereas developing countries still widely express discomfort with the terms and objectives of TRIPS, and the rationale and assumptions underpinning IP regulation more generally, some simultaneously support more expansive IP protection in certain areas. At the same time as many developing countries challenge developed countries to provide compelling evidence of the links between IP and development, many appear convinced that stronger IP protection will boost the growth of their creative and cultural industries.[14] Across developing countries, there are debates between those who seek new IP protections for traditional knowledge and those who seek to defend such knowledge against IP claims from others. There are those who believe traditional knowledge should properly be considered in the public domain and others who argue in favour of deference to customary laws for the management and sharing of knowledge. Some groups within developing countries push for more open access to knowledge, information, and educational materials, while others are keen to find ways to protect local music, textiles, and designs from unauthorized use and copying by foreign producers.

Several new themes are also emerging. There is growing interest in collaborative approaches to stimulating innovation and recognition of the importance of a public domain of ideas, knowledge, and technologies in that respect.[15] In addition, global concerns about climate change have stimulated interest in the intersection of IP rules and the effort to promote transfer of sustainable and energy-efficient technologies.[16]

Finally, we can expect mounting pressures on developing countries in the coming decade to improve the international framework for IP enforcement and their performance at the national level. As debates on competitiveness and fairness in the global economy intensify, so too will the concerns of major multinational corporations about piracy and counterfeiting in developing countries. The level of effort required to secure effective IP protection varies significantly in practice from country to country as does the scale of piracy and counterfeit challenges at hand. There will be debate on the fiscal implications for developing countries of greater IP enforcement effort, and the public health and safety impacts of some counterfeit goods. Developing countries will be pushed to commit more resources to public awareness-raising and to improve coordination of a broad range of government ministries (e.g. trade, industry, culture, and agriculture) and domestic regulatory institutions (e.g. the judiciary, police, copyright and IP offices, collective rights management organizations, and customs and taxation authorities).

To date, the effectiveness of IP enforcement in developing countries has varied significantly depending on the government agencies involved and the distribution of responsibilities and leadership among them. Some governments are proactive, adopting specific efforts to improve coordination among law enforcement agencies and to partner with private industry. In most cases, the push toward stronger enforcement is the result of targeted pressures from the United States, Japan, and Europe.[17] Even in countries with the greatest institutional and administrative capacity and resources, political will to improve enforcement is limited.[18] Importantly, the bureaucratic challenges of improving the efficiency of their adjudication and enforcement of IP rights are linked to far broader challenges. In most developing countries, the judicial system is slow, disorganized, and under-resourced for a whole range of national laws – not just those related to IP.[19] Tasks such as training enforcement personnel and courts to address IP matters are likely to take many years. In many developing countries, the absence of a prior culture of private IP rights increases the enormity of the task of raising public awareness about piracy and counterfeit goods. For most countries, building enforcement capacity will be a major institutional task, requiring political will, training, new infrastructure, and coordination among many different departments.[20]

In the meantime, many governments simply ignore technically illegal practices. Given the scale of public health problems they face, a number of African governments, for instance, turn a blind eye to the illegal import of generic versions of medicines patented in their countries, unless there is some additional justification (such as safety risks).[21] As noted above, some governments similarly overlook counterfeiting activities because they provided an important source of employment for otherwise poor segments of the workforce.[22] In China, where responsibility for IP enforcement falls to local government

offices and courts, many officials believe it is not in the economic interest of their constituency to crack down on piracy.[23] In countries challenged by extensive corruption in government, institutions responsible for the collection of licensing fees and royalties also face significant obstacles.[24]

In the coming decade, the challenge for developing countries will be to devise a coordinated and proactive development-oriented strategy for the range of multilateral and bilateral discussions on IP enforcement, and also for cooperative initiatives with governments and with industry. Few developing countries will want to risk appearing pro-piracy. Instead, their priority will be to keep the focus of the enforcement debate on the fairness and appropriateness of the international IP norms to be enforced.

8.6. A Development-Oriented IP Agenda

The analysis advanced in this book suggests several political strategies that would help developing countries to exploit and expand their room for manoeuvre in the implementation of TRIPS and other international IP commitments, and to advance a more development-oriented system of global rules for IP protection.[25] To conclude this book, I outline five strategies, starting with a focus on the importance of coalitions at the global level to constrain and manage coercive pressures, followed by improved cooperation among developing countries to advance their own agenda at the international level, and then finally looking to actions that should be considered within developing countries. A holistic, long-term strategy will demand well-coordinated actions through time on several levels by different coalitions of actors.

First, alliances at the multilateral and regional level among developing country governments, IOs, scholars, and civil society groups that share development-oriented perspectives will be critical. The ability of developing countries to use, defend, and expand TRIPS flexibilities will depend on coordination and information exchange across the range of international processes where IP issues are discussed. The experience of the past decade has shown that international NGO campaigns questioning the legitimacy of the TRIPS-plus agenda also helped to mitigate pressures on developing countries. Within developed countries, collaborative efforts by the public interest IP community to push for a more development-oriented perspective in their own government agencies will be vital, particularly among officials charged with trade and IP. So long as developed country officials responsible for IP remain captured by a narrow set of corporate interests, the prospect of a more balanced global IP system will remain weak.

Coalitions to promote progress on the WIPO Development Agenda will be central to promoting a more balanced, pro-development global IP system.[26] A

core action item must be to explore collective strategies for improving the accountability of the secretariats of the WTO, WIPO and regional organizations such as OAPI and ARIPO to their members and to public interest considerations. This in turn calls for careful assessment of how to change the political and financial incentives, and internal cultures at play within each organization. It should also prompt the creation of new mechanisms for consultation with a broader range of external stakeholders than traditional pro-IP constituencies. For each of these IOs, reform will rely on the commitment by developing countries to more consistent and critical engagement in their work. Participation in international processes is most difficult for those countries with least diplomatic capacity and particularly those that depend on IOs to finance their travel to international meetings. In this context, the more active and better-resourced developing countries must devote greater effort to listening to and exchanging views with a broad range of countries, particularly the poorest countries. Across the global IP system, the presence of a range of public-interest NGOs as observers to international meetings provides developing countries with potential allies for many reforms.

Second, advancing a pro-development agenda for national and international IP regulation will demand quantitative and qualitative research and data on the circumstances and needs of countries as well as the relationships between particular IP provisions and public policy goals. Methodologies to assess the impact of IP laws on different policy goals are urgently needed, as are benchmarks to help governments discern the appropriate level of IP protection given their socio-economic circumstances and objectives in different sectors. At present, the robustness of the IP reform process in developing countries and of debates at the international level is severely undermined by the lack of empirical data to support assertions on all sides of the debate. There is also a need for the development of benchmarks and indicators against which governments, donors, and IOs can undertake evidence-based evaluations of their IP-related capacity-building and its contribution to development.

Third, better coordination within national governments would help ensure that IP policies and laws are designed and implemented in ways that support national goals, particularly in the areas of innovation, public health, education, and technological development. IP decision-making must not be viewed as a technical issue that can be delegated to a small, technocratic community of IP officials, lawyers, and experts (whether IP proponents or sceptics) or to narrow commercial interests. Top priorities for developing countries should be to correct the relative autonomy of their IP offices in decision-making about national IP regulation and to instead embed that decision-making within a broader, development-oriented public policy framework.

The prospect for development-oriented IP reforms will be highest where governments have processes for interagency coordination and public consultation. While there have been a growing number of steps in the right

direction, most developing country governments still lack effective systems for internal coordination within government on IP decision-making. Further, there is minimal engagement of legislative branches in IP decision-making and limited consultation with non-government stakeholders and experts in the assessment and promulgation of IP policy and laws.

Building policy expertise on IP issues (rather than just legal expertise) is a multidisciplinary task that should involve civil society, industry, and academic analysts active in the fields of IP, investment, innovation, development, science, and technology. The full range of government agencies charged with public policy in areas impacted by IP reforms must participate as well (e.g., health, education, cultural, agricultural, and industrial agencies). Consultations should also include the full range of groups potentially affected by the outcomes of IP reforms (e.g. farmers, consumers, authors, small and medium-size enterprises, universities, musicians, artists, scientists). Expertise, experience, and analysis from these stakeholders would help countries design IP laws and policies that reflect the diversity of public policy goals, whether fostering innovation, promoting technology transfer, supporting cultural industries, ensuring affordable access to knowledge, or expanding value-added employment and export industries. In devising consultative processes, a core challenge is the lack of capacity on IP issues within many relevant stakeholder groups. The influence of some interest groups will not necessarily match the role they deserve in the determination of appropriate IP policy. The business sector may, for instance, be better organized to engage in consultative processes than consumers, educators, or health-care advocates who may require help to have their voice heard. In the area of copyright, relevant stakeholders include students, student and academic authors, academic users, libraries, universities, and commercial publishers. In the area of patents, they include domestic industries, plant breeders, farmers, providers of health services, patent attorneys, and patients.

Fourth, to advance development-oriented approaches to TRIPS implementation and IP reforms more generally, many developing countries will continue to need advice and training on international IP obligations, the options available to them, and the costs and benefits of these options in light of their development goals. The political nature of capacity-building demands that developing countries better negotiate the terms of assistance to ensure its form and content reflect their needs and to avoid conflicts of interest that may arise with advisors linked to industry. Progress in this respect will depend on greater efforts by developing country governments to identify and articulate their goals in the area of IP policy and their needs with respect to IP technical cooperation. Core priorities must be to acquire assistance that helps countries devise policy frameworks for the consideration of IP reforms, conduct impact assessments, establish structured inter-ministry/department coordination, build research capacity on key issues of national interest,

harness the IP system for national development, and consult broadly with a range of stakeholders. Greater acknowledgement of donor biases would help governments manage capacity-building so that it bolsters rather than erodes their ability to filter international pressures. At the international level, a set of principles and guidelines for IP-related capacity-building would help donors and recipients better negotiate capacity-building.[27] Such principles could also be employed as standards against which civil society organizations could monitor and assess the work of the various providers of capacity-building.

Finally, the debate on IP policy reform ought not to rely solely on assessments of the past, but also on scenarios for the future. Over the past decade, there has been a rapid expansion of collaborative models for promoting innovation and sharing knowledge. The evidence that some aspects of the IP system are constraining rather than enabling innovation and creativity has already prompted many scientists, research companies, and artists to explore new business models, incentive systems, and public–private collaborations. As the knowledge economy grows, government agencies, scientists, public-interest groups, and industries from developing *and* developed countries will share priorities and concerns with respect to IP policy that defy a North–South divide. At the international level, the Access to Knowledge (A2K) movement is also galvanizing interest in new models for ensuring public access to the knowledge, ideas, and information people need in order to address social problems. As such initiatives advance and novel approaches to national and global IP regulation are tested, developing country governments must be sure to access and apply the lessons learned.

Notes

1. Finger and Schuler (2001) and Sell (1998).
2. See statements from the Group of 77 (1999), and Group of 77 and China (2000, 2001, 2003*a*, 2003*b*).
3. The importance of socialization as a mechanism through which power is exercised is explored by Ikenberry and Kupchan (1990).
4. Abdel Latif (2005) and Halle and Wolfe (2007).
5. Krikorian (2007, 2008).
6. Abdel Latif (2005).
7. Ibid.
8. Okediji (2004*a*).
9. See WIPO (2007*a*, 2008*a, b*).
10. Ibid.
11. WIPO (2008).
12. MSF (2007).
13. MSF (2001).
14. Barrowclough and Kozul-Wright (2007), and Rizk (2007).

15. FTC (2003), Jaffe and Lerner (2004), and Bessen and Meurer (2008). In each instance, the authors allude to concerns that the increasing strength of IP protection may impede the rate of progress and innovation by increasing the price of knowledge that is the vital input into research.
16. EPO (2006*a, b*) and Barton et al. (2007).
17. Biadgleng and Tellez (2008) and Drahos (2004*a*).
18. Kostecki (2005) and Pengelly (2005).
19. Watal (2001).
20. To date, scholarly analyses of piracy, counterfeiting, and enforcement are most prominent in the fields of economics and business studies. See, for example, Samahon (2000) and van Kranenburg and Hogenbirk (2005).
21. Author's interviews with Pascal Boulet, MSF and James Love, CPTech, Feb 2006.
22. Schlatter (2005), and Fink (2008).
23. Yu (2008).
24. Ibid.
25. Abbott (2000), Abdel Latif (2005), CIEL (2007), Deere (2006), Drahos (2004*b*), Musungu (2004*b*, 2005). Several of the following proposals have already been set forth in Deere (2005*b*, 2006, 2007*a*, 2007*b*, 2008).
26. The interest of scholars and NGOs in this agenda is expanding. In 2008, two books were scheduled for publication on the topic following conferences held in 2007 on the implementation of the WIPO Development Agenda, one at UCLA Law School in March on *Intellectual Property and Developing Countries: The WIPO Development Agenda*. Also in 2007, Transatlantic Consumer Dialogue (TACD) sponsored a topic on the subject. See TACD (2007). In 2008, Yale University will sponsor its Third Annual Conference on Access to Knowledge, this time in Geneva.
27. A proposal for such principles and guidelines for technical assistance was an integral part of the Development Agenda. In an elaboration of their initial proposal, the Friends of Development called in 2006 for the adoption by WIPO of a Code of Ethics to be applied to individual providers of its technical assistance as part of the broader set of principles and guidelines for WIPO's technical cooperation. See WIPO (2006). Core elements of such a Code of Ethics could include principles regarding professional conduct, confidentiality, corruption, and conflict of interest. See Deere (2005*a*) and Correa and Deere (2005).

APPENDIX 1

Selection of interviews

Interview date	Name of interviewee	Title/affiliation of interviewee
Government officials		
Oct. 2004	Johannes Bernabe	Permanent Mission of Philippines to the WTO, TRIPS delegate
Oct. 2004	Frederico Alberto Cuello Camilo	Ambassador, Permanent Mission of the Dominican Republic to the WTO
Oct. 2004	Atul Kaushik	First Secretary, Permanent Mission of India to the United Nations, Geneva, TRIPS delegate
Oct. 2004	Mohan Kumar	Indian Ambassador to Sri Lanka, former Indian TRIPS delegate in Geneva
Oct. 2004	Cameron MacKay	Permanent Mission of Canada to the United Nations, delegate to WIPO and TRIPS
Nov. 2004	Edward Chisanga	TRIPS delegate, Permanent Mission of Zambia to the WTO
Jan. 2005	Betty Berendson	Minister Counsellor, Permanent Mission of Peru to the United Nations, Geneva, TRIPS delegate
Feb. 2005	Ron Marchant	Chief Executive and Comptroller General, UK Patent Office
May 2005	María Carmen Domínguez	Permanent Mission of Chile to the WTO, TRIPS delegate
May 2005	Paul E. Salmon	Patent Attorney, Office of International Relations, US Patent and Trademark Office (USPTO), WIPO delegate
Jun. 2005	Mathias Daka	Deputy Permanent Representative, Permanent Mission of the Republic of Zambia to the United Nations and Other International Organizations
Jun. 2005	Debabrata Saha	Deputy Permanent Representative of India, Permanent Mission of India to the United Nations, Geneva
Jul. 2005	Vera Bampo-Addo	State Attorney, Registrar Central's Department, Ghana
Sep. 2005	Toufiq Ali	Ambassador, Permanent Mission of Bangladesh, Geneva
Sep. 2005	Leonardo de Athayde	Second Secretary, Permanent Mission of Brazil to the United Nations, TRIPS and WIPO delegate
Sep. 2005	M.S. Grover	Deputy Permanent Representative of India, Permanent Mission of India to the United Nations
Sep. 2005	Konstantin Karachalios	Economic Development Bureau of the European Patent Office
Sep. 2005	Ahmed Abdel Latif	First Secretary, Permanent Mission of Egypt to the United Nations, TRIPS and WIPO delegate
Sep. 2005	Nelson Ndirangu	Minister Counsellor, Permanent Mission of Kenya to the United Nations, Geneva, TRIPS delegate
Sep. 2005	Guilherme Patriota	Counsellor, Permanent Mission of Brazil to the United Nations, TRIPS and WIPO delegate
Sep. 2005	Santiago Roca	Presidente del Directorio, Instituto Nacional de Defensa de la Competencia y de la Protección de la Propriedad Intellectual (INDECOPI)
Sep. 2005	Preeti Saran	Counsellor, Permanent Mission of India to the United Nations, Geneva, WIPO delegate
Sep. 2005	Paul Sciarone	Deputy Permanent Representative, Permanent Mission of the Kingdom of the Netherlands to the United Nations, Geneva

(*cont.*)

Interview date	Name of interviewee	Title/affiliation of interviewee
Oct. 2005	Adrian Cristobal	Secretary General, Philippines Patent Office
Oct. 2005	Thosapone Dansuputra	Head, Office of the Deputy Minister, Ministry of the Deputy Minister
Oct. 2005	Alberto Dumont	Ambassador, Permanent Representative of Argentina to the United Nations, Geneva
Oct. 2005	Marta Gabrieloni	Counsellor, Permanent Mission of Argentina to the United Nations, WIPO and TRIPS delegate
Oct. 2005	Faizel Ismail	Head of Delegation to the WTO, Permanent Mission of South Africa to the United Nations
Oct. 2005	Dr. Roberto Juagaribe	Director, Brazilian Industrial Property Institute (INPI)
Oct. 2005	Henrique Choer Morales	Secretary, Intellectual Property Division, Brazilian Ministry of External Relations
Oct. 2005	Phil Thorpe	Deputy Director, UK Patent Office
Dec. 2005	Eduardo Pérez Motta	President, Comision Federal de Competencia, Mexico, formerly Mexican Ambassador to the WTO and Chair of the TRIPS Council
Dec. 2005	Alejandro Neyra	First Secretary, Permanent Mission of Peru to the United Nations, TRIPS delegate
Feb. 2006	Hekmat Ghorbani	Counsellor, Permanent Mission of the Islamic Republic of Iran to the United Nations Office
Feb. 2006	Soledad Leal	Permanent Mission of Mexico to the WTO, TRIPS delegate
Feb. 2006	Usman Sarki	Minister Counsellor, Permanent Mission of Nigeria to the United Nations
Jun. 2006	Begona Venero Aguirre	INDECOPI (Peruvian Intellectual Property Office)
Jun. 2006	Angelica Navarro Llanos	Ambassador, Permanent Mission of Bolivia to the WTO
Jun. 2006	Souheir Nadde	Senior Trade Specialist, Head of Multilaterals Unit, Intellectual Property Expert, UNDP Project, Ministry of Economy and Trade, Lebanon
Sep. 2006	Ajay Dua	Secretary, Department of Industrial Policy and Promotion, Indian Ministry of Industry
Oct. 2006	Dayaratna Silva	Minister, Permanent Mission of the Democratic Socialist Republic of Sri Lanka to the United Nations, TRIPS delegate
Feb. 2007	Manzoor Ahmad	Ambassador to the WTO, Pakistan
Feb. 2007	Toufiq Ali	Ambassador to the WTO, Bangladesh
Feb. 2007	Trevor Clarke	Ambassador to the WTO, Barbados
Feb. 2007	Manuel Teehankee	Ambassador to the WTO, Philippines
Feb. 2007	Guillermo Valles	Ambassador to the WTO, Uruguay
Oct. 2007	Beatrice Dove-Edwin	Director, Policy, Planning and Research Division, Ministry of Trade and Industry, Sierra Leone
Nov. 2007	Debapriya Bhattacharya	Ambassador to the WTO, Bangladesh
Staff of international organizations		
Oct. 2003	Lynn Mytelka	Director, Institute for New Technologies, the United Nations University
Oct. 2004	Germán Velásquez	Head of Access to Essential Medicines Programme, WHO
Nov. 2004	Amb. Rita Hayes	Director, Copyright Division, WIPO.
Feb. 2005	Charles Clift	Former Director of CIPR report for DFID and for CIPIH report for WHO
Feb. 2005	Jayashree Watal	WTO Secretariat, TRIPS Division

Mar. 2005	Kiyoshi Adachi	Legal Officer, UNCTAD
Mar. 2005	Paul Hunt	Special Rapporteur on the Right to Health, United Nations High Commission for Human Rights
Mar. 2005	Douglas Lippoldt	Senior Trade Policy Analyst, Trade Policy Dialogue, Trade Directorate, OECD
Sep. 2005	Shakeel Bhatti	Legal Officer, Global Issues Division, WIPO
Sep. 2005	Nuno Pires de Carvalho	Acting Director–Advisor, Legislation for Public Policy & Development, WIPO
Sep. 2005	Lucinda Jones	Senior Legal Officer, Copyright, E-Commerce, Technology and Management Division, WIPO
Sep. 2005	Christophe Spennemann	Economic Officer, UNCTAD
Sep. 2005	Hannu Wager	WTO Secretariat, TRIPS Council
Oct. 2005	Sisule Musungu	Acting Director of IP Programme, South Centre
Nov. 2005	Carsten Fink	Senior Economist, World Bank Institute
Dec. 2005	Leo Palma	Deputy Director, Advisory Centre on WTO Law (ACWL)
Sep. 2006	Carlos Mazal	Senior Counsellor, WIPO
Sep. 2006	Pedro Roffe	Senior Fellow, ICTSD, formerly UNCTAD
Sep. 2006	Roger Kampf	WTO Secretariat, TRIPS Division
Oct. 2006	Hunter Nottage	Counsel, Advisory Centre on WTO Law (ACWL)
Oct. 2006	Cecilia Oh	Legal Officer, WHO
Dec. 2006	Carlos Correa	Law Professor, South Centre/University of Buenos Aires
Nov. 2007	Sivaramen Palayathan	Deputy Permanent Representative of the Permanent Delegation of the African Union in Geneva
Apr. 2008	Denis Croze	WIPO, Acting Director–Advisor, Copyright and Related Rights Sector
Apr. 2008	Wolf Meier-Ewert	TRIPS Division, WTO Secretariat
July 2008	Roger Kampf	TRIPS Division, WTO Secretariat
Aug. 2008	Adrian Otten	Director, TRIPS Division, WTO Secretariat.
Academics		
Sep. 2004	Michael Blakeney	Senior Lecturer, Queen Mary Intellectual Property Research Institute, University of London
Oct. 2004	James Otieno Odek	Senior Lecturer, University of Nairobi
Oct. 2005	Maristella Basso	Professor, University of Sao Paulo
Oct. 2005	Graham Dutfield	Senior Lecturer, Queen Mary Intellectual Property Research Institute, University of London
Oct. 2005	Jakkrit Kuanpoth	Senior Lecturer, University of Wollongong
Dec. 2005	Frederick Abbot	Law Professor, Florida State University
Dec. 2005	Peter Drahos	Senior Lecturer, Queen Mary Intellectual Property Research Institute, University of London
Feb. 2006	Ruth Okediji	University of Minnesota
Feb. 2006	Susan Sell	Professor of Political Science, Department of Political Science, George Washington University
Sep. 2006	Duncan Matthews	Senior Lecturer, Queen Mary Intellectual Property Research Institute, University of London
Oct. 2007	Sheila Page	Senior Research Associate, Oveseas Development Institute
Staff of NGOs and industry groups		
Oct. 2003	Alejandro Argumedo	ANDES Association, Cusco, Peru
Oct. 2003	Susan Finston	Pharmaceutical Researchers and Manufacturers of America (PhRMA)

(*cont.*)

Interview date	Name of interviewee	Title/affiliation of interviewee
Oct. 2003	Ruth Mayne	Oxfam UK
Jan. 2005	Amy Kapczynski	Postdoctoral Fellow in Law and Public Health, Yale Law School/Yale School of Public Health
Mar. 2005	Davinia Ovett	Programme Officer, 3D→Trade, Human Rights, Equitable Economy
Mar. 2005	Leo Palma	Senior Counsel, Advisory Centre on WTO Law
Jun. 2005	Leonardo Burlamaqui	Program Officer, Ford Foundation
Jun. 2005	James Love	Director, Consumer Project on Technology/Knowledge Ecology International
Jun. 2005	Manuel Ruiz	Legal Counsel, Sociedad Peruana de Derecho Ambiental
Aug. 2008	Eric Noehrenberg	Director, International Trade and Market Issues, IFPMA
Oct. 2005	Hanan Sboul	Secretary General, The Jordanian Association of Pharmaceutical Manufacturers
Oct. 2005	David Vivas	IP Programme Manager, ICTSD, formerly Permanent Mission of Venezuela to the U N, TRIPS delegate
Dec. 2005	Tenu Avafia	Researcher, Trade Law Centre for Southern Africa
Dec. 2005	Peter Bloch	Director of Operations, Light Years IP
Dec. 2005	Geoff Tansey	Quaker United Nations Office
Dec. 2005	Martin Watson	Representative, Global Economic Issues, Quaker United Nations Office
Feb. 2006	Pascale Boulet	Access to Essential Medicines Campaign, MSF
Feb. 2006	Ellen t'Hoen	Director, Access to Essential Medicines Campaign, MSF
Apr. 2006	Ricardo Meléndez Ortiz	Executive Director, ICTSD
May 2006	Maria Julia Oliva	Center for International Environmental Law
Feb. 2007	Miguel Rodriguez	Senior Fellow, ICTSD, former Venezuelan Ministry of Industry and Trade negotiator
Feb. 2008	Sangeeta Shashikant	Third World Network
Sep. 2005	Gwen Hinze	Legal Officer, Electronic Frontier Foundation
Case study interviews – government officials		
Feb. 2006	Falou Samb	Formerly TRIPS delegate, Permanent Mission of Senegal, Geneva
Sep. 2006	Soro Nagolo	Director, Ivorian Intellectual Property Office, Côte d'Ivoire
Oct. 2006	Raphael Etendo	Director, IP Office of Togo
Oct. 2006	Ndeye Adiji Dio Sall	Chef de Service de la Propriété Industrielle, Ministry of Craft and Industry, Senegal
Oct. 2006	Kanda N'na Sary	Director-General, Institut National de la Propriété Industrielle et da la Technologie, Togo
May 2007	Binazon Augustin	Technical services chief, National Center for Intellectual Property, Benin
May 2007	Julienne Kanda	Director, Institut National de la Propriété Industrielle et da la Technologie, Togo
May 2007	Boumediana Mohamed	Ministry of Industry, Mauritania
May 2007	Marisella Ouma	Executive Director, Kenya Copyright Board, Kenya
May 2007	Kaba Ousmane	National Service of Intellectual Property, Guinea

May 2007	Adji Diop Sall	Director of Intellectual Property, Ministry of Industry, Senegal
May 2007	Leye Yama	Department of Trade, Senegal
Case study interviews – international organizations and bilateral donors		
Sep. 2005	Geoffrey Onyeama	Director, Economic Development Bureau for Africa, WIPO
Feb. 2006	Francis Mangeni	African Union Office in Geneva
Jun. 2006	Tshimanga Kongolo	Head, Senior Lecturer, Professional Development Program, WIPO Worldwide Academy
May. 2007	Christopher Kiige	African Regional Intellectual Property Organization (ARIPO), Zimbabwe
May. 2007	Falou Samb	Consultant, International Trade Center
Jul. 2007	Konstantin Karachalios	European Patent Office
Aug. 2008	Michele Weil	Director of Cabinet, WIPO
Aug. 2008	Jacques Verone	French National Intellectual Property Office (INPI)
Case study interviews – OAPI Secretariat		
Sep. 2005	Athoumiane Ndiaye	Director-General, OAPI
May. 2007	Maurice Batanga	Chef de service, OAPI
Aug. 2008	Paulin Edou Edou	Director-General, OAPI
Case study interviews – NGOs and academics		
Mar. 2005	Kent Nndadozie	Consultant, Nigeria
Feb. 2006	Pascale Boulet	Legal Advisor, MSF
Feb. 2006	Joseph Ekpere	Formerly, OAU Secretariat
Jul. 2007	Hope Shand	Senior Policy Advisor, RAFI
May. 2007	El Hadji Diouf	Programme Coordinator – African Trade Program, ICTSD
May. 2007	Camara Ibrahima	Professor, University of Dakar, Senegal
May. 2007	Dalindyebo Shabalala	Programme Director IP, Sustainable Development, CIEL
May. 2007	Dieye Cheick Tidiane	Trade Programme Officer, ENDA
Jun. 2007	Ituku Elangi Botoy	Faculty of Law, University of Geneva
Aug. 2008	Catherine Gavin	Former Legal Advisor, NSF

Note: This table refers to both formal interviews and informal discussions. Interviews with individuals who asked not to be named are not listed.

APPENDIX 2

Timeline of international IP agreements

Agreement	Date	Topic
Paris Convention (WIPO)	1883	Concerning protection of industrial property, including patents, marks, industrial designs, utility models, trade names, geographical indications, and the repression of unfair competition
Berne Convention (WIPO)	1886	Concerning the protection of literary and artistic work
Madrid Agreement (WIPO)	1891	Concerning the international registration of marks
Hague Agreement (WIPO)	1925	Concerning the international deposit of industrial designs
Universal Copyright Convention (UNESCO)	1952	Concerning the protection of literary and artistic works
Nice Agreement (WIPO)	1957	Concerning the international classification of goods and services for the purposes of registration of marks
Lisbon Agreement (WIPO)	1958	Concerning the protection of appellations of origin and their international registration
Rome Convention (WIPO)	1961	Concerning protection of performances of performers, phonograms, producers of phonograms, and broadcasts of broadcasting organizations
Convention for the Protection of New Varieties of Plants (UPOV)	1961	Concerning protection of new varieties of plants
WIPO Convention	1967	Establishing the World Intellectual Property Organization
Locarno Agreement (WIPO)	1968	Establishing a system of classification for industrial designs
Patent Cooperation Treaty (WIPO)	1970	Enabling applicants to file an 'international' patent application simultaneously in many countries
Phonograms Convention (WIPO)	1971	Concerning the protection of phonograms
Strasbourg Agreement (WIPO)	1971	Establishing the International Patent Classification (IPC) system
Vienna Agreement (WIPO)	1973	Establishing a system for the classification for marks
Brussels Convention (WIPO)	1974	Relating to the distribution of programme-carrying signals transmitted by satellite
Budapest Treaty (WIPO)	1977	Concerning the international recognition of the deposit of micro-organisms for purposes of patent procedure
Nairobi Treaty (WIPO)	1981	Concerning the protection of the Olympic symbol
Film Register Treaty (WIPO)	1989	Concerning the international registration of audio-visual works
Washington Treaty (WIPO)	1989	Concerning the protection of integrated circuits
Madrid Protocol (WIPO)	1989	Rendering the Madrid system more flexible and more compatible with the domestic legislations of certain countries which had not been able to accede to that Agreement
Trademark Law Treaty (WIPO)	1994	Establishing more user-friendly national and regional trademark registration systems
TRIPS Agreement (WTO)	1994	Establishing minimum international standards for WTO members for most categories of IP
Copyright Treaty (WIPO)	1996	Introducing new international rules and clarifying the interpretation of certain existing rules in order to respond to the impact of information and communication technologies on the creation and use of literary and artistic works
Performances & Phonograms Treaty (WIPO)	1996	Introducing new international rules responding to the impacts of information and communication technologies on the production and use of performances and phonograms
Patent Law Treaty (WIPO)	2000	Harmonizing and streamlining formal procedures in respect of national and regional patent applications

APPENDIX 3

Examples of increase in IP standards in developing country WTO members from 1988 to 2007

Country	Term of patent protection		Exemption from patent protection for pharmaceutical products	
	1988 (years)	2007 (years)	In relevant law (1988)	In relevant law (2007)
Least developed countries				
Bangladesh	16[c,a]	16[c,a]	X	X
Benin	10[a,d]	20	X	–
Burkina Faso	10[a]	20	X	–
Burundi	20[a]	20	–	–
Cambodia	^	20	^	X
Central Afr. Rep.	10[a,d]	20	X	–
Chad	10[a,d]	20	X	–
Ghana	10[a]	20	X	–
Mali	10[a,d]	20	X	–
Mauritania	10[a,d]	20	X	–
Nepal	7[e]	7[e]	X	X
Niger	10[a,d]	20	X	–
Rwanda	20[a]	20	–	–
Sierra Leone	20[a,*]	20	–	–
Swaziland	20[a,*]	20	–	–
Togo	10[a,d]	20	X	–
Uganda	20[a,*]	15	–	–
Tanzania	20[a,*]	20	–	–
Developing countries				
Argentina	5, 10, 15[c]	20	X	–
Bolivia	15[c]	20	X	–
Botswana	20[a,*]	20	–	–
Brazil	15[a]	20	X	–
Cameroon	10[a]	20	–	–
Chile	15	20	–	–
China	15[a]	20	X	–
Colombia	5[c,d]	20	X	–
Congo	10[a,d]	20	–	–
Costa Rica	12	20	#	–
Côte d'Ivoire	10[a,d]	20	–	–
Cuba	10[a,d]	20	X	–
Dominican Republic	5, 10, 15[c]	20	–	–

(*cont.*)

Country	Term of patent protection		Exemption from patent protection for pharmaceutical products	
	1988 (years)	2007 (years)	In relevant law (1988)	In relevant law (2007)
Ecuador	5[c,d]	20	X	–
Egypt	15[a,d]	20	X	–
Gabon	10[a,d]	20	–	–
India	14[b]	20	X	–
Jordan	16[a]	20	–	–
Kenya	20[a,*]	20	–	–
Malaysia	15[c]	20	–	–
Mauritius	14[a,d]	20	–	–
Mexico	14[c]	20	X	–
Morocco	20[a]	20	X	–
Nigeria	20[a]	20	–	–
Pakistan	16[c,d]	20	–	–
Peru	5[c,d]	20	X	–
Philippines	17[c]	20	–	–
Senegal	10[a,d]	20	–	–
South Africa	20[a]	20	–	–
South Korea	15[a,d]	20	X	–
Sri Lanka	15[c]	20	–	–
Thailand	15[a]	20	X	–
Trinidad & Tobago	14[c]	20	–	–
Tunisia	5, 10, 15, 20[a]	20	X	–
Uruguay	15[c]	20	X	–
Venezuela	5, 10[c]	20	X	–
Zimbabwe	20[a]	20	X	–

Source: Data for 1998 draws from Dutfield (2000). The 2006 data was compiled by author based on the WTO Secretariat's Trade Policy Review reports on members.

[a] From filing date.

[b] From publication date.

[c] From grant date.

[d] Extension possible – typically five years.

[e] Extension possible – renewable twice for seven years.

[*] At this time, countries offered a system of registration of UK patents. The duration was from the date of the UK patent for as long as the patent remained in force in the UK.

[#] Pharmaceutical patents were valid for one year from grant.

[^] No patent law in 1988.

APPENDIX 4

Variation in use of copyright flexibilities by selected developing country WTO members in the Asia-Pacific

Type of flexibility	Cambodia	China	India	Indonesia	Malaysia	Mongolia	Philippines	Thailand
Keep the duration of copyright protection to the minimum:								
• literary and artistic works: life of author plus 50 years	√	√	x	√	√	•	√	√
• cinematographic works: 50 years	x	√	x	√	√	√	√	√
• anonymous works or pseudonymous works: 50 years	x	√		√	√	x	√	√
• works of applied art insofar as they are protected as artistic works: 25 years	x	x	x	x	x	√	√	√
Allow parallel import	x	x	•	x	•	x	x	x
Use compulsory licensing options for translation, reproduction, and public of copyright works	x	#	•	#	#	√	√	•
Make 'fixation' in material form' a condition for conferment of copyright	x	x	x	x	√	x	x	x
Incorporate a provision on idea–expression dichotomy	√	x	x	x	√	√	√	√
Provide for power to deal with anti-competitive practices	x	x	x	√	x	x	x	√
Include a general fair-use provision	x	x	x	x	x	x	√	x
Incorporate the maximum flexibilities available in the teaching exception:								
• allow the utilization of the whole of a work for teaching	•	•	•	√	√	x	√	•
• no limitation on types and forms of utilization for teaching	x	x	x	√	x	x	√	x
• extend the teaching exception to all classes of education, including distance education	•	x	x	√	x	x	√	x
• no restriction on number of copies that may be made of illustrations for teaching	√	x	x	x	√	√	√	√
Incorporate the maximum flexibilities available in the quotations exception:								
• no restriction on ways quotations can be made	√	•	x	•	√	x	√	√
• no limitation on types of work that can be quoted	x	√	x	√	√	√	√	√

(*cont.*)

Type of flexibility	Cambodia	China	India	Indonesia	Malaysia	Mongolia	Philippines	Thailand
• liberally interpret the requirement that work quoted must have been 'lawfully made available to the public'	x	x	x	x	x	x	x	x
• no limitation on the length of quotation	x	√	•	√	√	x	√	x
• no limitation on the purposes of quotation	•	x	x	x	√	x	√	x
Exclude altogether official texts and their translations from copyright protection	√	√	√	•	•	√	√	√
Exclude altogether political speeches and speeches delivered in the course of legal proceedings from copyright protection	x	x	x	x	x	√	•	x
Allow the use of copyright works in broadcasts	x	x	•	•	•	x	x	x
Formulate 'minor' reservations for educational purposes in respect of performing, recitation, broadcasting, recording, and cinematographic rights	x	•	•	x	•	x	•	•

Source: Consumers International (2006).

√ Limitation or exception was incorporated into national legislation.

• Part of the limitation or exception was incorporated into national legislation.

Limited part of the limitation or exception was incorporated into national legislation.

X Limitation or exception was not incorporated into national legislation.

APPENDIX 5

Examples of developing countries with bilateral agreements that include IP provisions

	U.S. bilateral agreements*			Other agreements*	
	Trade agreements with IP provisions	Investment agreements	IP agreements	EU and other bilateral agreements with IP provisions	WTO accession
Group 1 (TRIPS-plus)					
Bahrain	TIFA 2002; FTA 2004 (2006)	1999 (2001)			
Cambodia	TIFA, 2006		Trade Relations and IPR Agreement 1996		2004
Cameroon		1986 (1989)			
Chile	FTA 2002 (2004)			EU Association Agreement 2002	
Colombia	FTA 2006, amended 2007, not in force				
Congo		1990 (1994)			
Costa Rica	CAFTA 2005, amended 2007, not in force				
Dominican Republic	DR-CAFTA 2005 amended 2007, 2005 (2007)				
El Salvador	CAFTA 2004, amended 2007 (2006)	1999 (not in force)			
Guatemala	CAFTA 2004, amended 2007 (2006)				
Honduras	CAFTA 2004, amended 2007 (2006)	1985 (2001)			
Jordan	Jordan FTA 2000 (2001)	1997 (2003)	FTA MOU on Issues Related to the Protection of IPR 2000	EU Association Agreement 1997, 2002	2000
Mexico	NAFTA 1994 (1995)			Economic Partnership, Political Coordination and Cooperation Agreement 2000	

(*cont.*)

	U.S. bilateral agreements*			Other agreements*	
	Trade agreements with IP provisions	Investment agreements	IP agreements	EU and other bilateral agreements with IP provisions	WTO accession
Morocco	FTA 2004 (2006)	1985 (1991)		Association Agreement 1996, 2000	
Nepal					2004
Nicaragua	CAFTA 2004, amended 2007 (2006)	1995 (not in force)	IPR Agreement 1998		
Saudi Arabia	TIFA 2003				2005
Senegal		1983 (1990)			
Singapore	TIFA 1991; FTA, 2003 (2004)			EFTA, 2002 (2003)	
Tonga					2005
Vietnam	TIFA 2007		Copyright Agreement 1997	Switzerland IPR Agreement 1999	2007
Group 2 (Mixed use of TRIPS flexibilities)					
Argentina		1991 (1994)			
Bangladesh		1986 (1989)		EU Cooperation Agreement 2001	
Bolivia		1998 (2001)			
China			Implementation of the 1995 IPR Agreement1996; IPR MOU 1992; IPR MOU Action Plan 1995		2001
Ecuador		1993 (1997)	IPR Agreement 1993		1996
Egypt		1986 (1992)		EU Association Agreement 2001, 2004	
India			IPR MOU 2006		
Jamaica		1994 (1997)	IPR Agreement 1994		
Korea	FTA 2007, not in force		IPR and Insurance Understandings 1985,1986		
Mongolia		1994 (1997)			1997
Oman	FTA 2006 (2006)				2000

Panama	TPA 2007, not in force	1982 (1991), amended 2000 (2001)			1997
Paraguay			IPR MOU 2004		
Peru	TPA 2006, amended 2007 (2007)		IPR MOU 1997		
Philippines	TIFA 1989		IPR Understanding 1993		
South Africa	TIFA 1999			EU Trade, Development and Cooperation Agreement 1999	
Sri Lanka		1991 (1993)	IPR Agreement 1991	EU Cooperation Agreement 1995	
Taiwan			Agreement on Copyright 1992; Agreement on IPR, 1992; Agreement on Trademark, 1993		2000
Thailand	TIFA 2002				
Trinidad & Tobago		1994 (1996)	IPR Agreement, 1994		
Tunisia	TIFA 2002	1990 (1993)		EU Association Agreement 1995, 1998; EFTA 2004 (2006)	
Turkey		1985 (1990)		EFTA 1991 (1992)	
Uruguay		2005 (2006)			
Group 3 (Yet to complete TRIPS reforms)					
Congo, DR		1984 (1989)			
Haiti		1983 (not in force)			
Mozambique		1998 (2005)			

Source: Compiled by author from USTR, EC, and WTO websites.

* Dates in brackets indicate year the agreement entered into force. Note that countries listed here are LDCs, and have yet to reach deadlines for TRIPS implementation.

TPA Trade Promotion Agreement

FTA Free Trade Agreement

TIFA Trade and Investment Framework Agreement

APPENDIX 6

Variation in TRIPS-plus provisions of selected U.S. FTAs

Provision in US-FTA Agreements	Allowed variation from TRIPS-'plus' provision
Patent protection – patent term	
• Vietnam, Jordan	Extension given for delays caused by regulatory approval process
• Singapore, Chile, Morocco, Australia, Bahrain, DR-CAFTA	Extension given for delays caused by regulatory approval process. Additionally, extension given when a delay in the granting of the patent exceeds 4 years from the filing of the application; (5 years for U.S.–Chile) or 2 years after a request for examination (3 years for U.S.–Chile)
Patent protection – second-use patents	
• Vietnam, Jordan, Singapore, Chile, DR-CAFTA	No specific provision
• Morocco, Australia, Bahrain	Obligation to provide patents for new uses of known products
Patent protection – patenting of life-forms	
• Vietnam	Certain plants and animals may not be excluded from patentability
• Jordan, Singapore, Chile	No general exclusion of plants and animals from patentability
• Morocco	Explicit obligation to provide patent protection for plants and animals
• Australia	Exclusions *only* allowed for moral, health, and safety reasons
• DR-CAFTA	'Reasonable efforts' have to be undertaken to provide for patentability of plants
• Bahrain	Explicit obligation to provide patent protection for plants, but animals can be excluded
Patent protection – compulsory licences	
• Vietnam, Jordan, Singapore, Australia	Compulsory licences limited to national emergencies, public non-commercial use, and as antitrust remedy
• Chile, Morocco	TRIPS standards apply
Patent protection – linkage between patent status and drug marketing approval	
• Vietnam	No specific provision
• Jordan	Patent owner must be notified when marketing approval is sought during the patent term
• Singapore, Chile, Morocco, Australia, Bahrain, DR-CAFTA	Marketing approval of a generic drug is prohibited during the patent term, unless authorized by the patent owner. Further, the patent holder must be notified of the identity of the generic company requesting approval

Provision in US-FTA Agreements	Allowed variation from TRIPS-'plus' provision
Patent protection – test data protection for pharmaceutical products	
• Vietnam	Data exclusivity for a 'reasonable' period, normally not less than 5 years
• Jordan	TRIPS standards apply. Additionally, length of protection should be the same as in the originator's country
• Chile	Data exclusivity for 5 years
• Singapore	Data exclusivity for 5 years. Additionally, where drug regulators rely on foreign marketing approvals, data exclusivity applies automatically at home
• Morocco	Data exclusivity for 5 years. Additional 3-year data exclusivity triggered by 'new clinical information'
• Australia, Bahrain, DR-CAFTA	Data exclusivity for 5 years. In addition, data exclusivity applies in all FTA member countries, once first obtained in another territory. In the case of U.S.–Bahrain, additional 3-year data exclusivity is triggered by 'new clinical information' (with equivalent provisions on cross-border application)
Patent protection – parallel imports of patented products	
• Vietnam	No specific provision
• Jordan, Chile, Bahrain, DR-CAFTA	TRIPS standards apply
• Singapore	Patent holders may limit parallel imports of pharmaceutical products through licensing contracts
• Morocco, Australia	Patent holders may limit parallel imports through licensing contracts
Patent protection – side letters on public health	
• Vietnam, Jordan, Singapore, Chile, Australia	No
• Morocco, Bahrain, DR-CAFTA	Yes
Copyright protection – term of copyright protection	
• Vietnam	Same as TRIPS if determined by life of author, 75–100 years otherwise
• Jordan	Same as TRIPS
• Singapore, Chile, Morocco, Australia, Bahrain, DR-CAFTA	Life of author plus 70 years. If decided on a basis other than the life of the author, the term is 70 years from the publication or creation of the work
Copyright protection – technological protection measures	
• Vietnam	No specific provision
• Jordan	'Adequate' protection and 'effective' remedies against acts of circumvention. Ban on circumvention devices
• Singapore, Chile, Morocco, Australia, Bahrain, DR-CAFTA	'Adequate' protection against acts of circumvention. Ban on circumvention devices. Civil liability in case of wilful infringement. Criminal liability in case of wilful infringement for commercial purposes. Exempted are non-profit libraries, archives, educations institutions, and acts related to troubleshooting, reverse engineering, protection of minors, computer or network security, or lawfully authorized government activities
Copyright protection – liability of Internet service providers (ISPs)	
• Vietnam, Jordan	No specific provision
• Singapore, Chile, Morocco, Australia, Bahrain, DR-CAFTA	Limited liability of ISPs on condition they block infringing content upon notification by the copyright holder

(*cont.*)

Provision in US-FTA Agreements	Allowed variation from TRIPS-'plus' provision
Copyright protection – burden of proof in case of copyright infringement	
• Vietnam	No specific provision
• Jordan, Singapore, Chile, Morocco, Australia, Bahrain, DR-CAFTA	Burden of proof placed on the defending party to show that works are in the public domain. However, copyright owners still have to prove infringement
Copyright protection – parallel importation of copyrighted works	
• Vietnam	No specific provision
• Jordan, Morocco	Copyright holder has right to block parallel imports
• Singapore, Chile, Australia, Bahrain, DR-CAFTA	TRIPS standards apply
Enforcement of intellectual property rights – institutional flexibility in IP reinforcement	
• Vietnam, Jordan, Australia	No specific provision
• Singapore, Chile, Morocco, Bahrain, DR-CAFTA	Resource constraints cannot be invoked as an excuse for not complying with specific enforcement obligations
Enforcement of intellectual property rights – border measures	
• Vietnam	Apply to imported and exported goods
• Jordan	Scope of border measures not specifically defined
• Singapore, Chile, Morocco, Bahrain, DR-CAFTA	Apply to imported, exported, and transiting goods
• Australia	Apply only to imported goods (similar to TRIPS)
Enforcement of intellectual property rights – civil and administrative procedures	
• Vietnam, Jordan, Singapore, Chile, Morocco, Australia, Bahrain, DR-CAFTA	Obligations to fine infringers of copyright and trademark rights; irrespective of the injury suffered by rights holders
Enforcement of intellectual property rights – criminal procedures and remedies	
• Vietnam	Similar to TRIPS
• Jordan	Scope of criminal procedures and remedies not specifically defined
• Singapore, Chile	Similar to TRIPS. Criminal procedures apply in case of financial gain or wilful infringements
• Morocco, Australia, Bahrain, DR-CAFTA	Similar to TRIPS. Criminal procedures apply in cases of financial gain or wilful infringements; and specifically for known trafficking in counterfeit labels affixed to certain copyrighted works (e.g. CDs, software)

Source: Adapted from Fink and Reichenmiller (2005).

APPENDIX 7

U.S. Special 301 pressure on developing country WTO members and WTO disputes filed (1995–2007)

	Watch List	Priority Watch List	Out of cycle review	Further U.S. actions
Group 1				
Bahrain	1995–8			
Chile	1995–2007		2006	
Colombia	1995–2001, 2003–7	2002	2002	
Costa Rica	1995–2000, 2002, 2004–7	2001		Other observation: 2006
Dominican Republic	1997, 2004–7	1998–2000		
Ecuador	1996, 1999, 2000, 2003–7	1997, 1998		
El Salvador	1996			
Guatemala	1995–8, 2001–6	1999, 2000		
Honduras	1997–8			
Jordan	1997–9			Other observation: 1995–6
Mexico	1999, 2003–7		2002	Other observation: 1996–8
Panama	1997			Other observation: 1996, 1998
Peru	1995–8, 2001–7	1999, 2000		
Saudi Arabia	1996–2007	1995	2005–6	
Group 2				
Argentina	1995	1996–2007		WTO legal dispute: 1999 (US) WTO legal dispute: 2000 (US)
Belize	2004–5, 2007	2006		
Bolivia	1997, 1999–2007		1996, 1998, 2000	
Brazil	1996–7, 1999–2001, 2007	1995, 2002–6	2007	WTO legal dispute: 2000 (US)
China	1995	2005–7	2004	Priority foreign country: 1996 Section 306 List: 1997–2004 WTO legal dispute: 2007 (US)
Egypt	1995–6, 2003	1997–2002, 2004–7		
India		1995–2007		
Indonesia	1995, 2000, 2007	1996–9, 2001–6	2002, 2005–6	WTO legal dispute: 1996 (US)

(*cont.*)

	Watch List	Priority Watch List	Out of cycle review	Further U.S. actions
Jamaica	1998–2007			
Korea	1997–9, 2002–3, 2005–7	1995–6, 2000–1, 2004	2003	
Kuwait	1996–7, 2000–3, 2006–7			WTO legal dispute: 1996 (US)
Malaysia	1989–90, 2002–7	2000–1	1999, 2004	
Oman	1996–2000	1998–9, 2004–5		Other observation: 1995
Pakistan	1995–2003, 2006–7	2004, 2005	2007	WTO legal dispute: 1996 (US)
Paraguay	1996	1997		Priority foreign country: 1998 Section 306 List:: 1999–2007 Other observation: 1995
Philippines	1995–2000, 2006–7	2001–4, 2005	2002, 2005	
Qatar	1998–2000, 2002			Other observation: 1995–7
South Africa	1995, 1998–9			Other observation: 1996
Taiwan	1995, 1999–2000, 2005–7	2001–4	2004	Priority foreign country: 1992 Other observation: 1996
Thailand	1995–2006	2007	2002	
Turkey	2001–3, 2007	1995–2000, 2004–6		
United Arab Emirates	1995–2000		2002	
Uruguay	1999–2000, 2003–5	2001–2		Other observation: 1997–8
Venezuela	1995–2004	2005–7		Other observation: 1995–6
Vietnam	1997–2006			

Source: USTR Special 301 Reports and USTR website.

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