

External Pressures or Domestic Politics: Explaining Change in Developing Countries' Intellectual Property Legislation

Poppy Sulistyaning Winanti

Submitted in fulfilment of the requirements for the Degree of PhD

School of Social and Political Sciences

College of Social Sciences

University of Glasgow

2011

Abstract

This thesis aims to explain the change in developing countries' intellectual property legislation as a response to their Trade-related Intellectual Property Rights (TRIPs) obligations. When the TRIPs Agreement was negotiated during the Uruguay Round of multilateral trade talks, developing countries resisted its adoption because of their different domestic norms and traditions relating to intellectual property rights and concerns about the administrative costs of implementing the agreement. Nevertheless, when the TRIPs Agreement came into force, almost all developing countries altered their domestic intellectual property laws, and many did so prior to the deadline for implementation and/or adopted more rigorous intellectual property rules than required by TRIPs. That many developing countries have adjusted their domestic intellectual property law poses the puzzle that this thesis seeks to explain. It does so by testing two competing explanations: the role of external pressures (both in terms of great power coercion and legalisation of international institutions) and domestic politics. This thesis combines a survey of the timing and quality of 102 WTO developing country members' legislation across patents, copyrights, and trademarks, with detailed case studies of changes to intellectual property legislation in India and Indonesia, which are both unlikely cases for compliance, but reflect different domestic political circumstances. The empirical findings demonstrate that external pressures cannot provide a satisfactory explanation, as policy change occurred both with the presence and in the absence of these pressures. In order to fully understand the change in developing countries' intellectual property legislation, it is also necessary to analyse the preferences of domestic actors (societal and governmental) and how they interact. By arguing this, this thesis thus suggests the importance of taking domestic politics into account to explain change in developing countries' domestic legislation as a response to inconvenient international obligations.

Table of Contents

Title Page	1
Abstract	2
List of Tables	8
List of Figures	9
Acknowledgements	10
Author's Declaration	11
List of Abbreviations	12
Chapter 1: Developing Countries' Unexpected Responses to the TRIPs Obligations: Introducing the Puzzle	14
1.1 Introduction	14
1.2 The TRIPs Agreement: Why is It Controversial?	15
1.2.1 The TRIPs Implications: Costs and Benefits	17
1.2.2 The TRIPs Norms: Contending Views Regarding IPR Protection	21
1.3 Defining Compliance and Policy Change	23
1.4 Explaining Policy Change: Competing Perspectives	25
1.4.1 Norms and Legitimacy: Unmet Expectations?	26
1.4.2 External Pressures: A Better Explanation?	30
1.4.2.1 Great Power Coercion: A Prevailing Cause of Compliance?	30
1.4.2.2 Collective Enforcement: Does the WTO DSB Really Bark?	32
1.4.3 Bringing Domestic Politics Back in: Searching for Other Causes of Compliance	36
1.5 Analytical Framework	40
1.6 Research Methods	46
1.7 Outline of the Thesis	49
Chapter 2: The TRIPs Agreement: An Unlikely Case for Developing Countries' Compliance	52
2.1 Introduction	52
2.2 What are Intellectual Property Rights (IPR)?	53
2.3 International Regulations of IPR Protection prior to WTO	55
2.4 TRIPs and Developing Countries: An Unwelcome Agreement	56
2.4.1 Sharp Divisions: The Pro- Vs the Anti-TRIPs	56
2.4.1.1 The Pro-TRIPs: Major Developed Countries' Demand	57
2.4.1.2 The Anti-TRIPs: The G10 Developing Countries' Resistance	59
2.4.2 How the Agreement was Finally Reached: Hard Bargaining for Developing Countries	61
2.4.3 The Outcome of the Agreement	63
2.4.3.1 The TRIPs Agreement: Principles and Obligations	64
2.4.3.2 The TRIPs Agreement: Flexibilities Available	70

2.5 The TRIPs Agreement since the Uruguay Round: Dissatisfaction Continues	74
2.6 Conclusion	78

Chapter 3: The Change in Developing Countries' Domestic IP Legislation: Results of the Survey and Contextualising Case Studies	79
3.1 Introduction	79
3.2 Measuring Policy Change: the Timing and Quality of Legislation	79
3.2.1 The Timing of the Adoption of Major IP Legislation	80
3.2.2 The Quality of the Legislation Adopted	85
3.3 External Pressures: Great Power Coercion and the Legalisation of International Institutions	88
3.3.1 Policy Change and US Pressure	88
3.3.1.1 The Timing of IP Legislation Adoption and US Pressure	90
3.3.1.2 The Quality of IP Legislation Adopted and US Pressure	94
3.3.2 The Legalisation of International Institutions: The TRIPs Agreement and the WTO DSM	95
3.4 Assessment and Implications	98
3.5 Introducing the Case Studies: Indonesia and India	99
3.6 Conclusion	103

Chapter 4: Policy Change in Indonesia's IP Legislation: Where Government Institutions Have a Dominant Role	105
4.1 Introduction	105
4.2 Indonesian Policy Making at a Glance	106
4.3 IPR Protection in an Indonesian Historical and Cultural Context	109
4.4 Indonesia during the TRIPs Negotiations: Not on Indonesia's Priority Trade Agenda	111
4.5 Explaining Policy Change in Indonesia's IP Legislation and TRIPs Compatibility	113
4.5.1 Indonesia's Patent Policy Change: Government Pragmatism and Economic Crisis	113
4.5.1.1 Assessing Indonesia's Patent Legislation and TRIPs Compatibility	114
4.5.1.2 Indonesia's Patent Legislation: Explaining Policy Change	117
4.5.1.2.1 Patent Policy Change prior to and during the TRIPs Negotiations	117
4.5.1.2.2 Patent Policy Change during the Transition Period	121
4.5.1.2.3 Patent Policy Change after the end of the Transition Period	126
4.5.2 Indonesia's Copyright Policy Change: An Extensive Effort of Policy Reform	128
4.5.2.1 Assessing Indonesia's Copyright Legislation and TRIPs Compatibility	128
4.5.2.2 Indonesia's Copyright Legislation: Explaining Policy Change	132
4.5.2.2.1 Copyright Policy Change prior to and during the TRIPs Negotiations	132

4.5.2.2.2 Copyright Policy Change during the Transition Period	136
4.5.2.2.3 Copyright Policy Change after the end of the Transition Period	137
4.5.3 Indonesia's Trademark Policy Change: An Easy Case of Policy Reform	141
4.5.3.1 Assessing Indonesia's Trademark Legislation and TRIPs Compatibility	142
4.5.3.2 Indonesia's Trademark Legislation: Explaining Policy Change	144
4.5.3.2.1 Trademark Policy Change prior to and during the TRIPs Negotiations	144
4.5.3.2.2 Trademark Policy Change during the Transition Period	146
4.5.3.2.3 Trademark Policy Change after the end of the Transition Period	147
4.6 Analysing IP Policy Change in Indonesia: Competing Perspectives	149
4.7 Conclusion	154
Chapter 5: Policy Change in India's IP Legislation: Where the Domestic Societal Actors Take the Lead	156
5.1 Introduction	156
5.2 Indian Policy Making at a Glance	157
5.3 India during the TRIPs Negotiations: A Leader of Developing Country Opposition	159
5.4 Explaining Policy Change in India's IP Legislation and TRIPs Compatibility	161
5.4.1 India's Patent Policy Change: Reconciling International Obligations and Domestic Opposition	162
5.4.1.1 Assessing India's Patent Legislation and TRIPs Compatibility	162
5.4.1.2 India's Patent Legislation: Explaining Policy Change	165
5.4.1.2.1 Patent Policy Change prior to and during the TRIPs Negotiations	165
5.4.1.2.2 Patent Policy Change during the Transition Period	168
5.4.1.2.3 Patent Policy Change after the end of the Transition Period	176
5.4.2 India's Copyright Policy Change: Complying without Substantial Policy Reform	177
5.4.2.1 Assessing India's Copyright Legislation and TRIPs Compatibility	178
5.4.2.2 India's Copyright Legislation: Explaining Policy Change	181
5.4.2.2.1 Copyright Policy Change prior to and during the TRIPs Negotiations	181
5.4.2.2.2 Copyright Policy Change during the Transition Period	183
5.4.2.2.3 Copyright Policy Change after the end of the Transition Period	185

5.4.3 India's Trademark Policy Change: Another Case of Compliance without Substantial Policy Reform	186
5.4.3.1 Assessing India's Trademark Legislation and TRIPs Compatibility	186
5.4.3.2 India's Trademark Legislation: Explaining Policy Change	187
5.4.3.2.1 Trademark Policy Change prior to and during the TRIPs Negotiations	188
5.4.3.2.2 Trademark Policy Change during the Transition Period	189
5.4.3.2.3 Trademark Policy Change after the end of the Transition Period	190
5.5 Analysing IP Policy Change in India: Competing Perspectives	191
5.6 Conclusion	196
Chapter 6: Locating the Causes of Compliance in the Domestic Sphere and Resolving the Puzzle: A Conclusion	197
6.1 Introduction	197
6.2 Theoretical Debates: Explaining Policy Change	198
6.2.1 Beyond Great Power Coercion: Insufficient Cause of Compliance?	199
6.2.2 Authoritative International Institutions: It Barked but not so Loud	202
6.2.3 Bringing Domestic Politics Back in: Where Other Causes of Compliance can be Found	203
6.3 The TRIPs Agreement and Developing Countries: What Lessons can be Learned	207
6.4 Conclusion	209
Appendices	212
Appendix I—The WTO Developing Country Members based on World Bank's Income Classification (as of January 2011)	213
Appendix II—The WTO Least Developed Country (LDC) Members (as of 17 February 2011)	215
Appendix III—The Timing of Major IP Legislation Adoption in WTO Developing Country Members and US Pressure	216
Appendix IV—The WTO TRIPs Disputes 1995–2011 Involving Developing Country Members as Respondents	221
Appendix V Patents Applications by Resident in Selected Developing Countries in 2000	222
Appendix VI—IP Applications in Indonesia	223
Table VI.1 Patent Applications in Indonesia	223
Table VI.2 Copyright Applications in Indonesia	223
Table VI.3 Trademark Applications in Indonesia	224
Appendix VII—Documents submitted by the Indonesian Government on the Negotiating Groups during the Uruguay Round 1986–1994	225
Appendix VIII—IP Applications and Value of Software Exports in India	226
Table VIII.1 Patent Applications in India	226
Table VIII.2 The Value of Indian Software Exports	226
Table VIII.3 Trademark Applications in India	227
Appendix IX— <i>Lok Sabha</i> Party List during IP Policy Reform	228
Table IX.1 Tenth <i>Lok Sabha</i> Party List (20 June 1991–10 May 1996)	228

Table IX.2 Twelfth <i>Lok Sabha</i> Party List (10 March 1998–26 April 1999)	229
Table IX.3 Thirteenth <i>Lok Sabha</i> Party List (10 October 1999–06 February 2004)	230
Table IX.4 Fourteenth <i>Lok Sabha</i> Party List (17 May 2004–18 May 2009)	231
Appendix X–Interview List	232
List of References	233

List of Tables

Table 1.1	Summary of Competing Perspectives' Expectations on Developing Countries' IP Policy Change	40
Table 1.2	Levels of External Pressures	44
Table 1.3	Domestic Actors' Preference Categories in IP Policy Reform	45
Table 2.1	Specific Types of IPR	54
Table 2.2	Deadlines for Implementing the TRIPs Agreement	68
Table 2.3	Multilateral IP Agreements in Comparison: TRIPs and Its Predecessors	69
Table 2.4	Flexibilities under the TRIPs Agreement	73
Table 3.1	The Timing of Policy Adoption Categories	81
Table 3.2	Classifications of the Quality of Developing Countries' IP Legislation	85
Table 3.3	Variation in IP Standards of World Bank Country Classification	86
Table 3.4	The USTR Special 301 Report Categories	89
Table 3.5	Variation in IP Standards of World Bank Country Classification and US Pressure	94
Table 3.6	Case Studies Selection	102
Table 4.1	The Indonesian Patent Acts and TRIPs Compatibility	116
Table 4.2	United States Foreign Direct Investment to Developing East Asia 1982–1988 (in US\$ millions)	119
Table 4.3	The Indonesian Copyright Acts and TRIPs Compatibility	131
Table 4.4	Estimated Trade Losses and Level of Piracy in Indonesia 1995–2009 (in US\$ millions)	138
Table 4.5	The Indonesian Trademark Acts and TRIPs Compatibility	143
Table 4.6	Indonesia's IP Policy Change and External Pressures	150
Table 4.7	Indonesia's Patent Policy Change and Domestic Politics Analysis	151
Table 4.8	Indonesia's Copyright Policy Change and Domestic Politics Analysis	152
Table 4.9	Indonesia's Trademark Policy Change and Domestic Politics Analysis	152
Table 5.1	The Indian Patent Acts and TRIPs Compatibility	164
Table 5.2	The Indian Copyright Acts and TRIPs Compatibility	180
Table 5.3	Estimated Trade Losses and Level of Piracy in India 1995–2009 (in US\$ millions)	182
Table 5.4	The Indian Trademark Acts and TRIPs Compatibility	187
Table 5.5	India's IP Policy Change and External Pressures	193
Table 5.6	India's Patent Policy Change and Domestic Politics Analysis	194
Table 5.7	India's Copyright Policy Change and Domestic Politics Analysis	195
Table 5.8	India's Trademark Policy Change and Domestic Politics Analysis	195

List of Figures

Figure 3.1	The Timing of the Adoption of the First IP Legislation in the WTO Developing Country Members	82
Figure 3.2	The Timing of the Adoption of the First Patent Legislation based on Developing Country Categories	82
Figure 3.3	The Timing of the Adoption of the First Copyright Legislation based on Developing Country Categories	83
Figure 3.4	The Timing of the Adoption of the First Trademark Legislation based on Developing Country Categories	84
Figure 3.5	Variation in IP Standards of World Bank Country Classification	87
Figure 3.6	Early Patent Legislation Adoption and the USTR Special 301 Report	90
Figure 3.7	Early Copyright Legislation Adoption and the USTR Special 301 Report	90
Figure 3.8	Early Trademark Legislation Adoption and the USTR Special 301 Report	92
Figure 3.9	Developing Countries' Compliance and the USTR Special 301 Report based on the Timing of Patent Legislation Adoption	92
Figure 3.10	Developing Countries' Compliance and the USTR Special 301 Report based on the Timing of Copyright Legislation Adoption	93
Figure 3.11	Developing Countries' Compliance and the USTR Special 301 Report based on the Timing of Trademark Legislation Adoption	93
Figure 3.12	Patent Applications by Resident in Selected Developing Countries in 2000	101
Figure 4.1	Patent Applications in Indonesia (1991–2010)	124
Figure 4.2	Copyright Applications in Indonesia (1991–2010)	140
Figure 4.3	Trademark Applications in Indonesia (2001–2010)	148
Figure 5.1	Patent Applications in India (1992–2009)	171
Figure 5.2	The Indian Software Exports (2003–2010)	185
Figure 5.3	Trademark Applications in India (1997–2009)	190

Acknowledgements

Pursuing a PhD is the biggest challenge in my academic life I have encountered so far. Throughout this process, I received an enormous support from a number of individuals and institutions. First and foremost, I am extremely grateful to have an excellent supervisor, Professor Alasdair Young. I am highly indebted to his invaluable guidance and endless encouragement, since I started this research in January 2008. His comprehensive and insightful feedback greatly helped me to clarify my ideas and strengthen my arguments. I am benefitted from a partial scholarship, awarded by the Indonesian Ministry of Education, and I especially express my appreciation to Mr. Riza Sihbudi, former Educational Attaché of the Indonesian Embassy in London, for his kind assistance. I thank my home institution Department of International Relations, Faculty of Social and Political Sciences, Gadjah Mada University, for providing an additional financial support. I also thank Department of Politics, University of Glasgow, to support my field work in Geneva. I sincerely wish to thank all of those, who were willing to spend their time to share their ideas in the interviews, during my field trips both in Jakarta and Geneva. Thanks also to all fellow PhD students at the Department of Politics, University of Glasgow, who have created a lively and a supportive PhD community. Completing this thesis would be impossible without the utmost compassion from my husband, Victor Yasadhana. Thank you for sharing Pablo Neruda's dream into practice. I would finally like to thank my parents for their unparalleled love and dedicate this thesis to them.

Author's Declaration

I declare that, except where explicit reference is made to the contribution of others, that this thesis is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution.

Signature: _____

Printed name: Poppy Sulistyaning Winanti

List of Abbreviations

ABS	Access and Benefit Sharing
ACP	African, Caribbean, and Pacific
AMTC	Affordable Treatment and Action Campaign (India)
AoA	Agreement on Agriculture
ASEAN	Association of Southeast Asian Nations
ATC	Agreement on Textiles and Clothing
Bappenas	<i>Badan Perencanaan Pembangunan Nasional</i> (the Indonesian National Development Planning Agency)
BJP	<i>Bharatiya Janata Party</i> (India)
BSA	Business Software Alliance (US)
CBD	Convention on Biological Diversity
CEAS	Centre for European Agricultural Studies
CENTAD	Centre for Trade and Development (India)
CPI (M)	Communist Party of India (Marxist)
DPR	<i>Dewan Perwakilan Rakyat</i> (the Indonesian House of Parliament)
DSB	Dispute Settlement Body
DSM	Dispute Settlement Mechanism
EMR	Exclusive Marketing Rights
FDI	Foreign Direct Investment
FMRAI	Federation of Medical Representatives Association of India
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
Golkar	<i>Golongan Karya</i> (the Indonesian ruling party during Suharto Administration)
GSP	Generalised System of Preferences
ICTSD	International Centre for Trade and Sustainable Development
IDMA	Indian Drug Manufacturers' Association
IFPI	International Federation of Phonogram and Videogram Producers
IGIDR	Indira Gandhi Institute of Development Research
IIPA	International Intellectual Property Alliance
IKAPI	<i>Ikatan Penerbit Indonesia</i> (the Indonesian Publishers Association)
IMF	International Monetary Fund
INC	Indian National Congress
IP	Intellectual Property
IPA	Indian Pharmaceutical Alliance
IPR	Intellectual Property Rights
ITCB	International Textiles and Clothing Bureau
LDC	Least Developed Countries
MFN	Most-Favoured Nations
NGO	Non-Governmental Organisation
NICs	Newly Industrialised Countries
NWGPL	National Working Group on Patent Laws (India)
OPPI	Organisation of Pharmaceutical Producers of India
PFC	Priority Foreign Country

PhRMA	Pharmaceutical Research and Manufacturers of America
PWL	Priority Watch List
RJD	<i>Rashtriya Janata Dal</i> (India)
RSP	Revolutionary Socialist Party (India)
TRIMs	Trade-related Investment Measures
TRIPs	Trade-related Intellectual Property Rights
UNCTAD	United Nations Conference on Trade and Development
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UPA	United Progressive Alliance (India)
USTR	United States Trade Representative
WGTTT	Working Group on Trade and Transfer of Technology
WIPO	World Intellectual Property Organisation
WL	Watch List
WTO	World Trade Organisation
YLKI	<i>Yayasan Lembaga Konsumen Indonesia</i> (the Indonesian Consumers Foundation)

Chapter 1

Developing Countries' Unexpected Responses to the TRIPs Obligations: Introducing the Puzzle

1.1 Introduction

One of the most significant results of the Uruguay Round of multilateral trade talks was the first comprehensive and enforceable multilateral accord on trade-related aspects of intellectual property rights, widely known as the TRIPs Agreement. In contrast to other issues during the Uruguay Round, the TRIPs Agreement is not about liberalising trade, but aims to harmonise domestic regulatory and legal systems. In doing so, it went substantially beyond the existing intellectual property (IP) regime under the World Intellectual Property Organisation (WIPO), by establishing minimum standards for members' domestic IP laws with respect to terms and scope of protection for a wide range of intellectual property rights (IPR) categories, under a single multilateral agreement. Its negotiation process exhibited relentless attempts of developing countries, led by Brazil and India, to resist the adoption of the agreement, because of the concerns about the difference in philosophical strands, and the administrative costs associated with implementing the agreement. However, due to hard bargaining by major developed countries, particularly the United States, the EU, and Japan, developing countries acceded to the agreement.

Despite the moral and economic objections, and its foreseen short term negative implications, including high cost in adjusting their domestic laws, almost all developing countries have altered their domestic laws in response to the TRIPs agreement. Many have done so before they were required to, and many have adopted more rigorous IP rules than they are strictly required by TRIPs. The fact that many developing countries have reformed their domestic IP law, poses the puzzle that this thesis seeks to explain: why, in spite of strong opposition of its adoption, and the problematic nature of IPR protection as international norms, have most developing countries adjusted their domestic IP laws in accordance with the TRIPs agreement? This thesis, therefore, intends to analyse why and how developing countries' domestic IP laws have changed in response to the TRIPs Agreement. It does so by testing two competing explanations: the role of external pressures (both in terms of great power coercion and legalisation of international institutions) and domestic politics of compliance analysis.

In order to introduce the underlying argument of this thesis, the rest of the chapter is organised as follows. The next section presents the existing literatures concerning the debate on the implication and philosophical aspects of IPR protection, which are very crucial in highlighting why developing countries' compliance with the TRIPs Agreement is a puzzle. The chapter then defines what compliance is, in order to clarify the focus of the study. The next part discusses competing perspectives in understanding change in developing countries' domestic legislation as a response to their international obligations. It basically argues that, given the fact of the conflicting norms between domestic and international norms under TRIPs, IP policy reform, taken by developing countries' governments as a response to their TRIPs obligations, in particular challenges the constructivists' account, which predicts that IP policy reform would be unlikely to take place. In this regard, external pressures explanation, as argued both by neo-realism and neo-liberal institutionalism, arguably would be more likely to provide better accounts for understanding IP policy change in developing countries. Nevertheless, as will become clearer later in this thesis, external pressures accounts also fail to provide satisfactory explanation. This thesis then argues that, in order to understand developing countries' responses to their TRIPs obligations, it is also necessary to analyse the preferences of domestic actors (societal and governmental) and how they interact. The next section offers the analytical framework of this thesis, by identifying the dependent and independent variables, and how these variables are measured. The following section discusses the research methods, including locating the research sources and explaining how the research is conducted. The last part of the chapter describes how the argument of this thesis will be manifested in the rest of the thesis.

1.2 The TRIPs Agreement: Why is It Controversial?

As one of the problematic issues under the current global trade regime, various aspects of the TRIPs Agreement have been studied extensively. As can be observed from the existing literature, a broad range of a body of literature on the relationship between developing countries and the TRIPs Agreement, in principle, can be divided into four different aspects. First, the existing literature that, in essence, engages with the debate relating to the implications of the TRIPs Agreement especially for developing countries' economic development (for example Braga (1996), Maskus (1998, 2000a, 2000b, 2000c), Finger and

Schuller (2000), Chang (2001), Kerr (2003), Wade (2003), Mayne (2004), Dutfield (2006a), Vogel (2006), Lippoldt (2006)). Second, other scholars focus more on competing norms and tradition relating to IPR protection (such as Gutowski (1999), Marron and Steel (2000), May (2000), Drahos (2002a), Drahos and Braithwaite (2002), Richards (2004), Ngenda (2005)). Third, some studies in particular deal with the debate on the history of the TRIPs Agreement, including the negotiations process and/or how the agreement finally concluded (among others include Emmert (1990)¹, Watal (2001), Drahos (2002b), Gervais (2003)). Fourth, a vast body of literature also pays particular attention to how developing countries responded to their TRIPs obligations. The literature on this strand mostly focuses on the implementation of the TRIPs Agreement in specific case study countries/regions, or also concerning a specific IP category (such as Blakeney (1996), Bass (2002/2003), Heath (2003), Heath ed. (2003), Chaudhuri (2005), Eren-Vural (2007), Deere (2008), Goldstein and Straus eds. (2009)). The debates in existing literature essentially resemble the underlying question of whether the TRIPs Agreement is good or bad for developing countries, and why the TRIPs Agreement is widely seen as a controversial trade agreement.

The following discussions will pay attention mainly to the first two aspects of the debate, the implications of the TRIPs Agreement for developing countries' economic development, and competing perspectives in understanding IPR protection. The third aspect of the debate, relating to the historical background of the TRIPs Agreement, will be discussed in more detail in Chapter 2. The fourth aspect of the debate, concerning developing countries' responses to their TRIPs obligations, will be examined later in this chapter, particularly in section 1.4, on explaining policy change and competing perspectives, since this debate, in principle, is rooted in different accounts of major International Relations (IR) theories, in understanding domestic policy change as a response to international obligations. In addition, since the main purpose of this thesis is to explain change in developing countries' IP legislation, this thesis as a whole fits into the fourth aspect of the debate.

¹ This article focuses on the negotiation process since it was published when the negotiation was still ongoing.

1.2.1 The TRIPs Implications: Costs and Benefits

For the first aspect of the debate, relating to the implications of the TRIPs Agreement, it is important to underline that there is no consensus among scholars as to whether the TRIPs Agreement is beneficial or harmful for developing countries' economic development. Given the fact that the benefit of the TRIPs Agreement on their economic development is still questionable, developing countries' compliance with the TRIPs Agreement poses the puzzle that this thesis seeks to explain.

Some studies assert that the TRIPs Agreement is advantageous for developing countries, since it will foster economic growth through the increased flow in the transfer of technology, encourage Foreign Direct Investment (FDI) promotion, and will also facilitate in local innovative activities. It is expected that a strong legal IPR protection will provide stable protection for foreign investors—particularly in technology-related sectors—to do their business in developing countries (Wang, 2005, p.800). Within this context, Braga and Fink (1998, pp.542–43) argue that, since intangible assets,² which frequently translate into the ownership of intellectual property, is one of the main reasons behind FDI flows, this has made higher standards of IPR protection crucial in order to increase FDI flows to developing countries. Similarly, Maskus (2000a, p.155; 2000c, p.7) states that developing countries will be benefiting, since a strong legal protection of IPR will not only expand foreign investment and technology flows, but also will provide a favourable circumstance for the development of their own innovative domestic firms. As Maskus (2000a, p.147) further argues, by having a strong legal IPR protection, a country provides a competitive advantage for domestic innovative firms, and will also generate incentives for further invention.

Other studies, however, are more critical to the role of the TRIPs Agreement for FDI promotion, transfer of technology, and local innovation. While the importance of strong IPR protection is also acknowledged, some studies indicate that this is not the only, or the main, reason of the expansion of FDI. Multinational corporations' decisions to invest in developing countries depend on several other important conditions, including market size, growth prospects, the availability of necessary resource endowment, and desired political conditions

² These include "...new technologies, know-how among employees, management skills, reputation of quality..." (Braga and Fink, 1998, p.542).

(UNCTAD, 2002, p.14). Similarly, supporting the study by the United Nations Conference on Trade and Development (UNCTAD), in the interview with the author, a representative from one of the leading Geneva-based research institutes, dealing with IPR protection and developing countries, argued that there is no solid empirical evidence of the direct correlation of applying stronger IPR protection with the promotion of FDI.³ In this context, he further argues that a widely cited example is African countries, where they implemented strong IPR protection, but they are unable to attract significant FDI, especially compared to their Asian counterparts. Nevertheless, despite the fact that the empirical evidence of the usefulness of applying more rigorous IPR protection is still questionable, this kind of argument is not uncommon among developing countries' policy makers. For example, in the interview with the author, an Indonesian government official firmly perceived that stronger IPR protection will lead to attracting more FDI in developing countries. He further argued that foreign investors will feel more secure in investing in developing countries if they improve their standard for IPR protection.⁴

As can be seen in the relations between FDI flows and strong IPR protection, the strong role of IPR protection in encouraging local innovation is also still disputable. Unless other variables, such as highly qualified personnel and sufficient research infrastructure, are available, it is difficult that the adoption of the TRIPs Agreement alone will provide incentive for foreign firms to expand their research and development activities in developing countries (UNCTAD, 2002, p.14; UK CIPR Commission, 2002, p.23). Some studies also show the historical example that IPR was not well protected in now-advanced countries during the period of their early industrial development—at least until the late 19th century (Chang, 2001, pp.293–95; Botoy, 2004, pp.118–19; Eren-Vural, 2007, p.111). Yet, the absence of strong patent protection did not prevent them from developing their innovative technology. For instance, despite the fact that patent law was absent, Switzerland emerged as the most innovative society in the world during the late 19th century (Chang, 2001, p.295).

Another source of heated debate is related to the critical assessment of the relations between IPR protection and the transfer of technology. It is argued that instead of increasing the transfer of technology, the adoption of the TRIPs Agreement can reinforce a technology gap

³ Author's interview with a representative from one of the leading Geneva-based research institutes dealing with IPR protection and developing countries (Geneva, 25 November 2009).

⁴ Author's interview with an Indonesian government official (Jakarta, 26 August 2009).

between developed and developing countries. It is believed that a strong IPR protection will reduce the ability of developing countries to acquire the latest technology (Chang, 2001, p.301). In this regard, the history of the economic development of some countries demonstrates that, they have used weak IPR protection as a means of gaining access to foreign technologies in order to develop their own indigenous technology, through imitation and the adaptation of advanced technology by reverse engineering. This is particularly observable from the experience of the Newly Industrialised Countries (NICs) of East Asian countries' economic development (May, 2007, p.19). As a clear example, during its critical phase of development, South Korea did not have a strong IPR protection in its domestic law (Wade, 2003, p.626). Besides owing to a strong government intervention, South Korea managed to transform its economy through the importance of imitation and reverse engineering of foreign technology, which then became an important variable in developing its own domestic technological and innovative capacity (UK CIPR Commission, 2002, pp.19–20). Unfortunately, since imitation and reverse engineering are not allowed under the agreement, the implementation of TRIPS, therefore, has restricted the chance for other developing countries to pursue a similar route of development (UK CIPR Commission, 2002, p.20; Wade, 2003, p.626).

In addition to the debate on its implication for developing countries' economic development, another important source of controversy is related to the burden of the TRIPs Agreement implementation. A number of literatures draw attention to the fact that implementing the TRIPs Agreement is considerably costly, particularly for developing countries, which includes both direct and indirect costs. The direct cost is related to the costs of improving legal, administrative, and enforcement infrastructure, while indirect cost is associated with technology-related payment to foreign owners in the forms of increased royalty payments for the use of developed countries-owned intellectual property products (Gutowksi, 1999, p.751; Lybbert, 2002, p.310).⁵ In this regard, the implementation of the TRIPs Agreement in the forms of royalty payment can create a transfer of wealth from consumers in developing countries, particularly to multinational corporations based in developed countries (Dutfield, 2006a, p.7; Hindley, 2006, p.39). As estimated by the World Bank in 2001, developing countries would have to pay foreign companies some US\$20 billion more in technology-

⁵ The distinction of direct and indirect costs is debatable, since some scholars such as Chang (2001, p.302), considers the increased royalty payments from developing countries to the developed ones, as the example of the most direct international impact of TRIPs for developing countries.

related payments if they were to implement fully the TRIPS Agreement (Mayne, 2004, p.155; Dutfield, 2006a, p.7). On the other hand, the World Bank also estimated that the benefits to US companies on IP-related sectors would reach up to US\$19 billion per year (Wade, 2003, p. 624; Blakeney, 2006, p.22).

Furthermore, as Finger and Schuller (2000, p.522) argue, the implementation of the TRIPs Agreement has far reaching institutional challenges for domestic policy in developing countries. This is because the implementation of the TRIPs Agreement requires its signatories to reform their legal system, including drafting a new one; to enhance administrative structure; and to strengthen the institutional enforcement (Finger and Schuller, 2000, p.521). Moreover, developing countries also need to improve their institutional capacity in order to have a more sophisticated policing system (Kerr, 2003, p.8; May, 2004, p.826). As a consequence, this must be accompanied by spending extra money on purchasing equipment and training people. This is particularly costly for most developing countries, since these legal and institutional requirements were mostly absent prior to the TRIPs Agreement. For example, the cost of the World Bank projects to improve the IP regulatory framework in Indonesia during 1997–2003 was around US\$14.7 million (Finger and Schuller, 2000, p.522; May, 2004, p.826). Meanwhile, even though it can be regarded as having a considerably higher standard of IPR protection compared to other developing countries, the cost of the World Bank projects to establish an agency to implement industrial property laws in Mexico between 1992 and 1996, reached over US\$30 million (Finger and Schuller, 2000, p.522). In other words, the implementation of the TRIPS Agreement in developing countries involves significant costs.

Considering the costs and the benefits for developing countries' economic development, most scholars tend to acknowledge that in a short term, developing countries, particularly the poorer ones, may experience net welfare losses. As discussed earlier, this is owing to the fact that they will possibly have to pay a higher price for foreign patented products and technological innovations since they are not allowed to imitate them anymore (Maskus, 2000a). There is the disagreement, however, of whether the long term benefits will outweigh those short term costs. As Dutfield (2006a, p.7) points out, while it is not viable to calculate the long-term economic impacts of TRIPs, particularly on developing countries, the short-term costs clearly have direct welfare losses, which may already diminish its initial benefits.

1.2.2 The TRIPs Norms: Contending Views Regarding IPR Protection

In addition to the discussion of the role of the TRIPs Agreement for developing countries' economic growth and its implementation costs, the existing literature also pays attention to competing norms regarding IPR protection. Since the way in which they can be understood is rooted in different values, norms, and culture in various societies, there is no common understanding on IPR protection. Considering IPR protection as an international norm is arguably problematic, developing countries' responses to their TRIPs obligations, by reforming their domestic IP legislation rigorously, therefore require further explanation.

The major difference concerning IPR protection, particularly focuses on whether IPR is regarded as individual rights, as can be found in Western industrialised society tradition, or whether they should be treated as collective goods, as mostly understood in non-Western industrialised society tradition. Another dispute is concerned with the justification of IPR protection; whether it should be based on an economic justification through material benefits, which is again rooted in Western industrialised society tradition, or on another, non-material benefits justification, as can be found in non-Western industrialised society tradition. As will be explained further in Chapter 2, these conflicting norms, regarding IPR protection, clearly manifested in a wide division between developed and developing countries during the TRIPs negotiations.

Much of the existing literature considers that the TRIPs Agreement is Western industrialised society-biased (Gutowksi, 1999; May, 2005; Ngenda, 2005). Since the agreement perceives that the IPR protection is part of individual rights (Gutowksi, 1999, pp.744-45), the TRIPs Agreement resembles the Western liberal tradition, and, therefore, it is seen as promoting a Western industrialised society concept of intellectual property (Ngenda 2005, p.60). In this regard, the TRIPs Agreement represents what May (2005, p.180) regards as "...the internationalization [sic] of Anglo-Saxon legal privileging of owners' rights". Since norms embodied in the TRIPs Agreement are mostly rooted in the Western industrialised society tradition, these norms are in conflict with those of a non-Western liberal tradition, which consider knowledge and other forms of IPR as collective goods (Marron and Steel, 2000, p.166). Furthermore, Ngenda (2005, p.62) contends that the TRIPs Agreement envisages Western society's norms and values, which are rooted in its legal, economic, and political

regimes. As a result, the adoption of the TRIPs Agreement in developing countries' domestic laws entails deeper structural reforms. In other words, it requires an appropriate implementation of institutional structures associated with Western liberal democracy and free-market systems, which can be conflicting with developing countries' social and cultural configuration (Ngenda, 2005, p.62).

In addition, the existing literature also points out that the underlying argument behind IPR protection, as embedded in the TRIPs Agreement, is economic justification through providing material benefits, as rooted in Western industrialised society tradition. The argument is based on the assumption that creating knowledge requires high cost investment, not only in terms of time, but also financial spending. Furthermore, it is too risky to invest in that kind of process, since there is no assurance that such inventive efforts will be economically profitable (Emmert, 1990, p.1318). At the same time, due to the inherent characteristic of IP as public goods, once in existence, IP-related products can easily be used and reproduced by others with no additional cost (Emmert, 1990, p.1318). Under this situation, it is rational for economic agents to free-ride on inventive efforts of others, while it is not rational for them to undertake their own efforts to develop innovative activities (Drahos, 2005, p.143). Therefore, it is argued that the protection of IPR can be seen as the most effective way to provide a solution to this problem.

In contrast to liberal traditions, which regard material incentives as vital to encouraging innovative activities, most traditions in developing countries recognise the contribution to society, as well as cultural esteem, rather than material benefit, as the driving force for creativity (Maroon and Steel, 2000, p.166). Some studies also assert that the economic justification for protecting IPR can also produce adverse effects for economic growth. Instead of becoming an incentive for further innovative activities, IPR protection can hinder the emergence of new creative works. The benefits of the monopoly nature of IPR tend to encourage the right-holders to extend their rights protection, instead of investing in innovation and new productive works, which involves higher costs (Drahos, 2005, pp.145–46). Furthermore, the economic justification ignores other important functions of knowledge, such as serving as a social instrument to ensure technology transfer and promoting social welfare. Therefore, from this point of view, a low standard of IPR protection can serve to protect life itself, by ensuring a supply of essential goods, particularly in the fields of education and

medicine, both for sustenance and development (Gutowksi, 1999, p.744). Within this context, one of the most frequently cited examples is the impact of strong IPR protection for the access by poor people in developing countries to affordable medicine. Some studies (Matthews, 2002, p.113; Mayne, 2004, p.146; Sun, 2004, p.125) show that strong patent protection has resulted in an increased price for essential pharmaceutical products, which in turn puts more burdens on countries in dealing with health problems.

Previous discussions illustrated the conflicting aspects of the TRIPs Agreement, particularly due to its implications on developing countries' economic development, and the high costs of its implementation, as well as its inherently problematic norms. The existing literature tends to agree that developing countries would bear extensive cost to implement the agreement. Furthermore, there is no agreement among scholars as to whether the TRIPs Agreement is promoting or hindering developing countries' economic development. In addition, the agreement which principally represents IPR protection in the Western industrialised society tradition, inherently contrasts with non-Western industrialised society traditions, like those in most developing countries' traditions. Nevertheless, when the TRIPs Agreement came into force, almost all developing countries took the necessary steps to reform their domestic IP laws, and many did earlier than they had to, and some of them even adopted more rigorous IP rules than required by TRIPs. That many developing countries have adjusted their domestic IP law, poses the puzzle that this thesis seeks to explain.

1.3 Defining Compliance and Policy Change

Explaining change in developing countries' IP legislation as their response to the TRIPs obligations, is closely related to the study of developing countries' compliance with international agreement. Following Oran Young's (1979) definition, the existing studies suggest "[C]ompliance can be said to occur when the actual behavior [sic] of a given subject conforms to prescribed behavior [sic] and noncompliance or violation occurs when actual behavior [sic] departs significantly from prescribed behavior [sic]" (quoted in Chayes, Chayes, and Mitchells, 1998, p.39; Simmons, 1998, p.77; Raustiala, 2000, p.391; Raustiala and Slaughter, 2002, p.539). This thesis, therefore, uses this common definition of compliance, which is understood to be a rule-consistent behaviour.

Nevertheless, much of the compliance literature contends that a state can be legally in compliance with an international agreement even without implementing it, because the existing practice already resembled the agreement (Martin, 2008, p.205). In this context, implementation, defined as "...the process of putting international commitments into practice, the passage of domestic legislation, promulgation of regulations, creations of institutions (both domestic and international), and enforcement of rules" (Raustiala, 2000, p.392; Raustiala and Slaughter, 2002, p.539), therefore, can be considered as neither a necessary nor a sufficient condition for compliance (Raustiala and Slaughter, 2002, p.539). Despite this fact, in this thesis, however, implementation is going to be used interchangeably with the concept of compliance. This is owing to the fact that, since IPR protection was mostly alien in most developing countries prior to the TRIPs Agreement, the implementation of the TRIPs Agreement through the adoption of IP laws in national legislation, is a necessary condition in order for developing countries to comply with the TRIPs Agreement. Within this context, developing countries' acceptance to the TRIPs Agreement therefore resembles what Keohane argues as 'inconvenient commitments', defined "...as those commitments that oblige governments (1) [to] take actions that they would, apart from their commitment, not undertake; or (2) not to take actions in which they would, apart from their commitment, engage" (1992, p.176).

In this regard, the focus of this thesis is, therefore, on the TRIPs Agreement implementation or how the TRIPs Agreement is put into practice in developing countries, through the adoption of IP laws in domestic legislation, including its institutional arrangement as required by the agreement. To clarify further, the purpose of this thesis is to analyse why and how developing countries' domestic IP policies have changed in response to external trade obligations, specifically the TRIPs Agreement, and whether the policies taken are in accordance or not with their TRIPs obligations. This thesis, nevertheless, does not strive to assess the effectiveness, defined as "...the degree to which a rule induces changes in behavior that further the rule's goals; improves the state of the underlying problem; or achieves its policy objective" (Raustiala and Slaughter, 2002, p.539), of these policies. This is because, even though IP policy change is a necessary (if not sufficient) condition for protecting IPR, the legislative change itself, does not necessarily lead to a behavioural change or automatically achieve its policy objectives. The assessment on policy effectiveness, which requires time and resource intensive, is beyond the scope of this thesis. Within this context, this thesis, therefore,

does not intend to assess whether the change in developing countries' domestic IP policy has significantly fulfilled its policy objectives outlined by TRIPs or not, which is ranging from reducing the piracy to improving technology and innovation.

1.4 Explaining Policy Change: Competing Perspectives

This section engages with the debate concerning different expectations of major IR theories, in understanding the change in developing countries' domestic IP legislation as a response to their international obligations. Policy reform taken by most developing countries, as a response to their TRIPs obligations, in particular poses a challenge to the constructivist account. Given the fact of the coercive nature of its birth and the incompatibility between international norms regarding IPR protection under TRIPs with domestic norms in most developing countries, constructivists question the legitimacy of TRIPs, and, therefore, expect that policy reform would be unlikely to take place. From neo-realists' points of view, the TRIPs Agreement is considered as mainly representing developed countries' interests, and, therefore they would play a significant role to ensure weaker states' compliance with the agreement. By emphasising the role of great power coercion behind a state's compliance, neo-realism, therefore, expects that policy change would take place owing to developing countries' fear of punishment from dominant states. Neo-liberal institutionalism pays particular attention to the role of international institutions in explaining the reason behind domestic policy change. Considering the TRIPs Agreement is regulated under the WTO, which is widely acknowledged as a legalised form of international cooperation, neo-liberal institutionalism expects that developing countries would be more likely to comply with the TRIPs Agreement.

As will be elaborated in subsequent chapters, however, the expectations as proposed by leading IR theories, derived from neo-realism, neo-liberal institutionalism, and constructivism, do not provide satisfactory explanations in understanding policy change in developing countries' IP legislation. Contrary to the expectations of constructivism, neither the questionable legitimacy of the TRIPs Agreement from developing countries' points of view nor the incompatibility of international norms under TRIPs with their domestic norms, have caused widespread non-compliance by developing countries. Contrary to both neo-realists and neo-liberal institutionslists' expectations regarding the role of external pressure, the change in developing countries' IP legislation as a response to their TRIPs obligations reveals several

different patterns of responses that are inconsistent with the external pressure they received. In order to fully understand developing countries' responses to their TRIPs obligations, this thesis suggests the need to utilise a domestic politics of compliance analysis, by examining the interaction and preferences of domestic actors (societal and governmental) and how they shape domestic policy outcomes.

1.4.1 Norms and Legitimacy: Unmet Expectations?

By emphasising the role of norms, identities, and beliefs in shaping a state's decisions (Checkel, 1998, pp.327–28; Ruggie, 1998, pp.862-64; Adler, 2002, p.96; Fearon and Wendt, 2002, p.57), constructivists view the crucial role of international norms⁶ in affecting domestic policies.⁷ In order for compliance with international agreement to occur, therefore, constructivists value both the role of legitimacy of the agreement (Hurd, 1999), and the compatibility between the international norms underlying the agreement and the existing domestic norms (Checkel 1999, 2001; Cortell and Davis, 2000, p.73). Constructivists contend that states would comply with international rules, if they perceive them to be legitimate (Koh 1997; Hurd 1999). Furthermore, international norms will be considered to be more legitimate when they resonate the values, practices, or beliefs in the domestic sphere—or when a 'cultural match' exists—and, therefore, compliance is more likely to occur (Cortell and Davis, 2000, p.73; 2005, p.6). Conversely, when the international norms conflict with understandings, beliefs, or values in the domestic sphere, domestic actors may find reasons to not comply (Cortell and Davis, 2000, p.74).

Developing countries' opposition during the TRIPs negotiation, due to their norms regarding IPR protection conflicting with the ones negotiated under the agreement, is an evidence of the incompatibility of the TRIPs Agreement, as the international norm, with their existing domestic norms. Given the fact that the TRIPs Agreement represents a different conception of

⁶ Defined as "...collective expectations about proper behavior for a given identity" (Keck and Sikkink, 1998, p.3; Risse and Sikkink, 1999, p.7) or "...a standard of appropriate behavior for actors with a given identity..." (Finnemore and Sikkink, 1998, p.891)

⁷ As can be found at realism and neo-liberal institutionalism which have variety of traditions, constructivism also cannot be treated as a single perspective. Constructivism has variants including sociological variant, feminist variant, emancipatory constructivism, etc (Ruggie, 1998, p.880). However, for the purpose of this thesis, constructivism is used in a more general term to encompass all its core features regardless the differences in its variants. For a more detailed discussion on philosophical roots and historical accounts of the evaluation of constructivism, see Adler (2002, pp.95–118).

IPR than that found in most developing countries, constructivists therefore, would expect that compliance would seem unlikely. Furthermore, from the constructivists' points of view, developing countries were expected to perceive the TRIPs Agreement as illegitimate, due to a contentious nature and a coercive pressure behind its acceptance, which also represents a hard bargaining for developing countries. Thus, borrowing constructivists' argument, as Shanker (2003, p.169–77) argues, the TRIPs Agreement essentially generates incentives for non-compliance.

It should be noted however, according to constructivists, since norms and identity of the same state can change, as do its interests, there is a possibility that, as their domestic norms changed, developing countries would have the same preferences with international norms (Ruggie, 1998, pp.863–64). Risse, Cowles, and Caporaso (2001, p.8) point out that the change in domestic norms can also be a result of the internalisation of international norms in domestic norms. Furthermore, following Finnemore's (1996) argument regarding the diffusion of international norms, IP policy change in developing countries might also be explained as a result of the diffusion of international norms to developing countries, which may differ radically from their initial beliefs. Within this context, constructivists would argue that developing countries' preference towards the TRIPs Agreement can also change, as their normative perception towards the IPR protection changes.

Nevertheless, as pointed out by Checkel (1999, p.85), constructivism fails to specify diffusion mechanisms of how international norms are transmitted to states, and whether they have constitutive effects in the domestic arena. The shortcoming in the constructivist argument is also revealed by Kollman (2011, forthcoming), arguing that the constructivist account is unable to specify "...the process by which international norms lead to domestic policy change". Kollman (2011, forthcoming) further argues that constructivists pay little attention to how domestic (particularly political) actors, structures, and/or culture would respond to "...international normative pressure for change". To overcome these weaknesses, it is important therefore, to analyse the mechanisms available to domestic politics to understand how international norms influence the domestic ones, and how domestic actors (both societal and governmental) perceive these norms, which in turn determine whether these norms translate into policy change or not.

Following Checkel's (1997, pp.476–77) argument, there are two mechanisms of which international norms reach the domestic arena: societal pressure and elite learning. In the case of societal pressure on elites, non-state actors mobilise their support for international norms, and pressurise decision makers to adopt the norms. As they received the pressure from below, the elites recalculate their strategies, which influenced their decision on policy making (Checkel, 1997, p.477). In the case of elite learning, the internalisation of international norms is a result of the exposure of domestic political elites to international norms. Within this context, when they are exposed to new information and values, as reflected in international rules, through a process of interaction, the elites themselves would internalise these new norms, which eventually led them to adopt new preferences and interests, resembling the international norms they were exposed to (Checkel, 1997, p.477).

Similarly, Risse and Sikkink (1999, p.11) argue that international norms can contribute to domestic policy change through the 'socialisation process', defined as "...the process by which principled ideas held by individuals become norms in the sense of collective understandings about appropriate behavior [sic] which then lead to changes in identities, interests, and behavior [sic]". Risse and Sikkink (1999, pp.12–22) further identifies three types of socialisation process through which domestic actors can come to internalise international norms: a process of instrumental adaptation with international norms; a process of moral consciousness-raising, emphasising process of dialogue, argumentation, and persuasion; and a process of institutionalisation and habituation of international norms in the domestic sphere.

Alternatively, in addition to their argument regarding the existence of 'cultural match' as mentioned earlier, Cortell and Davis (2005, p.74) suggest several plausible mechanisms and processes that facilitate how international norms can be introduced and embedded into the domestic sphere. According to Cortell and Davis (2005, pp.74–84), international norm may have impact into the domestic sphere through mechanisms such as, a repeated declaration by both authoritative state and societal leaders about international norms embodied in international obligations (or national political rhetoric); a link between an international norm and material interests of domestic actors; an incorporation of an international norm into domestic institutions; and a stable patterns of state interaction with other states or international organisations (or socialising forces). In short, in order to understand how international norms

influence the change in domestic norms, and whether this change translates into domestic policy outcomes, it is important to look at the mechanisms available in domestic politics.

The discussion on the change in the domestic actors' preferences concerning IPR protection, particularly among domestic political actors, due to the internalisation of international norms on IPR protection, can also be found in the existing literature. As Deere (2008, p.167) argues, in addition to 'economic power' in the form of trade sanctions, 'ideational power', promoted by major developed countries and international institutions through various mechanisms, including by providing IP-related training in developing countries, plays a significant role in shaping the preferences of the government in developing countries regarding IPR protection. Similarly, May (2004, p.822) argues that international institutions and developed country governments actively promote 'a TRIPs mind-set' among policy makers in developing countries, through various IP-related training programmes. Following these arguments, developing countries' unexpected responses towards their TRIPs obligations can also be understood as a result of the internationalisation of new IPR values triggered by the exposure of the TRIPs Agreement, by both developed countries and international institutions.

In conclusion, in explaining IP policy change, constructivists would argue that the more legitimately international agreement fits with domestic norms, the more likely policy reform is to take place. Given the contentious process and the coercive nature behind its acceptance, which represents the illegitimacy of the Agreement in the eyes of developing countries, as well as due to incompatibilities of the norms embodied in the agreement with the conception of IPR protection in most developing countries, constructivists would expect that IP policy change would be unlikely to occur. Previous discussion also demonstrated that constructivists, however, may also offer another explanation with regard to the internationalisation of norms, and the change in domestic norms regarding IPR protection, as the reasons behind IP policy change.

1.4.2 External Pressures: A Better Explanation?

In explaining IP policy change in developing countries, neo-realism pays attention to the role of external pressures in the form of great power coercion, while neo-liberal institutionalism suggests collective enforcement through the legalisation of international institutions. The existing literature in developing countries' compliance with the TRIPs Agreement is mostly consistent with the neo-realists' account, which emphasises great power coercion behind IP policy change in most developing countries. Despite the fact that the WTO, as represented by its Dispute Settlement Body (DSB), is widely regarded as a highly institutionalised and legalised international institution, the role of collective enforcement as argued by neo-liberal institutionalists, is, however, not as prevalent as in the literature on great power coercion.

1.4.2.1 Great Power Coercion: A Prevailing Cause of Compliance?

Given its emphasis on the relative power of states, neo-realism argues that compliance with international rules will vary directly with states' power (Keohane, 1992, p.177). Furthermore, since international rules mostly represent the interests of the most powerful states (Mearsheimer, 1994/1995, p.33), neo-realism argues that the dominant state (the hegemon) plays a significant role in preventing defection from those rules, through the use of side-payments and the imposition of sanctions (Gilpin, 2001, p.97). In this regard, according to neo-realists, a relatively powerful state therefore has a greater possibility to not comply with international agreements, while at the same time it has the capability to enforce sanctions against non-compliant behaviour on the part of a weaker state. Within this context, since the TRIPs Agreement represents major developed countries' interests, neo-realism expects that developed countries would enforce the rules. Developing countries, on the other hand, which are much weaker economically and politically than that of the dominant states, would comply with the TRIPs Agreement essentially because of their fear of the punishment by the great power as the rule enforcers (Hurd, 1999, p.383). In short, neo-realism would suggest that great power coercion (or its credible threat) is the critical reason behind the change in developing countries' IP legislation as a response to their TRIPs obligations.

Much of the literature on developing countries and IPR protection is consistent with the realists' view of compliance, as it emphasises coercion by a great power, particularly the US

(McIlroy 1998; Sell, 1998; Simons, 1999). Some studies indicate that, in order to ensure developing countries' compliance with the TRIPs Agreement, the US has employed 'aggressive unilateralism'⁸ through various mechanisms, including threats of trade sanctions (McIlroy, 1998, p.446). As evident from the publication of the United States Trade Representative (USTR) Special 301 Annual Report on foreign trade partners' IPR protection performance, the US government uses a threat of trade retaliation in order to induce policy changes in targeted states which are considered as having inadequate IPR protection (Blakeney, 1996, p.544; Sell, 1998, p.183). Some studies also highlight the suspension of developing countries' benefits under the Generalised System of Preferences (GSP) as a coercive tool by the US, to ensure compliance among developing countries towards their TRIPs obligations (Drahos and Braithwaite, 2002, p.86).

The existing literature on great power coercion and IPR protection reveals that developing countries also experience other forms of external pressures, and what Deere (2008, p.161–63) describes as 'diplomatic threats', which again emanate mostly from the US government, to improve their IPR protection.⁹ Diplomatic threats, for instance, are evident from repeated visits by US top officials to specifically address IPR protection issues with these countries. Much of the existing literature on Indonesia's IP policy reform confirms this argument, showing that diplomatic pressures, mainly from the US government, is behind the policy reform taken by the Indonesian government (Uphoff, 1991, p.30; Rosser, 1999, p.103; Kusumadara, 2000a, p.133). Nevertheless, as will be elaborated in Chapter 4, a closer observation reveals that, IP policy reform in Indonesia did not correspond neatly with the external pressures it received.

To sum up, by emphasising the role of great power coercion, neo-realists argue that developing countries' compliance would be more likely to take place due to their fear of punishment by the stronger state or the hegemon. In other words, neo-realists would expect that the greater the external pressure, the more likely policy reform is to take place in

⁸ As cited by Bayard and Elliott (1994, p.19) the term of 'aggressive unilateralism' was first coined by Jagdish Bhagwati to attribute the expansion of Section 301 of 1988 US Trade Act.

⁹ It should be noted that in addition to 'diplomatic threats', Deere (2008, p.161–63) also identifies 'industry pressure and threat' as other forms of external pressure. Industry pressure and threats are not only in the form of direct lobby of these multinational companies, which are mostly based in the US and the EU to the targeted governments concerning TRIPs implementation, but also through pursuing legal challenge in national courts in the targeted countries regarding IPR violations (Deere (2008), p.161–63). Nevertheless, since these pressures were not pressure by the state, this form of external pressure does not fit with the neo-realists' account.

developing countries. Previous discussions also demonstrated that, in the existing literature, pressure from the US government is widely acknowledged as a prevalent reason behind the change in developing countries' IP legislation as a response to their TRIPs obligations.

1.4.2.2 Collective Enforcement: Does the WTO DSB Really Bark?¹⁰

In explaining policy change, neo-liberal institutionalism pays attention to collective enforcement through the role of authoritative international institutions. Neo-liberal institutionalism also emphasises the costs and the benefits of non-compliance, either in terms of reduced prospects for future cooperation (reputation) or in terms of encouraging the non-compliance of others (reciprocity) (Guzman, 2002, pp.1839-40; Simmons, 2010, p.275). In this context, as the WTO is commonly regarded as a particularly highly institutionalised and legalised form of international cooperation—it provides information about violations and transaction costs, reduces uncertainty, defines compliance, and provides mechanisms for enforcing commitments (Keohane, 1988, p. 386; Keohane and Martin, 1995, p.42; Goldstein et al, 2000)—neo-liberal institutionalism would expect a high degree of compliance with the TRIPs Agreement.

As argued by Otten (1998, p.524), the WTO is well-equipped with the necessary mechanisms to ensure its members' effective implementation of the TRIPs Agreement. The first tool is a detailed scrutiny process of the TRIPs review under the TRIPs Council, which is responsible for monitoring members' compliance with their TRIPs commitments. Another important tool is the integrated dispute system of the WTO. These mechanisms, according to Otten (1998, pp.525-6), would encourage members to take great care in complying with the TRIPs Agreement.

As will be elaborated in Chapter 3, the assessment on the WTO complaints, however, reveals that, between 1 January 1995 and 31 January 2011, only a few cases had been filed at the WTO DSB concerning TRIPs-related issues. During this period, from a total of 420 disputes, only 29 cases (or 6.9 percent) were related to TRIPs issues, which were also often in combination with claims under other WTO agreements (WTO, n. d. (j); (k)).¹¹ The latest cases, filed in May 2010 by Brazil and India as complainants regarding the seizure of generic

¹⁰ The title is inspired by Pauwelyn (2010)

¹¹ See also Pauwelyn (2010) for the dispute prior to 2011.

drugs in transit, involved some EU member countries. India requested the consultation with the EU on 11 May 2010, and then was followed by Brazil on 12 May 2010 (WTO, n. d. (l); (m)). It should be noted that at the time of writing, these two cases are still in the consultation stage. Furthermore, among the TRIPs cases filed during this period, as will be explained in more detail in Chapter 3, only six developing countries—Argentina, Brazil, China (twice for different aspects, but one not specifically on TRIPs, but in combination with the General Agreement on Trade in Services (GATS)), India, Indonesia (not specifically on TRIPs, but in combination with the Trade-related Investment Measures (TRIMs) Agreement), and Pakistan—have been respondents in a TRIPs complaint (see also Appendix IV for a complete list of the involvement of WTO developing country members as respondents in the WTO TRIPs disputes between 1995 and 2011). The fact that only a limited use of WTO DSB on TRIPs-related issues against developing countries reveals that, neo-liberal institutionalist's expectations concerning the role of WTO DSB, representing a highly institutionalised and legalised form of international cooperation, only partially met. Nevertheless, as will be discussed in more detail in Chapter 3, a state being specifically targeted in an adverse ruling does seem to have an impact on its compliance with the TRIPs Agreement.

In addition to the degree of legalisation and institutionalisation of international institutions, as stated earlier, neo-liberal institutionalism also attributes the role of international institutions to facilitate reputation, reciprocity, and retaliation mechanisms as the reason behind a country's compliance. In terms of reputation, compliance is important for revealing to other countries that a country has a good quality of political institutions and traditions. As Simmons (1998, p.81) points out, reputation is significant for demonstrating that the country is a rule-of-law country, which can provide a good signal for future cooperation. Similarly Guzman affirms that:

“When a state makes a compliance decision it sends a signal about its willingness to honor [sic] its international legal obligations. A state that tends to comply with its obligations will develop a good reputation for compliance, while a state that often violates obligations will have a bad reputation. A good reputation is valuable because it makes promises more credible, and therefore, makes future cooperation both easier and less costly” (Guzman, 2008, p.33).

In other words, a country tends to comply with its international obligations in order to avoid the reputational loss due to the violations (Guzman, 2002, p.1848; 2006, p.383). In this regard, in explaining IP policy change in developing countries, neo-liberal institutionalism expects

that, the greater the concern of a country about its reputation, the more likely the policy reform will take place. As will be discussed in Chapter 5, after being specifically targeted in an adverse ruling in WTO complaint regarding its patent regime, there was a growing concern over reputational loss among the Indian political elites, which then also contributed to the government's decision to reform its existing patent regime by the end of the 1990s.

Another important aspect of countries' compliance with international agreement is reciprocity, which usually reflects a country's response to a violation done by other country as one of the mechanisms to encourage compliance and discourage non-compliance as argued by neo-liberal institutionalist. In the case of developing countries' compliance with the TRIPs Agreement, however, reciprocal violation cannot be regarded as a credible threat for developing countries especially in the wake of Uruguay Round. This is because most developing countries at that time were net consumers or net importers of IP-related products (see Chapter 2 for further explanation on this issue). As net importers of IP-related product, most developing countries did not have many IP-related products to protect, thus, they did not have any fear of IPR violation by other countries. Considering this fact, therefore, reciprocal violation cannot be seen as a credible threat, and, as a consequence, reciprocal mechanism cannot provide a satisfactory explanation in understanding developing countries' compliance.

In addition to reputation and reciprocity mechanisms, another important compliance mechanism argued by neo-liberal institutionalist is retaliation. As Guzman (2002, p.1866) argues, direct retaliation can take the form of a decision by the complying state to terminate its own compliance with the agreement (see also Axelrod and Keohane, 1985, p.249; Keohane, 1985). In this regard, as with the role of reputation, in explaining IP policy change in developing countries, neo-liberal institutionalism also expects that, the greater the concern of a country about retaliation action by other countries, the more likely the policy reform will take place. As will be discussed in Chapter 5, after being specifically targeted in an adverse ruling in WTO complaint regarding its patent regime, in addition to a growing concern over reputational loss, a fear of retaliation particularly from the US, was also prevalent among the Indian political elites. Along with the concern over reputation loss, a fear of retaliation, then also influenced the Indian government's decision to reform its existing patent regime by the end of the 1990s.

Dai (2007, pp.22–23), however, argues that while international institutions facilitate reputation, reciprocity, and retaliation by monitoring states' compliance behaviours and by providing compliance information, "...it is not clear to what extent international institutions monitor states' compliance and to what extent international institutions utilise compliance information to enforce compliance between states". Furthermore, Dai (2005, p.363) also argues that, despite the fact that international agreements have 'domestic distributional consequences', there was a little attention has been given, particularly by neo-liberal institutionalist scholars, to address domestic mechanisms of compliance, or through which domestic constituencies can influence compliance. In this context, following Dai's (2005, 2007) argument, in order to understand how international institutions influence national policies, it is important to analyse what mechanisms are available in the domestic arena.

It can be concluded that since neo-liberal institutionalism emphasises the role of authoritative international institutions, in explaining the correlation between international obligations and domestic policy change, neo-liberal institutionalism would expect that the more institutionalised an international agreement, the more significant an impact it is expected to have. As stated earlier, considering the TRIPs Agreement is a highly institutionalised and legalised form of international agreement under the WTO, neo-liberal institutionalism expected that developing countries would have a great deal to comply with the agreement, by reforming their domestic IP legislation. It should be noted, however, since there is no obligation under TRIPs that requires developing countries to go beyond and/or comply earlier than necessary, neo-liberal institutionalism, therefore, only expects developing countries to meet the minimum requirement of the TRIPs obligations and at the deadline. In other words, neo-liberal institutionalism does not expect developing countries to comply either prior to the deadline or to adopt more rigorous rules than required.

1.4.3 Bringing Domestic Politics Back in: Searching for Other Causes of Compliance

As the preceding discussion suggests, there is a substantial degree of divergence between the actual behaviour of developing countries and that suggested by the IR theories. Moreover, scholars writing in different theoretical traditions have highlighted the importance of domestic actors and institutions in mediating the impact of international norms and rules on domestic policies.¹² In this regard, therefore, in order to understand domestic policy change in response to international obligations, one also needs to look at politics within the state, by observing the interaction between, and aggregation of, divergent interests among domestic actors (Keohane, 1992; Kingsbury, 1998, p.356–57; Raustiala, 2000; Guzman, 2002). In this context, according to Kingsbury (1998, p.357), compliance can be understood as “...[the] outcomes of the political interaction of aggregated preferences or, in discursive accounts, the weighted claims and responses of the relevant actors in the discursive community”.

Furthermore, as Raustiala (2000, p.411) points out “... compliance with legal [international] rules specifically may be explained by who benefits and who loses in a given cooperative setting, the distributional impacts, at a societal level, of the regulatory structure created by the legal instrument”. Dai (2007, p.70) contends that the key questions of the analysis of domestic politics are “...to specify how competing constituencies influence a government’s decisions” and “...how a government’s accountability to divergent domestic interests influences its compliance decisions” (2007, p.72). In this regard, in order to understand domestic policy change, following Milner’s (1997, p.17) argument, it is also necessary to explore the structure of domestic preferences¹³ and various actors within domestic politics, not only because they have different policy preferences, but also because they are differentially affected by government policies.

In assessing the role of domestic actors, two distinct groups can be identified: domestic political groups (the executive (including bureaucracy in the various departments and ministries of government) and the legislature), and domestic societal interest groups (Milner,

¹² For the discussion on the impact of international norms and rules on domestic outcomes from the rationalists perspectives, see for example, Keohane (1986, 1988, 1992), Raustiala (2000), Guzman (2002), and Dai (2005, 2007); for the constructivists approaches on this subject, see for instance, Cortell and Davis (1996, 2000, 2005), Risse and Sikkink (1999), and Kollman (2011).

¹³ Defined as “...the relative positions of the preferences of important domestic actors on the issue at hand” (Milner, 1997, p.16).

1997, p.12). However, contrary to Milner's (1997, pp.33–34) simplifying assumption that these agents, executives, legislatures, and societal interest groups are assumed to be unitary and rational, as will be explained later in the subsequent chapters, the empirical study shows that each group cannot be treated as unitary actor. As can be found particularly in Indonesia's case study, which will be elaborated in more detail in Chapter 4, the executive consists of several different departments, with their own preferences towards IP policy, which determines domestic policy outcomes. Within this context, following Kingsbury's (1998, pp.356–57) argument, the actual behaviour of a state can be more completely understood by disaggregating the state into various components including understanding the difference in government institutions and ministries which have different preferences, interests, and values according to the specific roles they play.

The existing domestic politics of compliance literature also recognises three categories of domestic actors based on their policy preference, which can be identified not only among domestic societal interest groups but also factions within the government: vested, committed, and mobilised (Young, 2009). According to Young (2009), vested domestic actors favour the status quo and oppose policy change, either because they materially benefit from it, or because they have internalised a domestic norm that is at odds with the international obligation. Committed domestic actors demand policy change, whether motivated by self-interest or principled beliefs. Mobilised domestic actors, in principle, do not really care about the specific policy for its own sake, but are concerned about non-compliance, which can be because they either fear the costs of non-compliance, or because they consider compliance appropriate (Young, 2009). Within this context, whether compliance will take place or not, therefore depends on the relative power of these actors.

As will be explained later in section 1.5 on analytical framework, in the case specifically on the role of domestic actors in developing countries' compliance with the TRIPs Agreement, these key types of domestic actors of compliance in general, can transform into three different categories: pro-IP (committed domestic actors); IP-sceptics (vested domestic actors); and IP-indifferent (mobilised domestic actors), see table 1.3. While the adoption of both 'committed domestic actors' into 'pro-IP domestic actors' and 'vested domestic actors' into 'IP-sceptic domestic actors' is essentially unproblematic, the category of 'IP-indifferent domestic actors' in this thesis is used rather differently with that of 'mobilised domestic actors' category. This

is because the term ‘mobilised’ in Young’s (2009) domestic actor categories mainly refers to the engagement of domestic actors on the policy, particularly in the wake of an authoritative ruling of non-compliance, whereas, this is not necessarily the case in the role of IP-indifferent domestic actors in IP policy change in developing countries. As will become clearer later in this thesis, the ‘IP-indifferent domestic actors’ share similar concerns with the ‘mobilised domestic actors’ about the costs of non-compliance and the appropriateness of compliance; their engagement on the policy, however, is not necessarily ‘mobilised’ in the wake of an authoritative ruling of non-compliance.

It should be noted however, that, unlike the role of the external pressures explanations, particularly the role of great power coercion, which are extensively echoed in the existing literature on policy change in developing countries’ IP legislation, there is little attention to the domestic politics of developing countries’ IP policies. Deere (2008) is a rare exception. Drawing from a comprehensive empirical study on Francophone African countries, Deere (2008, p.20) argues that “[N]ational economic circumstances and political factors *within* developing countries shaped the capacity of government to filter and manage international pressures regarding TRIPs implementation...” (emphasis original). In this regard, developing countries’ responses to their TRIPs obligations are influenced by a number of domestic aspects, such as the availability of national expertise regarding IPR protection, and the degree of public engagement, including the role of NGOs in the policy making process (Deere, 2008). To date, Deere’s (2008) work is the most comprehensive study on domestic politics analysis, in understanding the implementation of the TRIPs Agreement in developing countries.

It can be concluded, therefore, by looking at politics within the state in understanding developing countries’ responses to their TRIPs obligations, IP policy reform taken by developing countries can be explained as a result of a change in the balance of domestic actors’ preferences. Within this context, domestic politics of compliance would expect that the more powerful the domestic pro-IP actors, the more likely policy reform is to take place. In addition, a larger number of IP-indifferent constituents among domestic actors would also provide a more favourable circumstance for IP policy reform to occur.

Table 1.1 summarises the expectations of the competing perspectives in understanding developing countries’ responses to their TRIPs obligations. Given their emphasis on both the

role of legitimacy of the TRIPs Agreement and the compatibility of international and domestic norms, constructivists would expect that developing countries would be unlikely to comply with the TRIPs Agreement, which is viewed as not only illegitimate but also incompatible with their domestic norms. Constructivism, however, expects that as domestic norms in developing countries change due to socialisation and the internalisation of international norm under TRIPs, domestic IP policy reform would also be more likely to take place. By focusing on the role of great power coercion, neo-realists predict developing countries' compliance would take place because of their fear of punishment by stronger states. As with neo-realism, neo-liberal institutionalism also pays attention to the role of external pressure behind compliance. Neo-liberal institutionalism however, emphasises the role of collective enforcement, represented by authoritative international institutions, in explaining change in developing countries' IP legislation. As the TRIPs Agreement is governed under the WTO, which is widely argued as a highly institutionalised international institution, neo-liberal institutionalism expects policy reform would take place as developing countries' responses to their TRIPs obligations. Unlike other perspectives that treat a state as a unitary actor, domestic politics of compliance analysis, which focuses on the balance of various domestic actors' preferences, argues that compliance would take place when pro-IP domestic actors outweigh the anti-IP domestic actors.

Table 1.1 Summary of Competing Perspectives' Expectations on Developing Countries' IP Policy Change

	Constructivism	Neo-realism	Neo-liberal institutionalism	Domestic politics
General expectations of compliance	<p>The more legitimate the international agreement, the more likely policy reform will take place</p> <p>The more the international agreement fits with domestic norms, the more likely policy reform will take place</p>	The greater the external pressure, the more likely policy reform will take place	<p>The more institutionalised an international agreement, the more significant impact it is expected to have</p> <p>The greater the concern about reputation/reciprocity/retaliation, the more likely policy reform will take place</p>	The more powerful the domestic pro-IP actors are, the more likely policy reform will take place
Overall expectation regarding developing countries and TRIPs	No policy reform	Policy reform should have occurred	Policy reform should have occurred	No overall expectation ¹⁴

1.5 Analytical Framework

In order to explain the change in developing countries' IP legislation as a response to their TRIPs obligations, this thesis combines a survey of the timing and quality of 102 WTO developing country members' legislation across patents, copyrights, and trademarks,¹⁵ with detailed case studies of changes to intellectual property legislation in India and Indonesia, which are both unlikely cases for compliance, but reflect different domestic political circumstances. By analysing these three main IPR categories in selected case studies, this thesis intends to compare policy change, not only *between* different case study countries, but also to compare policy change *within* the same country for different aspects of IPR categories.

¹⁴ Since the tendency of domestic politics of compliance analysis is a positive account of behaviour rather than predictions, domestic politics analysis cannot provide a general model of compliance (Guzman, 2000, p.1839; Gourevitch, 2002, p.321).

¹⁵ In the early stage of the study, the survey observed 105 WTO developing country members according to the World Bank's categories of country/territorial's economy levels. However, by the end of December 2010, some developing countries (Croatia, Latvia, and Poland) were already upgraded to a high income economy.

Since this thesis focuses on explaining domestic policy change in developing countries' domestic IP legislation, in this thesis, therefore, policy change is treated as the dependent variable. As explained earlier, in order to test external pressures explanation (argued by both neo-realists and neo-liberal institutionalists) and domestic politics of compliance analysis, the possible explanations as to the reasons behind policy change, such as great power coercion, authoritative international institutions, and domestic actors' preferences, are then going to be treated as the independent variables.

In order to assess policy change, this research pays attention to whether the observed developing countries have adopted a minimum standard of IPR protection, and its mechanisms for the domestic enforcement, or not, by the designated period. This can be measured by looking at the timing of the adoption of IP laws in national legislation, and the quality of the IP legislation adopted. As will be explained in more detail in Chapter 3, since different members of the WTO have different deadlines according to their respective economic level of development, the timing of the adoption of major IP law in developing countries is relative to the deadline for compliance for each country (see table 2.2 in Chapter 2). Regarding the quality of the legislation adopted, as will also elaborated further in Chapter 3, the quality of the legislation is assessed by utilising Deere's (2008, p.74) classifications of a country's IP laws, which is based on a survey of the extent to which developing countries took advantage of TRIPs options and safeguards, as reflected in their legislation (see table 3.2 in Chapter 3). By employing these measurements, this thesis will test the rival expectations derived from the IR theories of compliance, and echoed in the existing literature on developing countries and the TRIPs Agreement, as summarised in table 1.1.

As the role of great power coercion is crucial for neo-realism, this thesis uses the substantial pressure by the US, which is widely regard as the hegemon, as a proxy for the independent variable of great power coercion. As briefly discussed earlier, it is widely acknowledged in the existing literature that the US is largely regarded as being particularly aggressive in pursuing trade barriers and in protecting IPR (McIlroy, 1998; Simons, 1999; Drahos and Braithwaite, 2002). Furthermore, the US trade laws are well-equipped to exercise pressure on foreign trade partners in order to protect IPR (McIlroy, 1998; Simons, 1999; Drahos and Braithwaite, 2002). The US also has applied significant direct pressure on targeted states, which are highly

dependent on access to the US market, and, therefore, have made them vulnerable to US threats of trade sanctions (Sell, 1998, p.177). As can be observed from the existing literature, US aggressiveness is resonated in various US trade policies, including the suspension of developing countries' benefits under the GSP, the annual publication of the USTR Special 301 Report on its trading partners' adequacy to the US standards of IPR protection, and the USTR National Trade Estimate Report, which provide a great tool of leverage for the US to negotiate improvements in foreign IP regimes. For these reasons, therefore, US pressure is utilised as a proxy for the independent variable of great power coercion.

As briefly stated earlier, publication of the USTR Special 301 Annual Report on foreign trade partners' IPR protection performance allows the US government to use the threat of trade retaliation in order to induce policy changes in targeted states which are considered to have inadequate IPR protection (Blakeney, 1996, p.544; Sell, 1998, p.183). It should be noted that Special 301 is Section 1301 of the US Omnibus Trade and Competitiveness Act of 1988 (Grier, 2005). It is sometimes confused with Section 301, but the two are different. Section 301 of the Trade Act of 1974 is "...much broader than Special 301 because Section 301 can be used to address foreign unfair practices affecting American exports of goods or services, whereas Special 301 which was created during the Uruguay Round deals specifically with IP" (McIlroy, 1998, p.447).¹⁶ In this context, Special 301 is primarily designed to enhance the US's ability to negotiate improvements in foreign IP regimes. This is done by identifying those countries that deny 'adequate and effective protection' of IPR, or that refute 'fair and equitable market access' to US IP holders (Drahos and Braithwaite, 2002, p.89).

As also extensively identified in the existing literature, in addition to publication of the USTR Special 301 Annual Report, another significant coercive tool used by the US is the suspension of developing countries' benefits under the GSP. Under the US GSP Programme, a beneficiary country was permitted to export qualified products into the US market on a duty-free basis (Drahos and Braithwaite, 2002, p.86). Initially, when the GSP began working in 1976, protection of IPR was not part of the criterion of eligibility for a country to receive GSP benefits. The IPR protection becoming the GSP's condition only emerged later, in 1984, due

¹⁶ Prior to the introduction of Special 301, in 1985, for example, the US took action against the Republic of Korea and Brazil under Section 301, due to the limited scope of these countries' legal protection for patent, trademark, and copyright (Blakeney, 1996, p.544). Similarly, in 1987, under Section 301, the US increased tariffs on Brazilian exports in order to pressurise the Brazilian government to improve its protection for pharmaceutical products (Blakeney, 1996, p.545).

to persistent pressures from the US industry associations (Sell, 1998, p.195; Drahos, 2002a, p.773; Eren-Vural, 2007, p.121). In this regard, the GSP mechanism indeed provides room for the US to develop a carrot and stick approach to ensure compliance among developing countries towards their TRIPs obligations, as well as the globalisation of IP with the US standard (Drahos and Braithwaite, 2002, p.86). As Drahos and Braithwaite (2002, p.87) further argue, “[S]tates complying with US demands on intellectual property would be rewarded with GSP benefits while those that did not might lose them”.

In order to get at neo-liberal institutionalist explanations of domestic policy change, this thesis also considers the WTO complaint as a proxy for the independent variable of the role of authoritative international institutions. The WTO complaint represents the high-watermark of internationalised enforcement of the TRIPs Agreement, since it leads to binding third-party adjudication, and also the imposition of sanctions. This thesis, therefore, utilises the data from WTO TRIPs disputes, with particular attention to developing countries’ involvement as respondents.

In this regard, in assessing the role of external pressures in detailed case studies, the level of external pressures is categorised from strong to none (see table 1.2). External pressure is considered as strong if it has immediate effect, such as in the forms of threats and actual action of trade sanctions. This also includes being on the USTR Special 301 Report with Priority Foreign Country (PFC)¹⁷ status, as well as being a respondent in the WTO dispute on a TRIPs-related issue. External pressure is regarded as moderate when there is no immediate effect, such as in the forms of pressures and lobbies from foreign industry and government, including being on the USTR Special 301 Report with Priority Watch List (PWL) or Watch List (WL) status. The lowest level of pressure is when there is no pressure that can be identified.

¹⁷ Chapter 3 will elaborate further on the classification of a country’s status on the USTR Special 301 Report.

Table 1.2 Levels of External Pressures

Level	Measurement
Strong	<ul style="list-style-type: none"> • On the USTR Special 301 Report with PFC status • Brought to the WTO dispute on a TRIPs issue • Threats, and the actual action of trade sanctions, including withdrawal of GSP
Moderate	<ul style="list-style-type: none"> • On the USTR Special 301 Report with PWL or WL status • Diplomatic lobby from major developed countries' government • Industrial pressure from multinational companies
None	<ul style="list-style-type: none"> • No pressures identified

Concerning the third independent variable of domestic actors' preferences, based on their policy preferences—which can be influenced by material benefits or principled beliefs/ideological stands—on domestic IP legislation, domestic actors from both political and societal interest groups can be categorised into three constituents: anti-IP policy reform (or IP-sceptics), pro-IP policy reform, and IP-indifferent.¹⁸ As summarised in table 1.3, the anti-IP policy reform represents domestic actors that oppose policy change, either because they materially benefit from the existing domestic legislations, or because they have internalised a domestic norm that is incompatible with their TRIPs obligations. This could be a domestic industry benefiting from low IPR protection—such as local producers of counterfeit goods, or a local industry relying on reverse engineering—or NGOs—which are mostly concerned with the misappropriation of traditional knowledge patented by multinational companies or bio-piracy.¹⁹

The pro-IP policy reform, on the other hand, represents domestic actors who, whether motivated by self-interest or principled beliefs, favour policy change. Domestic societal actors, can include local authors and musicians who are concerned about protecting their IP-related work, or a domestic industry benefiting from a strong IPR protection regime. For domestic

¹⁸ The assessment on domestic actors' preference has highly relied on the analytical framework developed in a trade policy study from International Political Economy (IPE), which disaggregates the state to analyse how its internal process explains foreign economic policy outcomes (Gourevitch, 2002, p.310). As Gourevitch (2002, p.311) further argues, domestic actors' preferences are not always driven by economic or material benefits, but can also be due to an ideological or values system.

¹⁹ According to Dutfield (2006b, p.6), bio-piracy can be defined as "...the misappropriation of genetic resources and/or traditional knowledge through patent system...[and]...the unauthorised collection for commercial ends of genetic resources and/or traditional knowledge". Similarly, Shiva (2001, p.49) defines bio-piracy as "...the use of intellectual property systems to legitimize [sic] the exclusive ownership and control over biological resources and biological products and processes that have been used over centuries in non-industrialized [sic] cultures".

political actors, it is mostly evident among government officials eager to attract technologically sophisticated FDI.

In the middle of these two standpoints, can be identified the IP-indifferent constituents, which mainly reflect the domestic actors' preference who essentially do not care about IPR protection for its own sake, but rather view policy reform as necessary, either because of considering the costs of non-compliance, or perceiving compliance as appropriate. This can be seen mostly among government officials who view that policy reform should be taken because, as a signatory of the international agreement, a country should respect that agreement; or, simply in order to avoid trade sanctions.

As mentioned earlier, following domestic politics of compliance analysis, the bigger the number of pro-IP constituents in domestic actors the bigger the chance for IP policy change to take place. In addition, a larger number of IP-indifferent constituents among domestic actors, would also provide a more favourable circumstance for IP policy reform to occur.

Table 1.3 Domestic Actors' Preference Categories in IP Policy Reform

General Domestic Actors' Preferences of Compliance	Domestic Actors' Preferences over IP Policy Reform	Motives/Objectives
Committed	Pro-IP	<ul style="list-style-type: none"> • Encourage domestic invention and innovation • Gain foreign investment and technology • Protect their rights (including authors and musicians) • Protect their IP-related business
Mobilised ²⁰	IP-indifferent	<ul style="list-style-type: none"> • Respect international trade agreements • Concern over reputation • Avoid trade sanctions
Vested	IP-sceptics	<ul style="list-style-type: none"> • Fear misappropriation of traditional knowledge and bio-piracy • Fear negative implications for access to affordable medicine • Protect their business (producers of counterfeit products and/or local industry with no capacity to invest in research and development activities)

²⁰ See previous section for the explanation of the difference in the term of 'mobilised' in domestic politics of compliance in general and that of 'IP-indifferent' in domestic politics of developing countries' compliance with the TRIPs Agreement.

Testing the role of external pressures (both in the forms of great power coercion and collective enforcement), and domestic actors' preferences regarding IPR protection, is therefore the main purpose of this thesis. This is done in order to elucidate why and how IP policy change occurs in developing countries, despite their strong opposition during its negotiations and inherent conflicting norms embodied in the agreement.

1.6 Research Methods

This thesis is designed as a case studies-analysis. As explained earlier, the case studies analysed in this thesis intend to answer the question of why and how domestic IP policy change takes place, by assessing the role of external pressures, and analysing the preferences of domestic actors and the interaction among them on IP policy reform. This thesis starts with a set of expectations derived from competing theories regarding developing countries' response to their TRIPs obligations. Through the examination of case studies, this thesis, therefore, examines those expectations provided by previous research and the competing theories (De Vaus, 2001, p.221).

As stated earlier, this thesis focuses on developing country members' legislation across patents, copyrights, and trademarks, with detailed case studies of changes to intellectual property legislation in India and Indonesia. The two countries are selected because they represent unlikely cases in the change in developing countries' domestic IP legislation which, according to Keohane (1992, p.176), embodies an 'inconvenient obligation'. India is selected because it is well-known as one of the developing countries that were strongly against the inclusion of the TRIPs Agreement during the Uruguay Round. However, when the agreement came into force, by the end of its transition period, India had already fulfilled its TRIPs obligations, and even adopted copyright and trademark laws with more rigorous rules than those required by TRIPs. Indonesia was also considered an unlikely case, since IPR protection was essentially unknown in its legal traditions prior to TRIPs and it even contradicted its domestic norms. Yet, after the TRIPs negotiations were concluded, Indonesia was among the WTO developing countries that fulfilled its TRIPs obligation by reforming its IP legislation earlier than required, and adopted more rigorous rules than those outlined by TRIPs,

particularly for its trademark and patent legislation (see Chapter 3 for a more detailed discussion on the case studies selection and justification).

In addition, despite their similarities, Indonesia and India are also selected because the two have different features concerning their domestic politics, particularly the role of domestic actors in IP policy issues. In this regard, India is selected as a representative of a developing country with the strong involvement of domestic societal actors, while Indonesia is selected as a representative of a developing country with a limited involvement of domestic societal actors. The variance in political process as to whether a bottom-up (as in the case of India) or a top-down (as in the case of Indonesia) process is important for the analysis to locate the main domestic actors in IP policy process. In a more 'top-down' political process, it is crucial to analyse different domestic political actors (government officials or different government institutions). In a more 'bottom-up' political process, in addition to domestic political actors, it is also important to pay attention to the various domestic societal actors' preference in policy making process. In doing so, it is expected to elucidate the unexplained variance in developing countries' response to their TRIPs obligations. As will be discussed further in Chapter 5, the policy change in developing countries with the strong involvement of domestic societal actors, as reflected from the case study of India, is a result of the interaction of divergent domestic societal actors, and represents the interest of the strongest actors among domestic societal actors. On the other hand, as will be discussed in Chapter 4, the policy change in developing countries with a limited level of domestic societal actors' involvement in IP policy making, as in the case of Indonesia, can be explained as a result of the calculation (or pragmatism) of the dominant government institutions in order to respond to external pressures.

In analysing the case studies, this research relies on documentary evidence, which are gathered from the publicly available official documents from case study countries, the WTO (and also its predecessor the GATT) Secretariat, the WIPO Secretariat, the US government, and other international organisations. The documentary evidence is crucial to assess the state of compliance in terms of both the timing of the adoption of IP legislation and the quality of IP legislation adopted. The initial findings based on documentary evidence therefore are used as the basis for deeper analysis through interviews. The official documents from case study governments include the texts of main IP laws, IP statistics, and other official documents that are gathered from offices dealing with the administration of patent, copyright, and trademark

protection. The official documents from the WTO and the GATT Secretariat include participants' position papers and proposals during the TRIPs negotiations, the TRIPs Council Annual Reports, the WTO developing country members' official notification to the TRIPs Council, the WTO DSB reports, and other relevant documents. In addition, this thesis also uses the WIPO countries' notification reports, particularly to gather information regarding developing countries legislation, which is unavailable from the TRIPs Council's documents. The official documents from the US government include the USTR Special 301 Annual Reports and the USTR National Trade Estimate Annual Reports. The publication from the US government is particularly important for identifying the degree of external pressures received by developing countries. This thesis also uses publications and reports from other international organisations, including the United Nations Convention on Biological Diversity (CBD), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), and the World Bank. The policy papers from international non-governmental organisations and independent research institutes dealing with developing countries and IPR protection, are also widely used in this study, and, where relevant, trade associations' publications. It should be noted that for the Indonesian case study, official documents, the texts of main IP laws, and any other published materials in the Indonesian language are also extensively used in this study.

The initial findings on the state of compliance based on documentary evidence are further analysed through interviews especially to understand why and how the case study countries comply with the TRIPs Agreement. For this purpose, elite interview is employed as a research tool to gain information, because this research aims to understand the policy process with key policy makers and experts on related issues. Here, following Morris (2009, p.209), elites are defined as 'those with close proximity to power' or 'with particular expertise'. These include, not only policy makers from the case study countries, but also key figures of both governmental and non-governmental institutions dealing with the TRIPs issue. As the nature of this research is to explore deep information and knowledge (Johnson, 2002, p.106), an in-depth interview technique is used, and all the interviews were conducted by in-person interviews except for one interview which was conducted by telephone. For this purpose, two field trips were undertaken for this research. The first field trip was in Jakarta from August to September 2009, and the second field trip was conducted in Geneva during November 2009. In all, this research draws on 21 not-for-attribution interviews. In Jakarta, the interviews were

conducted with government officials, a former diplomat, an NGO representative, and researchers from a state research institute. It should be noted that the interviews with Indonesian government officials and Indonesian NGO representative were conducted in the Indonesian language. In Geneva, the interviews were conducted with representatives of permanent mission case study governments, a counsellor of the US mission in Geneva, counsellors of the WTO Intellectual Property Division, a Geneva-based journalist dealing with IP issues, a representative of Geneva-based international organisation, and representatives of Geneva-based research institutes dealing with developing countries and IPR protection (see appendix X for a complete list of the interview).

Nevertheless, due to financial scarcity, I was not able to conduct my field research in India. In this regard, it seems that compared to the Indonesian case study, for which I could get quite a significant number of interviews, the number of interviews for the Indian case study is incomparable. However, despite facing this problem, during my field research in Geneva, I had a chance to have an interview with a former Indian delegate, who was involved in the TRIPs negotiation during the Uruguay Round, and also to have an interview with a former Indian official who had a significant role during the amendment process of IP legislation in India after the birth of the TRIPs Agreement. Therefore, even though I could only have a limited number of interviews for my India case study, it does not necessarily mean that the validity and the substance of the assessment on the Indian case study are then compromised. Moreover, the lack of primary data from interviews for the Indian case study is compensated by the fact that, compared to the Indonesian case study, other sources from official documents for the Indian cases study, including parliamentary debate in two Houses are, more extensively accessible.

1.7 Outline of the Thesis

The structure of this thesis is outlined as follows. Chapter 2 provides a comprehensive explanation of the TRIPs Agreement, in order to establish why policy change in developing countries' domestic IP legislation, as a response to their TRIPs obligations, is puzzling. In this regard, the chapter presents the key areas of contention, the negotiation tactics, and how the agreement was finally reached. The chapter, in essence, argues that, by establishing the minimum standards of terms and scope of protection for a wide range of IPR categories, and

obligating the members to enforce these standards in their domestic legislation, the TRIPs Agreement poses inconvenient obligation for developing countries, since IPR protection was largely absent in most developing countries' domestic legislation prior to TRIPs. The chapter also discusses the development of the TRIPs Agreement since the Uruguay Round to date, in order to illustrate further the continuation of developing countries' dissatisfaction with the TRIPs Agreement, even 17 years after the conclusion of the Uruguay Round.

Chapter 3 presents the results of a survey on the implementation of the TRIPs Agreement of 102 WTO developing country members, on the timing and quality of their domestic IP laws across patents, copyrights, and trademarks. Based on the analysis of both the timing and the quality of legislation adopted, the chapter argues that none of the established IR theories adequately explain the variance in the change in developing countries' IP legislation. The fact that the vast majority of developing countries took the necessary steps to reform their IP legislation as a response to their TRIPs obligations, challenges the constructivists' expectations of non-compliance by developing countries. Furthermore, the empirical findings also undermine both neo-realists and neo-liberal institutionalists' accounts on the role of external pressures, either in the form of great power coercion, or the legalisation of international institutions, in explaining IP policy change. Based on the results of the survey, India and Indonesia are selected for deeper analysis, since the two represent unlikely cases for compliance, but reflect different domestic political circumstances.

The case study of the implementation of the TRIPs Agreement in Indonesia is the main focus of Chapter 4. The chapter argues that, contrary to both neo-realists and neo-liberal institutionalists' expectations, IP policy change in Indonesia does not always correspond to external pressures. This is because IP policy reform took place with both the presence and the absence of external pressures. The empirical findings demonstrate that IP policy reform took place in the absence of substantial external pressure, when there was a shift in the government's preference regarding IPR protection, from sceptical (particularly concerning patents) prior to and during the TRIPs negotiation, to being more favourable in the TRIPs era. The Indonesian case study also demonstrates that, there was no sufficient evidence to support the neo-liberal institutionalists' argument regarding the role of authoritative international institutions in influencing domestic IP policy change. As will become clearer in the chapter, a closer observation on the interaction among domestic actors further reveals that, in a relative

absence of domestic societal actors' involvement in the policy making process, government institutions play a critical role in determining the process of IP policy change in Indonesia.

Chapter 5 serves to analyse the domestic IP policy change in India. The chapter argues, as in the case of Indonesia, India's IP policy reform took place both in the presence and the absence of external pressures. Moreover, the external pressures explanation is unable to capture the difference in India's response to its TRIPs obligations for different types of IP category. Empirical findings demonstrate that India's response to its TRIPs obligations varies across different types of IPR, and correlates strongly with the relative strength of the pro-IP domestic constituents for different IPR categories. The chapter further argues that the empirical evidences in the Indian case study, to some extent, arguably supports the neo-liberal institutionalist account of the role of reputation and retaliation behind domestic policy change. This is particularly evident as, after being brought to the WTO dispute, the Indian government used reputational loss and fear of retaliation to overcome domestic opposition to policy reform. Nevertheless, the case study of India also demonstrates that analysing domestic politics of compliance is the key to understanding how external pressures translate into domestic policy change.

The last chapter concludes the discussion of the previous chapters. In addition to underlining the limitations of the study, the chapter also highlights both the theoretical and empirical contributions of this thesis, drawing from the empirical findings in the detailed case studies discussed in the last 2 chapters. The chapter argues that, since major IR theories of both neo-realism and neo-liberal institutionalism, which emphasise external pressures, are unable to provide a satisfactory explanation regarding developing countries' responses to their inconvenient obligations, this thesis confirms the necessity to bring domestic politics back into the study of IR. The chapter also suggests that a comprehensive understanding of IP policy reform in developing countries cannot be achieved without looking at developing countries' different approaches to different IP categories, which correspond to the existence, or non-existence, of domestic constituents for various types of IPR protection. The last part of the chapter concludes the overall discussions, by underlying how these main findings contribute to our understanding concerning developing countries in the current international trade regime.

Chapter 2

The TRIPs Agreement: An Unlikely Case for Developing Countries' Compliance

2.1 Introduction

This chapter provides the basic background information on the TRIPs Agreement, in order to highlight why the developing countries' responses to their obligations under the TRIPs Agreement is puzzling. The wide differences between developed and developing countries in understanding IPR, and their rival views on how they can be protected under a multilateral framework, resulted in a contentious and long negotiation process. Since its conclusion mainly owed to the hard bargaining by major developed countries, led by the US, the EU, and Japan, arguably the legitimacy has become one of the controversial aspects of the agreement. Furthermore, since developing countries are obliged to adopt minimum standards of IPR protection—a subject which is alien for most of them—in their national legislation, this has made TRIPs become an unwelcome agreement for developing countries.

To fulfil its aim, the first section of the chapter explains what IPR is before discussing the contending perspectives in understanding IPR, and its implication in the effort to design a multilateral framework for IPR protection. Since IPR is understood differently in different cultures, there is no common conception in how to protect them. This tension was reflected in the difference between developed and developing countries' positions during the Uruguay Round negotiations, which will be the focus of the next section of the chapter. The discussion on the negotiation process pays particular attention to the key area of contention, the negotiating tactics, and how the agreement was finally reached. However, before presenting the negotiation process, the chapter will briefly highlight international regulations of IPR prior to TRIPs. This is important in order to understand how far the new agreement departs from its predecessors. Before concluding the discussion, this chapter will provide a brief explanation of the development of TRIPs since the Uruguay Round. This section intends to illustrate the continuation of developing countries' dissatisfaction with the TRIPs Agreement, even after the conclusion of the Uruguay Round. The last part of the chapter concludes the main arguments, and provides the basis for the discussion of next chapters.

2.2 What are Intellectual Property Rights (IPR)?

Intellectual property (IP) can be broadly understood as “...creations of the mind, inventions, literary and artistic works, and symbols, names, images, and designs used in commerce” (WIPO, n. d. (a)). While intellectual property rights (IPR) can be defined as “...the rights awarded by society to individuals or organisations principally over creative works, inventions, literary and artistic works, and symbols, names, images, and designs used in commerce” (UK CIPR, 2002, p.12; WTO, n. d. (a)). These rights grant a person or a firm control over the use of the product—which encompasses a wide range, from ideas and images, sounds and symbols, words and music, text and designs, to formulae and blueprints—as well as enables the holders to determine the distribution and price of the product (Capling, 2004, p.180). More importantly, by possessing this right, the creator or the owner can exclude others from making unauthorised use of their creation for a certain period granted under the law. In this regard, since the creator or the owner is granted an exclusive right over the protected products, this in turn provides material benefits as the incentive for the right-holders.

Following this definition, there can be identified several types of IPR, which can be divided into two main categories of creations: the first category is industrial property and the second category is artistic and literary property (WIPO, n. d. (a); WTO, n. d. (a)) (see table 2.1). Industrial property has functional commercial innovation or values; this includes patents, industrial designs, trademarks, geographical indications, and trade secrets. While specific types of IP, such as copyrights, is considered as artistic and literary property, since it has cultural or aesthetic character. This includes literary and artistic works, such as novels, poems and plays, films, musical works, drawings, paintings, photographs and sculptures, and architectural designs. According to WIPO (n. d. (a)), rights related to copyright include those of performing artists in their performances, producers of phonograms in their recordings, and those of broadcasters in their radio and television programmes. However, current technological developments, with the emergence of some hybrid *sui generis* systems, have made the distinction between industrial property and that of artistic and literary property rather unclear. In this regard, hybrid *sui generis* systems include integrated computer circuits, plant breeders’ rights, and data protection (UK CIPR Report, 2002, p.13).

Table 2.1 Specific Types of IPR

Main Categories	Specific Types	Definition
Industrial Property	Patents	Granted for all types of processes and products, including those related to the primary sector of production, namely agriculture, fishing or mining, etc. In order to be patentable, an invention usually needs to meet the requirements of novelty (previously unknown to the public), inventive step (or non-obviousness, containing sufficient innovativeness to merit protection) and industrial applicability (or usefulness).
	Trademarks	Signs or symbols (including logos, names, and particular words such as personal names, letters, numerals, figurative elements and combinations of colours as well as any combinations of such signs) registered by a manufacturer or merchant to identify goods and services.
	Geographical Indications	Indications which identify a good as originating in the territory of a member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the goods is essentially attributable to its geographical origin. These are signs or expressions used to indicate that a product or service originates in a particular country, region or place.
	Industrial Designs	Protects the ornamental or aesthetic aspect (shape, texture, pattern, colour rather than the technical features) of an industrial article.
	Trade secret	Confidential information of commercial value, including confidential business information and know-how, such as lists of clients or recipes which can be an enterprise's most valued asset. Unlike patents, trade secrets are protected as long as the information has commercial value and is kept secret.
	Utility Model	Protection is given to the functional aspect of models and designs, generally in the mechanical field. Utility models—which are concerned with the way in which a particular configuration of an article works—are distinct from industrial designs, which are only concerned with the aesthetic character of an article.
Artistic and Literary Property	Copyrights	Protection to authors of original works of authorship, including literary, artistic, and scientific works.
Sui Generis Systems	The layout (or topography) of integrated circuits	A specific <i>sui generis</i> form of protection for design of integrated computer circuits. Integrated circuit means a product which is intended to perform an electronic function. Layout-design (topography) means the three-dimensional disposition of an integrated circuit or prepared for an integrated circuit intended for manufacture.
	Plant Breeders' Rights	Granted to breeders of new, distinct, uniform and stable plant varieties.
	Database Protection	Protection in respect of databases, preventing unauthorised use of data compilations, even if non-original. Exclusive rights to extract or utilise all or a substantial part of the contents of the protected database are granted.

Sources: The Washington Treaty of 1989; The TRIPs Agreement of 1994; South Center, 1997; Matthews, 2002; the UK CIPR Report, 2002; UNCTAD, 2002; Matsushita, Schoenbaum, and Mavroidis, 2006; WIPO, n. d. (b, g).

Note: The TRIPs Agreement sets minimum standards on all the categories of IPR, with the exception of utility models and breeders' rights (South Center, 1997, p.4).

2.3 International Regulations of IPR Protection prior to WTO

The protection of IPR is not a new issue in the international arena. According to Gutowski (1999, p.713), IPR has been protected in various international conventions since the 19th century. Moreover, trademark protection can be traced back to ancient Greece and Rome (Emmert, 1990, p.1337). Furthermore, as Emmert (1990, p.1337) argues, “[P]atents appeared in the fourteenth century in the form of state-guaranteed monopolies called “privileged”; they were not granted as a reward for innovation or creativity, however, but rather as a political favor [sic] or simply to generate money for the authorities”. In addition, a modern patent, in the form of a ten-year monopoly, was first introduced in Venice in 1474 to creators who registered their novel and workable ideas (Emmert, 1990, p.1337).

Some of the first key international agreements for the protection of IPR were the 1883 Paris Convention for the Protection of Industrial Property and the 1886 Berne Convention for Protection of Literary and Artistic Works. As there is no requirement of a minimum standard of protection, the coverage of these agreements has been quite uneven (Capling, 2004, p.182). These two conventions also suffered from the lack of effective enforcement and sanction provisions (Groombridge, 1999, p.997), as well as dispute settlement mechanisms (Gervais, 2003, p.10). Furthermore, the absence of detailed rules on the enforcement of rights before national judicial administrative authorities has resulted in each member country being free to determine its own level of protection and its own enforcement mechanisms (Capling, 2004, p.182).²¹

The increasing importance of intellectual property in international trade (Gutowski, 1999, p.714), and the greater recognition of the contribution of technology to competitiveness (South Center, 1997, p.10), began to push IPR protection up the international trade agenda during the 1970s. US firms were at the forefront of these efforts, and, with the support of business groups

²¹ A comparison between the TRIPs Agreement and its predecessors is summarised in table 2.3.

in the EU and Japan, managed to persuade their respective governments that intellectual property should be an important issue to address in the Uruguay Round of multilateral trade negotiations (Sell, 2000b, p.176).²²

2.4 TRIPs and Developing Countries: An Unwelcome Agreement

As a result of the advocacy of the global business collaboration led by US-based firms, the launching of the new multilateral trade round in September 1986, saw IPR protection emerge, not only as one of the most important, but also one of the most controversial trade issues. During the negotiation process, there were two opposing blocs within the TRIPs negotiating group.²³ Such divisions largely reflected the gap between developed countries, which are the net exporters or the net producers of IP, and developing countries, which are the net importers or the net consumers of IP (Hoekman and Kostecki, 2001, p.284; Wade, 2003, p.624). The negotiations on trade-related aspects of IPR during the Uruguay Round therefore can be seen “...as a battle between ‘developed’ and ‘developing’ countries, the ‘industrial countries’ versus the ‘Third World’, the ‘North’ versus the ‘South’” (Capling, 2004, p.185). In order to argue that the agreement can be considered as an unwelcome international agreement, especially for developing countries, this section discusses the contentious process of the TRIPs negotiations, and shows that, only through hard bargaining by developed countries, was the agreement finally achieved.

2.4.1 Sharp Divisions: The Pro- Vs the Anti-TRIPs

The two opposing blocs within the TRIPs negotiating group can be identified as the pro-TRIPs and the anti-TRIPs. The pro-TRIPs²⁴ was led by the US supported by its industrialised counterparts, particularly, the EU and Japan. The pro-TRIPs Agreement was “...pushing for a new and comprehensive agreement on intellectual property” (Capling, 2004, p.184), which would cover a broader aspect of IPR, accompanied by a strong dispute settlement system, and

²² For further discussion related to the significant role of the US business community and its global corporate networking behind the inclusion of IPR protection on the agenda of multilateral trade negotiations during the Uruguay Round, see Sell (1999, 2000a, 2000b) and Matthews (2002).

²³ The issue related to IPR protection was discussed in the Negotiating Group on Trade-Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods. This was one of the 14 negotiating groups established during the Uruguay Round.

²⁴ Watal (2001) uses the term *demandeurs* to refer to developed countries led by the US, the EU, and Japan during the TRIPs negotiations.

harmonisation of domestic laws (Hoekman and Kostecki, 2001, p.283). The opposite position was the G10²⁵ developing countries, led by India and Brazil. The G10 developing countries refused to negotiate any broader discussion of the IPR issue. They insisted on negotiating just a limited scope of IPR, namely, only in the context of the prohibition of trade in counterfeit goods (Capling, 2004, p.184; Hoekman and Kostecki, 2001, p.283). The argument from each bloc is discussed in more details in the following sections.

2.4.1.1 The Pro-TRIPs: Major Developed Countries' Demand

As can be seen from the US's initial suggestions for negotiation on TRIPs, the main reason behind developed countries' efforts to include IPR protection during the Uruguay Round was the belief that the protection of IPR promotes innovation and intellectual creativity, and thus encourages investment in commercialisation of new ideas and technology (US, 1987a, p.1). In this view, the adequate protection of intellectual property would contribute to economic growth and development, through, for example, the increased transfers of technology and of direct international investment (EU, 1988, p.2). In other words, strong IPR protection and its enforcement are essential to the expansion of international trade, investment, and distribution of technology, as well as economic development.

The Pro-TRIPs developed countries further argued that inadequate and ineffective protection and enforcement of IPR would result in trade distortions, since failure to provide IPR protection is assumed to deter the inventors and authors to enter the unprotected markets for their products (US, 1987a, p.1). The immediate effect is therefore to eliminate or diminish trade in potential markets, while in the long term it will discourage the investment on research and development. In other words, the absence of adequate protection of basic IPR would not only result in the reduction of voluntary international transfers of technology and capital, but it would also become disincentive for investment in research and development (EU, 1988, p.2).

²⁵ The Group of Ten developing countries consist of Argentina, Brazil, Cuba, Egypt, India, Nicaragua, Nigeria, Peru, Tanzania, and Yugoslavia (Matthews, 2002, p.24). In later development, there are several additional developing countries which clearly expressed their similar position to this group. However, this thesis is going to use the widely-used term of 'the G10 Developing Countries' in referring to developing countries led by India and Brazil (Matthews, 2002, p.24; Capling, 2004, p.184) during the TRIPs negotiations regardless of its expansion in terms of the number involved.

Another concern raised by developed countries was that the existing conventions were insufficient to prevent counterfeiting and piracy, since they were not equipped with effective dispute settlement provisions (US, 1987a, p.3). The inadequate dispute settlement provision is also worsened by the absence of adequate and effective protection for IPR under national laws. In this regard, from developed countries' points of view, without international standards for national enforcement, global IPR protection would be meaningless (Watal, 2001, p.333).

With these backgrounds, there were several objectives that were proposed by developed countries to be considered further during the negotiation. The negotiation should be focused firstly on creating an effective economic deterrent to international trade in goods and services, which infringe intellectual property rights through the implementation of border measures (US, 1987b, p.3). Developed countries also stressed the importance of having adequate standards and norms in IPR protection that should be applied indiscriminately in all members' national legislations. Furthermore, the agreed standards should also be accompanied by the effective enforcement. Developed countries also argued that, in order to have effective enforcement, the monitoring and surveillance should be extended into a multilateral level, and equipped with strong dispute settlement procedures (US, 1987b, p.3). Nevertheless, it is also acknowledged that the necessity to ensure that any efforts to protect intellectual property or enforce IPR should not create any barriers to legitimate trade. In addition, the EU and Japan, in particular, also proposed the application of the general principles and mechanisms of the general agreement that ensure liberalisation of trade, including national treatment and Most-Favoured Nations (MFN) on IPR protection (EU, 1987, p.1; Japan, 1987, p.2).

In addition to the US, the EU, and Japan's drafts, other developed countries, such as the Nordic countries, Switzerland, Australia, and New Zealand, also filed suggestions and drafts of the agreement during the negotiation. Most of their suggestions resembled the US's position. However, these developed countries also recognise the necessity to incorporate special and differential treatment for developing and the least developed countries, in the form of a transitional arrangement, to carry out domestic change as required by the agreement (Australia, et al., 1990, p.1). Similarly, as can be seen from Switzerland's draft of the agreement, in order to achieve successfully strengthened protection and enforcement of intellectual property rights, it is necessary to provide appropriate transitional arrangements for developing countries and the least developed countries (Switzerland, 1990, p.3). In this

context, a number of developed participants including Australia, Hong Kong, New Zealand, and the Nordic countries, proposed several forms of transitional arrangements, which, in principle, take the different stages of the members' economic development into account, thus providing flexibility to implement the agreement according to the members' own circumstances and needs (Australia, et al., 1990, pp.2–4). As can be seen from later development, the suggestions regarding a transitional period for developing countries were also accommodated in the final text of the TRIPs Agreement.

2.4.1.2 The Anti-TRIPs: The G10 Developing Countries' Resistance

The US and other major industrialised countries' proposal received strong resistance from developing countries. Developing countries also questioned the General Agreement on Tariffs and Trade (GATT) as the venue for IPR protection negotiations, not only because the protection of IPR has no direct or significant relationship to international trade, but also considering the existence of a more competent and appropriate international organisation under the World Intellectual Property Organisation (WIPO), which would be more suitable for dealing with this issue (Matthews, 2002, p.31). As a response to major industrialised countries' proposals, developing countries, led mainly by India and Brazil, submitted alternative points of view in understanding IPR protection. In essence, it includes the limitation of the scope of negotiation agendas, the consideration of developing countries' development objectives, and the fear of the detrimental effect of excessive IPR protection.

Developing countries, India in particular, insisted that the scope of the negotiation agendas should be limited to the restrictive and anti-competitive practices of the owners of IPR. From the developing countries' points of view, these practices obviously can be considered to be trade-related, and they, therefore, can distort or impede international trade (India, 1989, p.2). Whereas other aspects, such as the scope and the duration of IPR protection, which are not specifically related to the trade issue but more to development policy in general, should be left for every country to define according to their own socio-economic, developmental, technological, and public interest needs and priorities. In this regard, it is clear that developing countries were only willing to negotiate a very limited aspect of IPR protection.

Even though most developing countries acknowledged the importance of the protection of IPR for promoting innovation and creativity, they also stressed the necessity to take into account the development, technological, and public interest objectives of developing countries (Argentina, et al., 1990, p.6). Given the enormous economic and technological gap between the industrialised and developing countries, developing countries, therefore, rejected the uniform standard for IPR protection. Considering their level of economic development, for most developing countries, patents are closely linked to critical developmental priorities, such as “...food production, poverty alleviation, nutrition, health care, and disease prevention” (Watal, 2001, p.29), while these may not be the priorities for developed countries. As can be seen from the preamble of the proposal from some developing countries, such as, Argentina, Brazil, Chile, China, Colombia, Cuba, Egypt, India, Nigeria, Peru, Tanzania and Uruguay, developing countries also recognised “...the special needs of the least developed countries in respect of maximum flexibility in the application of the Agreement in order to enable them to create a sound and viable technological base” (Argentina, et al., 1990, p.2). Hence, contrary to the suggestion from developed countries regarding the importance of integrating the GATT principles, developing countries argued that neither national treatment nor MFN treatment could apply in IPR protection, since they were necessarily linked to trade in (material) goods (Gervais, 2003, p.15).

Another important concern raised by developing countries was the fear that excessive IPR protection may lead to rigid monopoly situations, as well as to the abusive or anti-competitive use of IPR. In this context, instead of promoting growth and development, on the contrary, a rigid and excessive protection of IPR may create a disadvantageous situation for developing countries, and restrict the participation of developing countries in international trade (Brazil, 1988, p.3). A very strict protection of IPR would lead to a monopoly of technical knowledge, and would result in the restriction of developing countries to freely acquire and adapt foreign technology, or to import new processes and products from alternative foreign sources (Brazil, 1988, p.3). This reflects developing countries’ fear that “...the adoption of stronger IPR would be detrimental to their welfare and development prospects” (Hoekman and Kostecki, 2001, p.279). The flexibility of an IPR protection system is therefore essential to developing countries, since greater access to technological innovation is also significant to their development needs. Furthermore, to prevent a rigid monopoly situation resulting from the excessive protection of IPR, developing countries argued that the agreement should not only

set principal rights, but also establish some provisions related to the obligations of the IPR owners. This includes the provision that obliges the patent owners to refrain from engaging in abusive or anticompetitive practices, which may adversely affect the transfer of technology (Argentina, et al., 1990, p.11).

2.4.2 How the Agreement was Finally Reached: Hard Bargaining for Developing Countries

Despite their strong objections, nevertheless, developing countries eventually accepted the TRIPs Agreement, which is mainly mirrored the developed countries' positions. The existing literature mainly identifies three main reasons for this outcome: the introduction of a single undertaking principle, the exploitation of issue linkage, and the persistence of US unilateral pressure.

Developing countries' bitter acceptance is first closely related to the new mechanism introduced during the Uruguay Round, the so-called single undertaking principle. Unlike under the GATT system, where the contracting party may choose and adopt an agreement that was suitable for them, under the newly introduced principle, all the individual agreements were treated as 'integral parts' and 'binding on all members' (Steinberg, 2002, p.360). For this reason, all countries were obliged to adopt all agreements which were embodied in the Uruguay Final Act²⁶ as a package deal without any exception (Cattaneo, 2000, p.627; Hindley, 2006, p.40; VanGrasstek and Sauve, 2006, p.851). Furthermore, to join the WTO, the US and EU withdrew from the GATT 1947²⁷ and terminated their GATT 1947 obligations to any country that did not accept the Uruguay Round Agreement, including TRIPs (Steinberg, 2002, p.360). As a consequence, this has made it hard for developing countries to resist, since, if they did not accept the Final Act and join the WTO, they would lose the access they had had to the US and EU markets under GATT.

Another reason is the significant role of the issue linkage as part of the negotiation deals (Matthews, 2002, p.45). In this regard, developing countries were willing to accept developed

²⁶ The Uruguay Final Act consists of six main parts: the Agreement Establishing the WTO; the GATT 1994 (which is legally different from the GATT 1947, see explanation in the following footnote); the GATS; the TRIPs Agreement; Dispute Settlement; Trade Policy Reviews (WTO, 2008, pp.23–24).

²⁷ It should be noted that the GATT 1947 is legally different from the GATT 1994, since the establishment of the WTO has replaced the GATT as an international organisation. As a result of the Uruguay Round negotiations, the GATT serves as the WTO's umbrella treaty for trade in goods (WTO, 2008, p.19).

countries' intellectual property agenda in exchange for concessions on other trade objectives, such as market access to developed countries for significant exports, particularly agriculture and textiles (Gutowksi, 1999, p.756; Cattaneo, 2000, p.627; Sell, 2000, p.176; Arup, 2004, p.7; Capling; 2004, p.188; Richards, 2004, pp.133–38).²⁸ Prior to the Uruguay Round, even though agriculture was covered under GATT, the US and the EU managed to secure their protectionist policy from GATT disciplines. Both the US and the EU heavily subsidised and protected their agricultural sector through quantitative restrictions on imports, which have made their agricultural products so competitive in the international arena (Jawara and Kwa; 2003, pp.26–27). This then resulted in a detrimental effect for developing countries, as, not only were they unable to compete with cheap imported agricultural products from the US and the EU in their own domestic market, but they were also unable to get access to enter the highly protected US and EU markets. In this context, by accepting the TRIPs Agreement, developing countries were hoping to get the benefits from agricultural liberalisation and subsidy reduction in major developed countries under the Agreement on Agriculture (AoA). While regarding textiles, developing countries would expect to gain the benefit of access to US and EU markets under the Agreement on Textiles and Clothing (ATC) (Jawara and Kwa, 2003, p.45).

The adoption of the TRIPs Agreement is also because of developing countries' fear of the threat of unilateral sanctions, mainly from the US regarding the lack of IPR protection. Some developing countries, mostly newly industrialising countries, such as Mexico, South Korea, and Singapore, began to alter their original position due to unilateral pressure from the US (Drahos, 2002, pp.775–76; Capling, 2004, p.186). During the Uruguay Round, these countries suffered from US sanctions through the suspension of their benefits under the Generalised System of Preferences (GSP) because of their inadequate IPR protection. Drahos and Braithwaite (2002, p.88) further report that Mexico in 1987 was subject to a US\$50 million loss of its GSP benefits, while in 1989, Thailand had to lose US\$165 million, and India in 1992 came in for GSP losses of US\$80 million. Within this context, the use of US unilateral pressure is seen as an effective means of dividing developing countries' positions during the negotiations (Watal, 2001, p.44). Given this fact, Maskus (2000a, p.4) and Hindley (2006, p. 39) argue that unilateral pressure from the US certainly played a critical role in getting developing countries to agree with the TRIPs Agreement.

²⁸ Author's interview with a counsellor of the WTO IP Division (Geneva, 17 November 2009).

In addition to those main reasons, developing countries' acceptance of the TRIPs Agreement is also because there was the acknowledgement of developing country concerns with respect to TRIPs. These include a longer transition period and other flexibility arrangements, which can be utilised by developing countries to fulfil their obligations under the TRIPs Agreement (see section 2.4.3.2 for further discussion of flexibilities under the TRIPs Agreement). Moreover, developed countries' governments undertook to provide financial and technical assistance to support the legislative and administrative reforms associated with implementing the TRIPs Agreement, a commitment incorporated in Article 67 of the TRIPs Agreement.

To conclude, the inclusion of the TRIPs Agreement displays the power disparity between developed countries as the major holders of IPR and developing countries as its net consumers. Developing countries' governments, however, accepted an unpalatable agreement because of the costs associated with rejecting it and in exchange for promised benefits in other areas. They had also managed to negotiate some concessions in order to mitigate the impact of complying with the agreement. Considering the coercive nature of its negotiation process, and only with a great reluctance from developing countries, can the agreement finally be reached, the agreement, arguably, is considered to have a low degree of legitimacy, and has made it become an unwelcome agreement, particularly for developing countries.

2.4.3 The Outcome of the Agreement

The TRIPs Agreement, which is formally known as Annex 1C of the Marrakesh Agreement, went significantly beyond existing IPR protection (see table 2.3). It establishes minimum standards of terms and the scope of protection for a wide range of IPR categories. The TRIPs Agreement also incorporates all basic principles of previous international IP agreements, including national treatment and MFN principles, as well as extending coverage to more countries. Furthermore, the TRIPs Agreement provides international criteria for the national enforcement of IPR through civil, criminal, and administrative proceedings in members' territories. In addition, as with all the agreements under the Uruguay Round Final Act, the TRIPs Agreement is also equipped with a more effective and binding dispute settlement mechanism to solve disputes among members (Reichman, 1998, p.586; Helfer, 2004, p.2; Das, 2005, p.37; Matsushita, Schoenbaum, and Mavroidis, 2006, pp.704–5). The first part of this

section will present the outcome of the agreement in general. The next part will pay attention particularly to the flexibilities granted under the agreement.

2.4.3.1 The TRIPs Agreement: Principles and Obligations

As reflected in its preamble, the TRIPs Agreement aims to achieve the following objectives: to promote the effective and adequate protection of IPR, which is regarded as private rights; and to reduce distortions and impediments to international trade through multilateral arrangements. In order to achieve it, the preamble of the TRIPs Agreement also seeks “...to ensure that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade” (the TRIPs Agreement 1994). Furthermore, it is clearly stated that the agreement also aims to reduce “...tensions by reaching strengthened commitments to resolve disputes on trade-related intellectual property issues through multilateral procedures” (the TRIPs Agreement 1994). Even though the agreement considers IPR as ‘private rights’, it also recognised “...the underlying public policy objectives of national systems for the protection of intellectual property, including developmental and technological objectives” (the TRIPs Agreement 1994). In this regard, it can be seen that even though the objectives of the TRIPs Agreement mainly incorporated developed countries’ positions, it also acknowledged developing countries’ points of view on the underlying public policy objectives of the national policy of its members.

The TRIPs Agreement also incorporates the GATT principles of non-discrimination/MFN and national treatment. The national treatment obligation (Article 3) means that all WTO members should provide the same opportunity for protecting the IPR of people from other WTO member countries as they do for their own citizens. The national treatment principle is not new to the TRIPs Agreement. It has been the standard of IPR protection since the late 19th century, under the Paris and Berne Conventions. The MFN obligation (Article 4) indicates that the members should treat all other WTO members equally. As Gervais (2003, p.104) argues, MFN is to ensure uniformity of the multilateral trade environment, “[U]nder this system...any advantage, favour, privilege or immunity granted (usually bilaterally) to nationals of any (not just of another WTO Member) other country must be accorded to nationals of all WTO Members”. As can be seen from the previous section, the inclusion of the GATT principles of non-discrimination and national treatment reflected developed countries’ positions rather than

those of developing countries, which rejected the incorporation of these principles for IPR protection.

The TRIPs Agreement sets the minimum standard of protection for all types of IPR, including patents, copyrights, trademarks, undisclosed information and trade secrets, geographical indications, industrial designs, and integrated circuit layout designs for its members' national legislation. It does not only incorporate a minimum fifty-year term of copyright protection as required in the Berne Convention, but also introduces a minimum twenty-year term of patent protection, which was not part of the Paris Convention. In addition, it extends the scope of copyright protection beyond literary, artistic, and scientific works, to include new areas such as software and databases (WIPO, n. d. (b); WTO, n. d. (b); see table 2.3). However, it is also clearly stated on Article 1.1. of the TRIPs Agreement that “[M]embers may, but shall not be obliged to, implement in their law more extensive protection than is required by this Agreement, provided that such protection does not contravene the provisions of this Agreement” (the TRIPs Agreement 1994). The same Article also provides a room to manoeuvre for the members in implementing the provisions by stating “[M]embers shall be free to determine the appropriate method of implementing the provisions of this Agreement within their own legal system and practice” (the TRIPs Agreement 1994). Nevertheless, by codifying and setting minimum standards of IPR protection, the TRIPs Agreement largely reflected developed countries' positions instead of the developing ones.

Another major difference between the multilateral IP agreements prior to the WTO, with the one under the TRIPs Agreement, is related to the enforcement provisions under national legislation. While previous laws did not establish adequate and effective standards for IPR protection under national laws, the TRIPs Agreement provides international criteria for the national enforcement of IPR, which should be available in members' territories. The agreement requires that national enforcement should be available through civil, criminal, and also administrative proceedings, as well as common procedural requirements concerning the administration and maintenance of IPR being implemented in each national government (Reichman, 1998, p.586; Das, 2005, p.37; Matsushita, Schoenbaum, and Mavroidis, 2006, pp.704–5). Furthermore, Vandoren (1999, p.27) argues that the effective procedures and remedies for the enforcement of IPR can be provided, not only through the normal civil judicial process, but also through customs action against imports of counterfeit and pirated

goods, as well as through criminal procedures in respect of intentional counterfeiting and piracy on a commercial scale.

A further important feature of the agreement is related to dispute prevention and settlement mechanism. In this regard, any disputes among the members related to the IPR protection will be subjected to the integrated dispute settlement system under the WTO (Vandoren, 1999, pp.27–28). The dispute settlement under this new mechanism is based on clearly-defined rules by a panel of impartial experts, and its decision is automatically adopted, unless there is a consensus to reject a ruling (WTO, 2008a, p.56). This implies a more legally binding or rule-oriented approach, and the effective nature of the dispute settlement mechanism, compared to the previous system under GATT, in which any country may block the adoption of a decision. Within this context, settling the dispute under a multilateral procedure also essentially entails that unilateral action is prohibited, as stated by the UNCTAD “[T]he adoption by another Member of unilateral trade sanctions would be incompatible with the multilateral rules” (UNCTAD, 2002, p.40). In this regard, this mechanism can be beneficial for developing countries to ease unilateral pressure particularly from the US through its Section 301. Nevertheless, the WTO Panel Report later in 1999²⁹ confirmed the compatibility of the US unilateral action through Section 301 with the WTO, since the Clinton Administration committed to base its 301 action on the WTO Panel or Appellate Body findings (WTO, 1999b). This can partly explain the persistence of US unilateral pressure, even after the conclusion of the Uruguay Round (Watal, 2001, p.59).

The enforcement mechanism is complemented with a strong monitoring system through the establishment of a special body, the Council for TRIPs (commonly known as the TRIPs Council). Each WTO member is represented in this Council, which formally meets in Geneva around five times a year, and is obliged to notify and submit their implementing legislation to this Council for examination. Article 68 of the TRIPs Agreement states that, “[T]he Council for TRIPs shall monitor the operation of this Agreement and, in particular, Member’ compliance with their obligations hereunder, and shall afford Members the opportunity of consulting on matters relating to the trade-related aspects of intellectual property rights.” As part of its monitoring task, the TRIPs Council plays a role as a forum “...in which any Member

²⁹ This is a report of a panel established based on a complaint initiated by the EU regarding the US Section 301, see WTO (1999b).

can raise any issue relating to compliance by other parties” (Otten, 1998, p.524). Under this system, each member has the obligation to provide notification of implementing legislation at the end of its transition period. After the submission, the legislation is examined by other members. During this review process, other members are entitled to assess whether the legislation has fulfilled the minimum requirements and commitments of the agreement.

However, the TRIPs Council is not only responsible for monitoring member’s compliance with agreement’s obligations, but it can also offer consultation for members related to the TRIPs Agreement, as well as assisting them in dispute settlement (UNCTAD, 2002, p.40). Following Otten’s (1998, pp.525–26) argument, such a detailed scrutiny process can be beneficial in terms of encouraging members to take great care in drafting legislation, related to IPR protection. It also can serve to ease misunderstanding about a country’s legislation, which may lead to disputes. In addition, a detailed scrutiny process has a function to identify, not only in terms of deficiencies in notified laws and regulations, but also to identify the differences in interpretation. Lastly, it can also provide information related to the implementation of the agreement in each WTO member (Otten, 1998, pp.525–26).

In addition, one of the most important outcomes of the negotiations is that, as can be seen from Article 65, the agreement sets different deadlines according to the WTO members’ economic level of development. Developed countries were obliged to implement their TRIPs obligations on 1 January 1996. Developing countries were given an extended period to implement the agreement. The initial deadline was until 2000 for developing countries and countries in transition, and 2006 for least developed countries, but under the Doha Round, least developed countries were granted a further transition period until 2013 (see table 2.2). Developing countries were also granted an additional transition period until 1 January 2005 to introduce patent protection for pharmaceutical and agricultural chemical products, if the protection of these areas were not available in their national legislation by the time the agreement was concluded. However, for those countries that chose to delay the implementation until 2005, they were obliged to provide a means to accept patent applications for pharmaceutical and agricultural chemical products (TRIPs Agreement Article 70 (8)). During this transition period, they also had to provide a mechanism called Exclusive Marketing Rights (EMR) as contemporary protection for these specific products (TRIPs Agreement Article 70 (9)).

Table 2.2 Deadlines for Implementing the TRIPs Agreement

1996	Deadline for industrialised countries
2000	Deadline for developing countries and economies in transition
2005	Additional deadline for developing country products not previously patented (pharmaceutical and agricultural chemical products)
2006	Original deadline for LDCs (agreed at the end of the Uruguay Round negotiations)
2013	Revised deadline for LDCs to implement the general obligations except for Article 3 (National Treatment), Article 4 (Most Favoured Nation), and Article 5 (Multilateral Agreements on Acquisition or Maintenance of Protection) agreed by the TRIPs Council on 29 November 2005
2016	Revised deadline for LDCs' patent, test data protection, and exclusive rights for pharmaceuticals agreed on November 2001 at the Doha Ministerial

Sources: The TRIPs Agreement 1994 and the Declaration on the TRIPs Agreement and Public Health 2001 (WTO, 2001c).

Note: States acceding to the WTO after the conclusion of the Uruguay Round are not eligible for transition periods and must comply with the TRIPs Agreement by the time they accede.

In conclusion, by establishing the minimum standards of terms and the scope of protection for a wide range of IPR categories, and obligating the members to enforce these standards in their domestic legislation, the TRIPs Agreement can be considered as the most comprehensive and enforceable multilateral agreement on IPR protection. Moreover, unlike previous international regulations on IP, the TRIPs Agreement is strengthened by a more effective and binding dispute settlement mechanism to solve disputes among members. The adoption of the TRIPs Agreement, therefore, can be seen as a milestone for global IPR protection, and a significant departure from the existing international regulations.

Table 2.3 Multilateral IP Agreements in Comparison: TRIPs and Its Predecessors

Aspect	Treaties and Conventions under the WIPO	The TRIPs Agreement
Type of agreement	Individual convention/treaty for a specific type of intellectual property. The most important conventions are the Paris Convention (1883) ³⁰ and the Berne Convention (1886) ³¹	A single multilateral agreement encompassing all types of intellectual property
Membership coverage	Applied only to the signature of the convention/treaty	Applied to all WTO members whether or not they are party to previous conventions
Scope of protection	Protecting 'moral right' ³² (the Berne Convention)	No obligations with respect of the moral rights under the Berne Convention
	Covering only the protection of literary, scientific and artistic domain (the Berne Convention)	Extending the scope of copyright protection to new areas such as software and databases. It also extends the provisions on rental rights ³³
Terms of protection	No minimum term of patent protection under the Paris Convention	Minimum 20 year term of patent protection
Provision on enforcement	No effective standards for IPR protection under national laws	Effective standards for IPR protection under national laws
	No effective monitoring mechanism for the implementation	Effective monitoring mechanism for the implementation through the establishment of the TRIPs Council
	No effective dispute settlement provisions	Effective dispute settlement provisions

Sources: WIPO (1994) and the Text of the TRIPs Agreement (Annex 1C of the Marrakesh Agreement) 1994.

³⁰ The Paris Convention for the Protection of Industrial Property (1883) (including patents, marks, industrial designs, utility models, trade names, geographical indications and the repression of unfair competition, as amended in 1979).

³¹ The Berne Convention for the Protection of Literary and Artistic Works (1886) (as amended in 1979).

³² Moral right is defined as "...the right to claim authorship of the work,...[and] to object to any distortion or modification of the work, or other derogatory action in relation to a work, which would be prejudicial to the author's honor [sic] or reputation..." (WIPO, n. d. (b), p.12).

³³ Rental rights give the authors of computer programmes and producers of sound recordings the right to organisation or prohibit the commercial rental of their works to the public (see Hoekman and Kostecki, 2001, p.287).

2.4.3.2 The TRIPs Agreement: Flexibilities Available

As explained earlier, as part of the negotiations deal, considering the fact that implementing the TRIPs Agreement requires the necessary domestic policy reform, which involved administrative costs, especially for developing countries and the least developed countries, as demanded by developing countries the agreement provides several flexibilities that can be utilised by the WTO members that fall into these categories. According to Musungu and Oh (2006, p.8), the substantive flexibilities under the TRIPs Agreement are mostly related to the options in the scope of the obligations. These include exempting certain types of patentable products, such as plants and animals from patentability; allowing some of uses of copy-righted work and patents for government or non-commercial use; granting parallel imports through modifying the exhaustion regime to suit their domestic policy objectives; as well as authorising compulsory licensing of patented products in the public interests, or to protect public health, or the environment (South Center, 1997, pp.25–32; Deere, 2008, pp.68–9, p.75) (see table 2.4 for the summary of these flexibilities). The following discussions will explain each of these flexibilities and their implications for developing countries in more detail.

The TRIPs Agreement grants flexibilities in the forms of both exceptions and exemptions of IPR from protection.³⁴ For patents, for instance, based on Article 27 of the TRIPs Agreement, a member may exclude inventions which are necessary to protect public order or morality; plants and animals other than micro-organisms; and/or diagnostic, therapeutic and surgical methods for the treatment of humans or animals. With regard to the flexibilities for copyright protection, based on Article 13 of the TRIPs Agreement, “[M]embers shall confine limitations or exceptions to exclusive rights to certain special cases which do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the right holder”. Therefore, as long as they are fulfilling the criteria prescribed, in essence, members can interpret this provision to provide the exceptions to achieve their public policy objectives, and for non-commercial purpose, including facilitating dissemination of knowledge and promoting education. Within this context, the TRIPs Agreement also permits exemptions for the government’s use. Even though the TRIPs Agreement does not explicitly specify the government’s use of patents, the Article 31 (b) of the TRIPs Agreement recognises the

³⁴ According to Musungu and Oh (2006, p.58), the exceptions of IPR (particularly patents) apply where a right has been granted, whereas exemptions mean the exclusion from protection when the right has not been granted.

concept of public, non-commercial use of patents used by or for the government. In this regard, governments in developing countries may use patents without granting a compulsory license (which will be explained later). According to Musungu and Oh (2006, p.35), the main difference between government-use provision and compulsory license is that, in the case of government use, it should be strictly to public, non-commercial purposes, while for compulsory license, it can also be for private and commercial use. In this context, the use of patents by a government is subject to less procedural conditions than those under compulsory licensing, including no requirement to seek the initial consent from the patent holders (Musungu and Oh, 2006, pp.35–36).

Another form of flexibility under the TRIPs Agreement is the so-called ‘compulsory licensing’, which can be defined as a license authorised by a government to a third party to produce a patented product or process without the consent of the patent owner (WTO, n. d. (c)). The granting of patent rights enables the patent holders to prevent the use of a patented product or process by a third party without their consent. However, with justified reasons to protect public interest, a government may grant a compulsory licensing or non-voluntary license. In this regard, a government may grant a compulsory license when ensuring a broader access to patented products or processes to meet public needs is more important than retaining patent holders’ exclusive rights (Musungu and Oh, 2006, p.27). Article 31 of the TRIPs Agreement defines the conditions to be met in granting such licences, including in the case of a national emergency or situation of extreme urgency; for public or non-commercial use of patents; limited predominantly for the supply of the domestic market in a country which grants such use; as well as providing adequate remuneration for the right holders.

Furthermore, the Doha Declaration on the TRIPs Agreement and Public Health in 2001 also reaffirmed this flexibility to grant a freedom for a member country to determine the conditions in which to adopt compulsory licensing, as stated in Paragraph 5(b), “[E]ach Member has the right to grant compulsory licences and the freedom to determine the grounds upon which such licences are granted” (WTO, 2001c). Furthermore, Paragraph 5(c) of the Doha Declaration on the TRIPs Agreement and Public Health also states, “[E]ach Member has the right to determine what constitutes a national emergency or other circumstances of extreme urgency, it being understood that public health crises, including those relating to HIV/AIDS, tuberculosis,

malaria and other epidemics, can represent a national emergency or other circumstances of extreme urgency” (WTO, 2001c).

The TRIPs Agreement also provides flexibility in the form of so-called ‘parallel importation’, which can be defined as “...goods produced genuinely under protection of a trademark, patent, or copyright, placed into circulation in one market, and then imported into a second market without the authorization [sic] of the local owner of the intellectual property right”(Maskus, 2001, p.2). Within this context, as the IP holder, a person is granted an exclusive right to manufacture the product and place the product in the market. However, due to the principle of exhaustion, when the product is placed on the market the IP holder has no further right over the product because its exclusivity has been exhausted by the act of selling it (Musungu and Oh, 2006, p.47). Article 6 of the TRIPs Agreement provides the flexibility to a member country to choose its own regime of exhaustion, since the decision by the member on this issue should not be a subject of dispute settlement. In this regard, the members have three options of the exhaustion regimes, international, regional, and national. The choice of the exhaustion regime determines the use of parallel importation. Under a regime of national exhaustion, parallel import is prohibited, but under a regime of international exhaustion, parallel import is legal, while under a regime of regional exhaustion, parallel import is permitted in any other member state of a regional trade agreement (Maskus, 2001, p.2; Musungu and Oh, 2006, p.47). Furthermore, the Doha Declaration on the TRIPs Agreement and Public Health reaffirmed the use of this flexibility as stated on Paragraph 5(d), “...each Member free to establish its own regime for such exhaustion without challenge...” (WTO, 2001c).

Table 2.4 Flexibilities under the TRIPs Agreement

Forms	Flexibilities Provided	Legal Justification
Exceptions and exemptions to IPR protection	Granting the exceptions and exemptions to IPR protection in order to achieve the member's own public policy objectives and for non commercial purposes	Article 13 and 27 of the TRIPs Agreement
Compulsory licensing	A license authorised by a government to a third party to produce a patented product or process without the consent of the patent owner	Article 31 of the TRIPs Agreement; the Doha Declaration Paragraph 5(b) and 5(c)
Government use of patent	Recognising the concept of public, non-commercial use of patent used by or for the government, to achieve public policy objectives	Article 31 (b) of the TRIPs Agreement
Parallel importation	Granting the importation of goods produced genuinely under protection of a trademark, patent, or copyright, placed into circulation in one market into a second market without the authorisation of the local owner of the IPR	Article 6 of the TRIPs Agreement; the Doha Declaration Paragraph 5(d)

Note: Author's assessment on Text of the TRIPS Agreement (Annex 1C of the Marrakesh Agreement) and the Declaration on the TRIPs Agreement and Public Health 2001 (WTO, 2001c).

In conclusion, the birth of the TRIPs Agreement has marked an ambitious international agreement, which aims to set a common floor for IPR protection in all WTO members, as promoted mainly by major developed countries. The TRIPs Agreement, which was agreed after intense negotiations and uneasy compromise between developed and developing countries, reflects an unwelcome agreement for most developing countries. The availability of flexibilities integrated in the agreement can be seen as developing countries' successful efforts to negotiate a degree of policy autonomy for its implementation (Musungu and Oh, 2006, p.8).³⁵ In this regard, the use of flexibilities granted under the agreement is one of the crucial indicators to assess the quality of legislation adopted by developing countries, whether it meets the minimum or goes beyond the TRIPs requirements. Considering that implementing the TRIPs Agreement exhibits heavy burdens for most developing countries, the fact that not many developing countries took full advantage of the use of these flexibilities in their national legislation thus demands further explanation.

³⁵ Author's interview with a counsellor of the WTO IP Division (Geneva, 19 November 2009)

2.5 The TRIPs Agreement since the Uruguay Round: Dissatisfaction Continues

Given the history of its birth, it is hardly surprising if the TRIPs Agreement is still one of the most contentious agendas in every WTO ministerial meeting after the Uruguay Round. The main source of this ongoing dispute is developing countries' dissatisfaction with several aspects of the TRIPs Agreement implementation, especially during their transition period. These include developed countries' reluctances to carry out their commitments to reduce subsidies and lower the protection for both textiles and agricultural sectors, as part of the concessions for the adoption of the TRIPs Agreement, and the effect of strong patent protection for the availability of affordable pharmaceutical products. The lack of consensus on TRIPs-related issues is also one of the reasons behind the failure of the Seattle Ministerial meeting in 1999. In addition, in recent years, TRIPs-related issues have also developed to include the discussion on expanding the scope of protection for geographical indications, the relationship between TRIPs and the United Nations Convention on Biological Diversity (CBD), as well as the need to protect indigenous or traditional knowledge.

During the transition period, developing countries' dissatisfactions regarding TRIPs were mostly related to developed countries' difficulties to meet their commitments to reduce subsidy and lower the level of protection for both textiles and agricultural sectors (Jawara and Kwa, 2003, p.45). For instance, as can be found from the textiles sector, where, instead of facilitating to provide greater access for developing countries, the ATC allowed developed countries to hold on to most of their quantitative restrictions on textiles until 2005 (Jawara and Kwa, 2003, p.45).³⁶ Similarly, it took several years for the issue related to the agricultural sectors to be solved when, in 2005 at the Hong Kong Ministerial meeting, members finally agreed to end export subsidies in agriculture by 2013 (WTO, 2005c, p.2). Within this context, during its transition period, developing countries' frustrations were mostly caused by the fact that, while they had to take the necessary steps to comply with the TRIPs Agreement, they still could not gain much from the concession as part of the Uruguay Round package deal.

In addition to arguably unfulfilled commitments as part of the Uruguay Round concession, another major concern of most developing countries in the post-Uruguay Round era,

³⁶ The ATC has already expired on 1 January 2005, and since then, trade in textiles and clothing products is integrated into the General Agreement on Tariffs and Trade (GATT) which covers international trade in goods in the post-Uruguay Round era (see WTO, n. d. (f)).

especially during the transition period, is related to the devastating effect of the strong patent protection on the availability of affordable pharmaceutical products. Some studies indicate that strong patent protection has resulted in the increased price of medicines and diminishing public access to essential medicines in most developing countries (Matthews, 2002, p.113; Mayne, 2004, p.146; Sun, 2004, p.123). One widely cited example related to this issue is the cost of patented drugs in Africa, which has been a significant obstacle to the availability of AIDS treatment, which resulted in millions of people having died due to lack of access to affordable treatment (Sun, 2004, p.124). This situation then triggered wider public attentions, not only from governments in developing countries, but also NGOs from developed countries, to amend the TRIPs Agreement in order to address this concern (Das, 2005, p.41).

Owing to wider public support, the WTO ministerial meeting in Doha in 2001 launched ‘the Declaration on the TRIPs Agreement and Public Health’ (WTO, 2001c).³⁷ As explained earlier, based on this declaration, least-developed countries were granted longer a transition period to implement provisions on pharmaceutical patents until 1 January 2016. In addition, developing countries that do not have sufficient manufacturing capacities are also allowed to use compulsory licensing for their domestic needs. This illustrates the explicit guaranty for the use of flexibilities by members in dealing with health problems (Sun, 2004, p.123). Nevertheless, despite the progress made by the adoption of the Doha Declaration, there was also concern related to a permanent solution for providing access to vital medicines once the transition period is over (Gervais, 2003, pp.49–50). This implies that even the Doha Declaration had still not fully rectified the essential problems of the implication of the TRIPs Agreement borne by developing countries. These unresolved issues were eventually settled during the Cancun Ministerial Conference in 2003, when members agreed to allow developing countries greater access to needed categories of vital medicines, and to import generic drugs when they faced public health threats (WTO, 2003b; Das, 2005, p.47).

The most recent disputes between developed and developing countries regarding TRIPs and health issues emerged when, in early December 2008, the Dutch customs authorities seized an Indian generic drugs shipment destined for Brazil while in transit in the Netherlands, for an alleged violation of IPR (Lynn, 2009). During 2009, several other Indian generic drugs

³⁷ In addition to this declaration, among other things, the Doha ministerial meeting also agreed to establish the Working Group on Trade and Transfer of Technology (WGTTT) to facilitate the work on technology transfer from developed countries to developing ones (WTO, 2001b).

shipments which were meant for Latin American countries were seized at various European ports, including Germany and France, for similar reasons (New, 2009; Unnikrishnan, 2009). The EU defended the seizures as part of the anti-counterfeiting policy under the EU laws, stating that they were in line with international trade rules (Mara and New, 2009). While the Indian and Brazilian governments supported by NGOs—dealing with public health advocacy—argued that the seizures were not only violations of the TRIPs Agreement, since generic drugs are legitimate under the agreement, but have also put poor patients in developing countries at risk (ICTSD, 2009; Mara and New, 2009). As briefly mentioned in Chapter 1, in May 2010, the Brazilian and the Indian governments requested a consultation with the EU through the WTO DSB regarding the seizure of generic drugs in transit involving some EU member countries. At the time of writing, these two cases are still in progress. A series of these events exhibit the continuation of heated debate between developed and developing countries on the TRIPs Agreement, even after more than a decade since it became effectively in force in January 1995.

Another debatable aspect on TRIPs-related issue since the Uruguay Round is regarding the extension of the scope of geographical indications to products other than originally prescribed under Article 23 of the TRIPs Agreement, which grants a higher level of protection only for wines and spirits. As part of the mandate of the 2001 Doha Declaration, members decided to further negotiate a mechanism for a multilateral register for wines and spirits, as well as extending the higher level of protection beyond wines and spirits. The first draft on the first issue related to registration for wines and spirits was just recently achieved, on 13 January 2011. Nevertheless, by the time of writing, the negotiations on the issue regarding the extension of geographical indications are still ongoing, with no sign of consensus (WTO, n. d. (d)).³⁸

In addition to those issues, recent negotiations on TRIPs-related issues include the relationship between the TRIPs Agreement and the United Nations CBD, the protection of traditional knowledge and folklore, as part of the mandate of the 2001 Doha Declaration. The main

³⁸ Members that advocate the extension of geographical indications protection include Bulgaria, the EU, Guinea, India, Jamaica, Kenya, Madagascar, Mauritius, Morocco, Pakistan, Romania, Sri Lanka, Switzerland, Thailand, Tunisia and Turkey (WTO, n. d. (d)). On the other hand, countries including Argentina, Australia, Canada, Chile, Colombia, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, New Zealand, Panama, Paraguay, the Philippines, Chinese Taipei, and the United States are against the proposal on the ground that the existing protection under the TRIPs Agreement is already sufficient (WTO, n. d. (d); WTO, 2005b, p.3).

reason behind this issue, as argued by the proponent members from developing countries, is particularly because there is a growing concern regarding the detrimental effect of bio-piracy for their economic, social, and cultural interests.³⁹ The focus of the negotiations is on a disclosure mechanism for patent applications on the commercial use of traditional knowledge and genetic materials (WTO, n. d. (e)). As can be found in the issue on the extension of geographical indications protection, by the time of writing, the debate on the relationship between TRIPs and CBD, traditional knowledge and folklore, is still in progress.⁴⁰

Previous discussions indicated that after the conclusion of the Uruguay Round, the TRIPs Agreement can still be considered as one of the most contentious agendas in trade negotiations under WTO. The negotiations on the TRIPs-related issues since the Uruguay Round exhibit, not only the continuation of developing countries' dissatisfactions with the agreement, but also indicate developing countries' efforts to incorporate their specific interests in order to rebalance the TRIPs Agreement (Abbot, 2000, p.167; Cattaneo, 2000, p.627; Helfer, 2004, p.6). Within this context, recent negotiations on TRIPs-related issues also show that developing countries are more aware of the development implications of the TRIPs Agreement.⁴¹ In short, continuing tensions concerning the TRIPs Agreement, therefore, display the puzzling nature of developing countries' compliance with the agreement.

³⁹ Countries that propose the inclusion of effective provisions to protect the traditional knowledge and folklore include Albania, Brazil, China, Colombia, Croatia, Ecuador, the EU, Georgia, Iceland, India, Indonesia, the Kyrgyz Republic, Liechtenstein, the Former Yugoslav Republic of Macedonia, Pakistan, Peru, Sri Lanka, Switzerland, Thailand, Turkey, the African, Caribbean, and Pacific (ACP) Group and the African Group (Albania, et al., 2008). Other members which also express their support for the proposal include Croatia, Georgia, and Moldova (Albania, et al., 2008). For the debate concerning the protection of traditional knowledge, see also Bolivia, et al., 2005.

⁴⁰ One of the difficulties in reaching a consensus on this issue is also because the US is not a party to the CBD. It also should be noted that, even though the CBD finally reached an agreement on Access and Benefit Sharing (ABS) on 30 October 2010, which is also one of the issues raised in the recent TRIPs-related issue negotiations, there is still no significant progress on the discussion concerning the relationship between TRIPs and CBD. For a detailed discussion on the relationship between the TRIPs Agreement and CBD see the final report of Centre for European Agricultural Studies (CEAS, 2000). See also ICTSD (2010) for the discussion related to the consensus on ABS under the CBD. For the discussion concerning traditional knowledge and IPR protection in general, see WIPO (n. d. (e)).

⁴¹ Author's interview with a representative from one of the leading Geneva-based research institutes dealing with IPR protection and developing countries (Geneva, 18 November 2009)

2.6 Conclusion

The TRIPs Agreement's substance and the process by which it was concluded make it an unlikely case for developing countries' compliance. Only after a long and contentious negotiation process, which was characterised by a mixture of a newly introduced single undertaking principle, issue linkage, and the use of trade coercion, the agreement was finally concluded. The outcome, which involves both the approximation of national rules and the strengthening of enforcement mechanisms, does not only depart far beyond its predecessors, but it also largely reflected developed countries' positions. Due to its lack of legitimacy, and one-size-fits-all feature, as well as its unbalanced nature for the burden borne by developing countries and its uncertain long gains, it is hardly surprising if TRIPs, therefore, became the unwelcome agreement for most developing countries.

Considering the history of its birth, a significant aspect to discuss further is to understand how developing countries would respond to their heavy obligations under the TRIPs Agreement. Intriguingly, however, as the next chapter demonstrates, despite their moral and economic objections, and the foreseen short term negative implications of the TRIPs Agreement, including the high cost of adjusting their domestic laws, most developing countries have altered their domestic laws in response to the TRIPs Agreement. This is the puzzle that the rest of this thesis seeks to explain.

Chapter 3

The Change in Developing Countries' Domestic IP Legislation: Results of the Survey and Contextualising Case Studies

3.1 Introduction

As explained in previous chapters, the underlying puzzle of this thesis is why, despite their rigorous resistance to the adoption of the TRIPs Agreement, have almost all developing countries, taken steps to reform their domestic IP legislation as a response to their TRIPs obligations. Many have done so before they were required to, and many adopted more rigorous IP rules than outlined by TRIPs. This chapter presents the empirical evidence of the results of a survey on the change in developing countries' domestic IP legislation, to support the underlying puzzle, as well as the basis for the case studies selection.

The chapter begins by explaining how to measure policy change, which will be operationalised by using two indicators of compliance, the timing of the adoption of the IP legislation and the quality of the legislation adopted. It then discusses the importance of external pressure, which is crucial to both the neo-realist and neo-liberal institutionalist's accounts. To test the neo-realist account, the section pays particular attention to the role of US pressure as a proxy for the independent variable of great power coercion. It also then discusses the role of the WTO Dispute Settlement Mechanism (DSM) as the main element of the enforcement under WTO, since it is essential for neo-liberal institutionalism. The last part of the chapter introduces the case studies selected (Indonesia and India) for further analysis.

3.2 Measuring Policy Change: the Timing and Quality of Legislation

Policy change in developing countries' domestic IP legislation will be assessed based on the timing and the quality of the legislation adopted. It should be noted that, as WTO has no formal definition of developing countries,⁴² this thesis relies on the World Bank's categories of developing countries, upper middle income, lower middle income, and low income economies. Most of the World Bank's low income economies are recognised as the WTO

⁴² Under the WTO practice, each member decides whether it wishes to be considered a developing country, even though other members can challenge that decision. Nevertheless, the WTO recognises the United Nations' Least Developed Countries (LDC) List. As of 17 February 2011, there are 31 WTO LDC Members (WTO, n. d. (i)). See Appendix II for a complete list of WTO LDC Members.

Least-Developed Country (LDC) members (see the note of Appendix I for details on the exceptions). Based on the World Bank's categories (World Bank, n. d.), therefore, this thesis seeks to survey the policy change of 102 WTO developing country members (as of January 2011) as a basis for the case studies selection.

3.2.1 The Timing of the Adoption of Major IP legislation

Since different members of WTO have different deadlines according to their respective economic level of development, the timing of the adoption of major IP law in developing countries is relative to the deadline for compliance for each country (see table 2.2 in Chapter 2). To measure the timing of policy change, the timing of the adoption of the IPR legislation is based on the first legislation adopted by developing countries immediately prior to or after the conclusion of the Uruguay Round, as reported in official notifications to the TRIPs Council and the WIPO's country profiles. Additional information related to developing countries' adoption of legislation was also gathered from the USTR Special 301 Annual Reports from 2001 to 2010. This thesis focuses on the timing of the adoption of legislation concerning three major types of IPR, patents, copyrights, and trademarks, which are of particular concern to the US.⁴³ As evident from the USTR Special 301 Report, it is clear that the US complaint on the implementation of the TRIPs Agreement in developing countries is mostly related to the inadequate protection and ineffective enforcement of these three IPR categories.

As summarised in table 3.1, based on the timing of the adoption of these three types of IPR, the policy change in developing countries' IP legislation can be categorised into five categories, early, on time, late, not yet and other:

⁴³ In this exercise, I established a database on 102 WTO developing country members' legislation concerning patents, copyrights, and trademarks to identify the first legislation adopted and the latest amendment as of 15 January 2011. For a summary of the database on the timing of major IP legislation adoption in WTO developing country members from 1995 to 2010, see Appendix III. A complete database can be provided upon request.

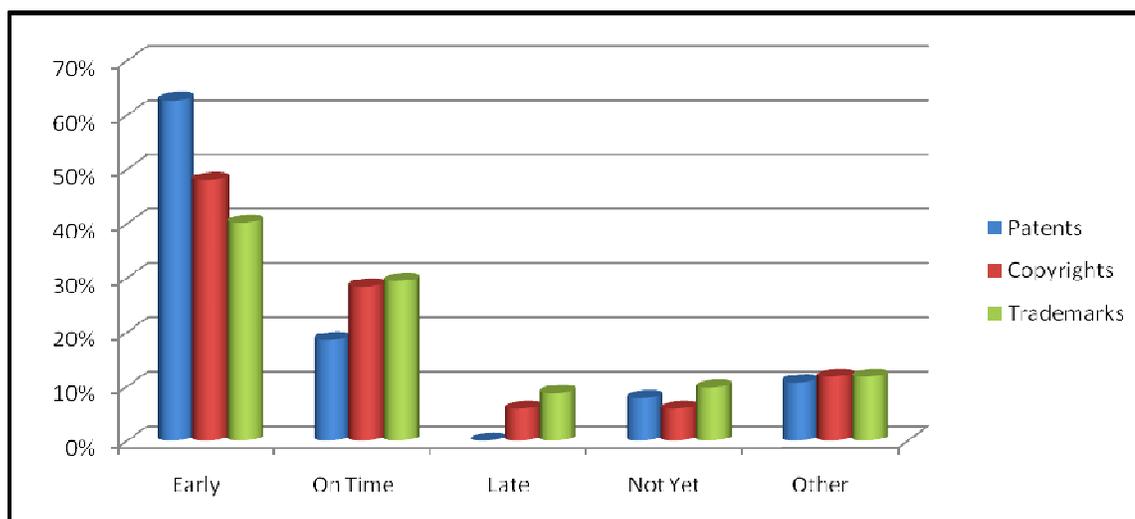
Table 3.1 The Timing of Policy Adoption Categories

Categories	Measurement
Early	IP legislation adopted prior to the deadline. It was counted starting from the year 1993 when the Uruguay Round was nearly concluded, assuming those countries that adopted their IP legislation during this period were fully aware of the content of what would be agreed under the TRIPs Agreement.
On Time	IP legislation adopted in the year immediately prior to or of the deadline.
Late	IP legislation adopted after the deadline. A country on this category can be considered as ‘late-compliance’. This category does not apply to the WTO LDC members because at the time of writing, they are still in the transition period.
Not Yet	IP legislation has not been adopted as required by the TRIPs at the time of writing. A country on this category can also be considered as ‘non-compliance’. This category does not apply to the WTO LDC members because at the time of writing, they are still in the transition period.
Other	IP legislation has not been adopted because at the time of writing a country is still in the transition period. This category only applies to the WTO LDC members.

The point of departure with respect to the empirical evidence is to observe that, out of 102 developing countries, the vast majority had adopted IP legislation by the end of their transition period.⁴⁴ As can be seen from figure 3.1, at least 41 out of 102 developing countries, or more than 40 percent of developing countries, adopted IP legislation prior to the deadline. The evidence is even more striking for patents where 64 out of 102 developing countries, or more than 63 percent of developing countries, adopted their patent legislation earlier than they had to do so.

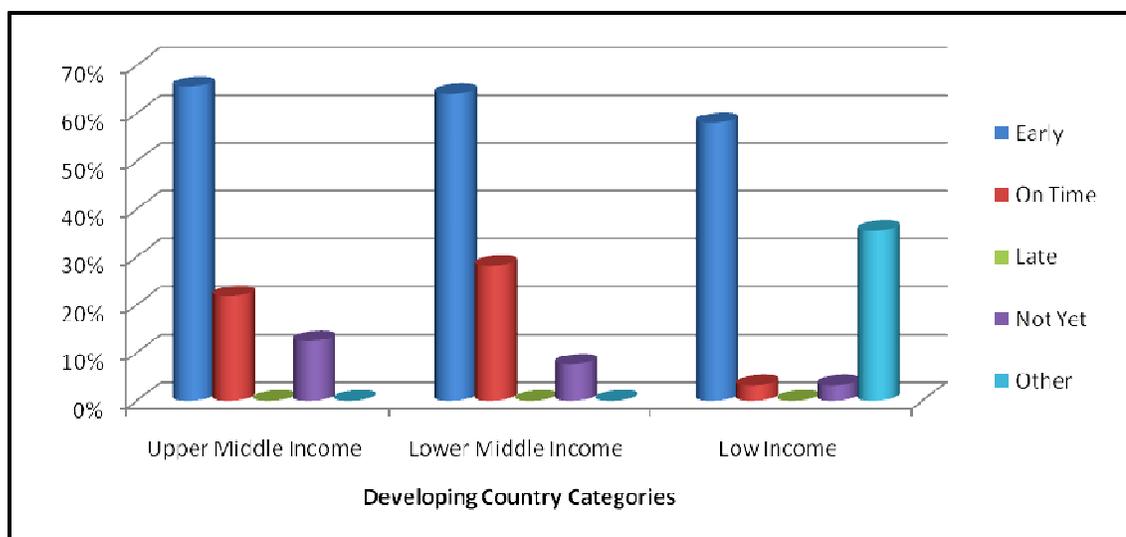
⁴⁴ It should be noted however, after the adoption of the first IP legislation, most developing countries also still undertook a series of legislative reforms related to IP protection (for a more detailed information see Appendix III). The fact that, even after a decade of the end of their transition period, most developing countries still reform their IP legislation indicates that IP protection can still be considered as one of the most significant issues under the current international trade regime.

Figure 3.1 The Timing of the Adoption of the First IP Legislation in the WTO Developing Country Members



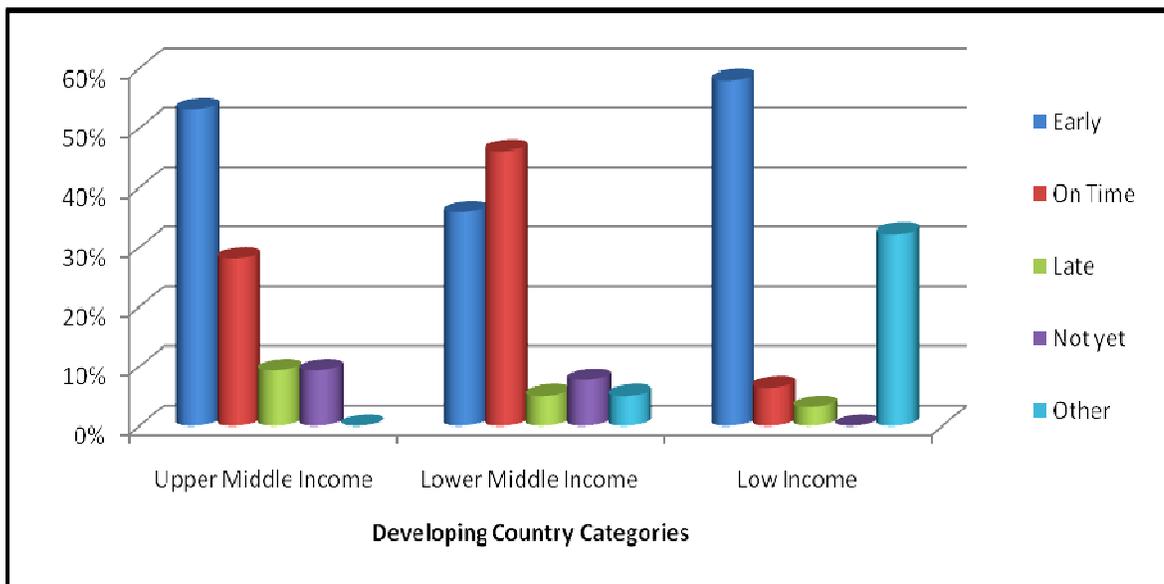
A closer observation for each of the three types of IPR in different developing country categories also confirmed the general findings. As can be seen from figure 3.2, more than 58 percent of developing countries in each developing country category had already adopted patent legislation prior to the deadline. More specifically, 21 out of 32 upper middle income economies (66 percent), 25 out of 39 lower middle income economies (64 percent), and 18 out of 31 low income economies (58 percent) adopted patent legislation earlier than they had to do so.

Figure 3.2 The Timing of the Adoption of the First Patent Legislation based on Developing Country Categories



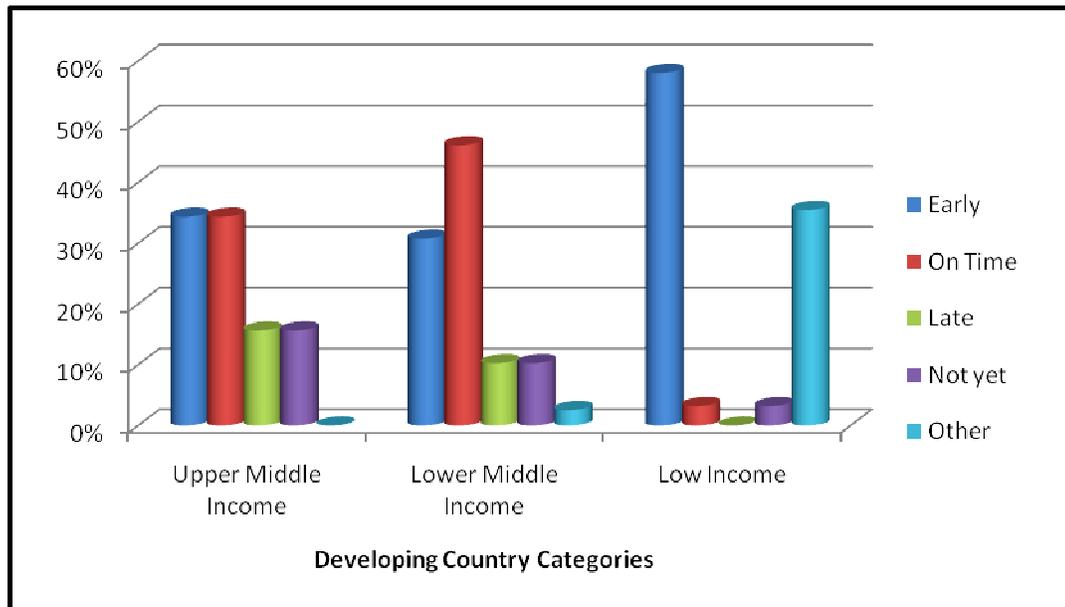
For copyright legislation, as can be seen from figure 3.3, at least 36 percent of developing countries in each developing country category adopted legislation prior to the deadline. In this regard, 17 out of 32 upper middle income economies (53 percent), 14 out of 39 lower middle income economies (36 percent), and 18 out of 31 low income economies (58 percent) enacted copyright legislation far before the end of their transition period.

Figure 3.3 The Timing of the Adoption of the First Copyright Legislation based on Developing Country Categories



In the case of trademarks, even though it is not as striking as the other two IP categories, the figure is still high, especially for low income economies, where 18 out of 31 countries, or more than 58 percent, had reformed their trademark legislation prior to the deadline. While, for the upper middle income economy category, 11 out of 32 (34 percent) and for the lower middle income economy category, 12 out of 39 (31 percent) had reformed their trademark legislation before the end of their transition period.

Figure 3.4 The Timing of the Adoption of the First Trademark Legislation based on Developing Country Categories



The fact that most developing countries had already taken the necessary steps to reform their IP legislation prior to the deadline indicates the flaws in the constructivist's explanation. Constructivists expected policy reform to be unlikely to take place, since international norms outlined under TRIPs contradicted the existing norms in most of the developing countries' domestic norms. Both neo-realism and neo-liberal institutionalism arguably would provide a better explanation by arguing that IP policy change in most developing countries could take place due to external pressures. Nevertheless, neo-liberal institutionalism also expects developing countries to comply at the deadline, since there is no pressure to go either beyond the obligations or make the reforms earlier than the deadline. Later discussions on the following sections, specifically on the role of external pressure, also demonstrate further flaws in both the neo-realists and neo-liberal institutionalists' expectations.

3.2.2 The Quality of the Legislation Adopted

The adoption of legislation is an imperfect measure of policy change as it does not capture the quality of the law adopted, nor does it address issues of implementation and enforcement (Winanti and Young, 2009, p.64). Nevertheless, the adoption of legislation is a necessary (if not sufficient) step to assess policy change as a response to developing countries' TRIPs obligations. In this regard, therefore, it is important to observe the quality of legislation adopted, to measure whether they meet the minimum TRIPs requirements or not.

The quality of the legislation is assessed with regard to whether the law adopted goes beyond the standard required by TRIPs. For this purpose, the chapter uses Deere's (2008) classifications of a country's IP legislation (see table 3.2). This classification is based on a survey of the extent to which developing countries took advantage of TRIPs options and safeguards as reflected in their legislation (Deere, 2008, p.74). It pays particular attention to some of the most contentious flexibilities in the area of patent, copyright, and plant variety protection. It also covers the use of specific TRIPs flexibilities, including the choice of an exhaustion regime for industrial property; the use of exclusions and exceptions of patent rights; the use of compulsory licenses; the availability of data protection for new chemical entities; the scope, coverage, and protection term of plant variety protection; as well as the length of the copyright terms of protection (Deere, 2008, pp.74–98).⁴⁵

Table 3.2 Classifications of the Quality of Developing Countries' IP Legislation

Classifications	Overall IPR protection
TRIPs-Plus	Early implementation, standards go beyond minimum, adopt laws that supplement TRIPs standards, efforts to enforce IP standards that go beyond TRIPs.
TRIPs-minimum	Comply by deadline, meet minimum standards, have effective enforcement.
TRIPs-minus	Delayed implementation, lower than TRIPs standards, and weak enforcement.

Source: Deere (2006; 2008, pp.68–69, p.75)

⁴⁵ See also Chapter 2 particularly section 2.4.3.2 for further discussion of flexibilities under the TRIPs Agreement.

By observing the quality of legislation, it can be identified that many developing countries have adopted more stringent IPR protection than required by TRIPs, or not made use of the flexibility arrangements available to them (see table 3.3).

Table 3.3 Variation in IP Standards of World Bank Country Classification

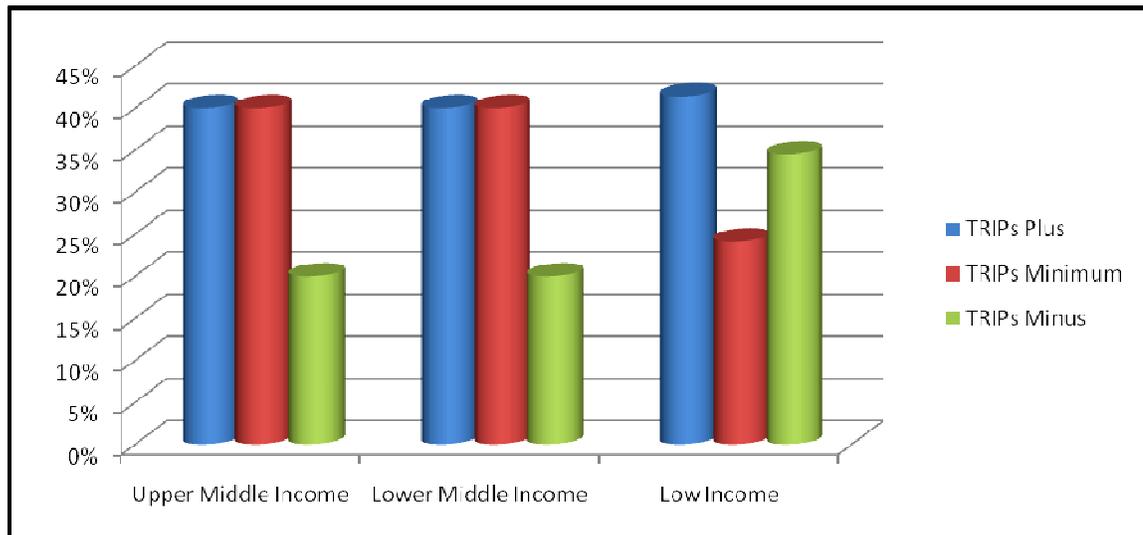
	Upper middle income	Lower middle income	Low income
TRIPs-Plus	Chile, Colombia, Dominican Republic, Gabon, Mexico, Peru	Cameroon, Côte d'Ivoire, Congo Rep, Guatemala, Honduras, Jordan, Mongolia, Morocco, Senegal , Tonga	Benin, Burkina Faso, Cambodia, Central African Republic, Chad, Guinea, Guinea Bissau, Mali, Mauritania, Nepal, Niger, Togo
TRIPs-Minimum	Argentina, Brazil, Cuba, Malaysia, South Africa, Venezuela	Bolivia, China, Ecuador, Egypt, India, Indonesia, Nigeria, Pakistan, Philippines, Thailand	Bangladesh, <i>Ghana</i> , <i>Kenya</i> , Malawi, Tanzania, Uganda, Zambia
TRIPs-Minus	Grenada, Namibia, Suriname	Angola , Djibouti , Lesotho , Maldives, Papua New Guinea	Burundi, Gambia, Haiti, Madagascar, Mozambique, Myanmar, Rwanda, Sierra Leone, Solomon Islands, <i>Zimbabwe</i>

Source: Adapted from Deere (2008, p.98). Some countries have been excluded because they are not WTO members (Equatorial Guinea, North Korea, and Sudan) or do not fall into the World Bank's developing country criteria (Bahrain, Oman, South Korea, and Singapore).

Note: Countries in bold are WTO LDC members that do not fall into the World Bank's low income economy categories. Countries in italic are countries under the World Bank's low income economy categories but are not recognised as WTO LDC members, and therefore should meet the deadline as developing countries in general.

Figure 3.5 indicates that 28 out of 69 developing countries assessed, or more than 40 percent of them, adopted more rigorous rules than outlined by TRIPs. While 23 out of 69 (33 percent) of developing countries assessed meet the minimum TRIPs requirement and only 18 out of 69 (26 percent) of developing countries adopted IP rules below the TRIPs requirement.

Figure 3.5 Variation in IP Standards of World Bank Country Classification



The fact that many developing countries adopted more rigorous rules than required by TRIPs presents a particular problem for neo-liberal institutionalism. Both the monitoring and enforcement mechanisms of the TRIPs Agreement by the WTO, while providing incentives for meeting the obligations, provide no incentive to go beyond the minimum. Neo-realism, however, arguably could explain better the anomalies associated with the adoption of national IP legislation beyond the TRIPs obligations. As the US tends to demand IPR protection beyond what is required by TRIPs, US pressure might be able to explain why developing countries have not taken advantage of flexibility mechanisms. Moreover, neo-realism, given its emphasis on relative power, would expect the weakest (least developed countries) to be the most susceptible to US pressure. However, empirical evidence, as will be discussed in the next section on the role of great power coercion, undermines neo-realists' expectations on the correlation of US pressure and the quality of legislation.

3.3 External Pressures: Great Power Coercion and the Legalisation of International Institutions

The empirical evidence, as explained previously, has confirmed the underlying puzzle of this thesis that why, despite their strong resistance during the negotiation process, most developing countries complied with the TRIPs Agreement and adopted more stringent IPR protection than required by TRIPs. The leading IR theories derived from neo-realism suggests that great power coercion is the main reason behind such an anomaly. In this regard, this thesis, therefore, uses pressure by the US as a proxy for the independent variable of great power coercion. In addition to the role of great power coercion, this research will also pay attention to the use of the WTO dispute settlement, since neo-liberal institutionalism offers that the legalisation of the international agreement under WTO plays a significant role in ensuring developing countries' responses to meet their TRIPs obligations.

3.3.1 Policy Change and US Pressure

As discussed in Chapter 1, in the existing literature, it is widely acknowledged that the US trade laws are well-equipped to exercise pressure on foreign trade partners, in order to protect IPR (McIlroy, 1998; Simons, 1999; Drahos and Braithwaite, 2002). As briefly explained earlier, one of the most obvious tools of US pressure is the USTR Special 301, which is designed to enhance the US's ability to negotiate improvements in foreign IP regimes. This is done by identifying those countries that deny 'adequate and effective protection' of IPR, or that refute 'fair and equitable market access' to US IP holders (Drahos and Braithwaite, 2002, p.89). As a result of the assessment on its IP acts, policies, and practices, a foreign country can be placed under the Watch List (WL), the Priority Watch List (PWL), the Priority Foreign Country (PFC) category, or another category, such as Section 306 (see table 3.3). In this regard, in this thesis, in order to measure the degree of US pressure, a country is categorised according to how often it is placed on a certain category on the USTR Special 301 Report during and after the transition period.

Table 3.4 The USTR Special 301 Report Categories


Categories	Explanations
Watch List (WL)	Countries that merit bilateral attention to address underlying IPR problems.
Priority Watch List (PWL)	Countries that do not provide adequate level of IPR protection or enforcement or market access for persons relying on IPR protection.
Priority Foreign Country (PFC)	Countries whose acts, policies, or practices are ‘the most onerous or egregious’ and have the greatest adverse impact on relevant US products, and that have not entered into or made significant progress in negotiations to provide adequate and effective IPR protection. These countries are subject to accelerated investigations and possible sanctions.
Section 306	Countries are subject to immediate trade sanctions if there is slippage in the enforcement of bilateral IP agreement.

Source: The USTR Special 301 Report. See also Grier (2005) for the explanation regarding the investigation procedures and action taken by the US government under the Special 301.

This thesis focuses on US pressure both during transition and after the transition period. Unfortunately, it is difficult to get systematic information on US pressure regarding IPR protection prior to 2000. Therefore, this thesis also surveyed the USTR’s National Trade Estimate Reports for 1996–1999 for all developing countries, searching for mentions of IPR violations and the USTR Special 301 reports, which assess countries’ IP policies and practices for 2001–2010, for mentions of IP concerns prior to 2000. Additional information came from Deere (2008). It is worth noting that the US demands a higher standard of IPR protection than that agreed in the TRIPs Agreement.

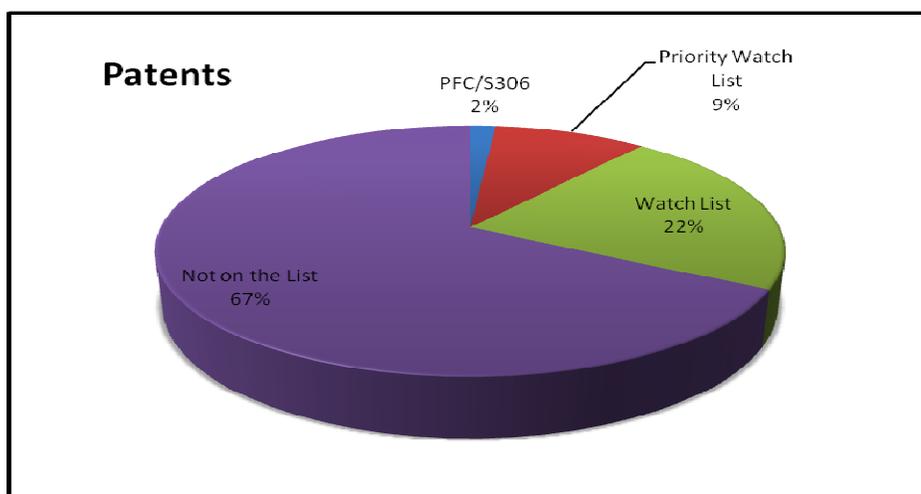
As is evident from figures 3.6; 3.7; 3.8 and table 3.5, the pattern of variation in terms of the timing of the adoption of IP legislation and the quality of developing countries’ compliance, does not, as neo-realism would expect, map neatly with US pressure. In terms of the timing of the adoption of IP legislation, most countries that adopted the IP legislation prior to the deadline have done so even without US pressure. Meanwhile, despite being clearly subject to

substantial pressure from the US,⁴⁶ most countries adopted legislation reflecting minimum compliance with TRIPs, according to Deere's (2008) classification.

3.3.1.1 The Timing of IP Legislation Adoption and US Pressure

As can be observed from figure 3.6, 43 out of 64 developing countries that adopted patent legislation prior to the deadline were not subject to US pressure. In other words, 67 percent of developing countries that reformed their patent legislation earlier than they had to were not on the USTR Special 301 Report during the transition period from 1995 to 2005. On the other hand, only one developing country (Paraguay) that reformed its patent legislation prior to the deadline was placed with PFC/S306 status on the USTR Special 301 Report during the transition period from 1995 to 2005. While other countries, China and Ukraine, that were placed with PFC/S306 status on the USTR Special 301 Report during the same period, adopted their patent legislation at the deadline. It should be noted, however, that since both China and Ukraine became WTO members after the Uruguay Round, complying with the TRIPs Agreement was part of the conditions for these two countries to become WTO members, so they were not eligible to have a transition period.

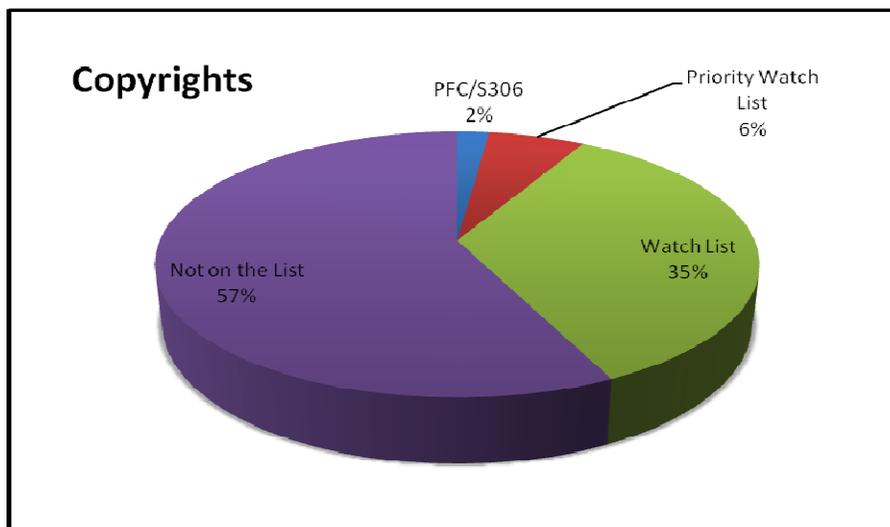
Figure 3.6 Early Patent Legislation Adoption and the USTR Special 301 Report



⁴⁶ In this survey, substantial pressure means being on the USTR Special 301 Report with PWL status for more than a single year and or listed as a PFC or subject to Section 306.

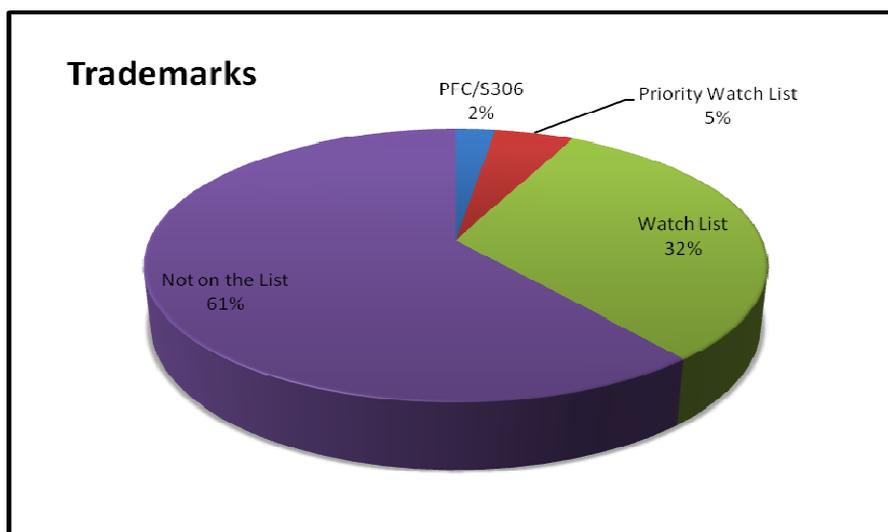
Similarly, as figure 3.7 illustrates, 28 out of 49 (57 percent) of developing countries that adopted copyright legislation prior to the deadline were not on the USTR Special 301 Report during the transition period from 1995 to 2000. As can also be seen in the case of patent legislation, only Paraguay, that adopted its copyright legislation prior to the deadline, was placed with PFC/S306 status on the USTR Special 301 Report during the transition period from 1995 to 2000. Other countries (China and Ukraine) that were placed with PFC/S306 status during the same period adopted copyright legislation at the deadline.

Figure 3.7 Early Copyright Legislation Adoption and the USTR Special 301 Report



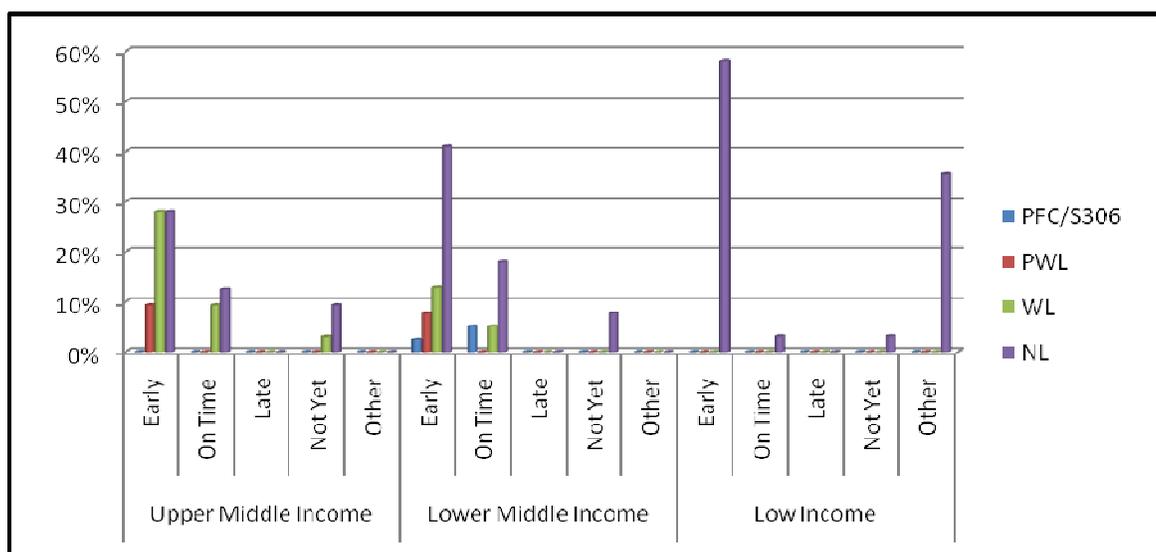
Correspondingly, quite a significant number of developing countries, 25 out of 41 (61 percent), that adopted trademark legislation prior to the deadline, were also not on the USTR Special 301 Report during the transition period from 1995 to 2000 (see figure 3.8). As can be seen from the other two IP categories, only one developing country (Paraguay) that adopted trademark legislation prior to the deadline was placed with PFC/S306 status on the USTR Special 301 Report during the transition period. Other developing countries (China, Ecuador, and Ukraine) that were placed with PFC/S306 status on the USTR Special 301 Report during 1995 to 2000, adopted their trademark legislation at the deadline. As with China and Ukraine, Ecuador also became the member of WTO after the Uruguay Round.

Figure 3.8 Early Trademark Legislation Adoption and the USTR Special 301 Report



A closer observation reveals that most countries that adopted IP legislation prior to the deadline, that were not on the USTR list, belong to the low income economies category.⁴⁷ As can be seen from the following figures 3.9; 3.10; 3.11, 18 out of 31 low income economies or more than 58 percent of them adopted all legislation for all IPR categories earlier than they had to do, even though they were not on the USTR Special 301 Report.

Figure 3.9 Developing Countries' Compliance and the USTR Special 301 Report based on the Timing of Patent Legislation Adoption



⁴⁷ For further analysis on the anomaly regarding low income economies' responses to their TRIPs Agreement especially in Francophone African countries, see Deere (2008).

Figure 3.10 Developing Countries' Compliance and the USTR Special 301 Report based on the Timing of Copyright Legislation Adoption

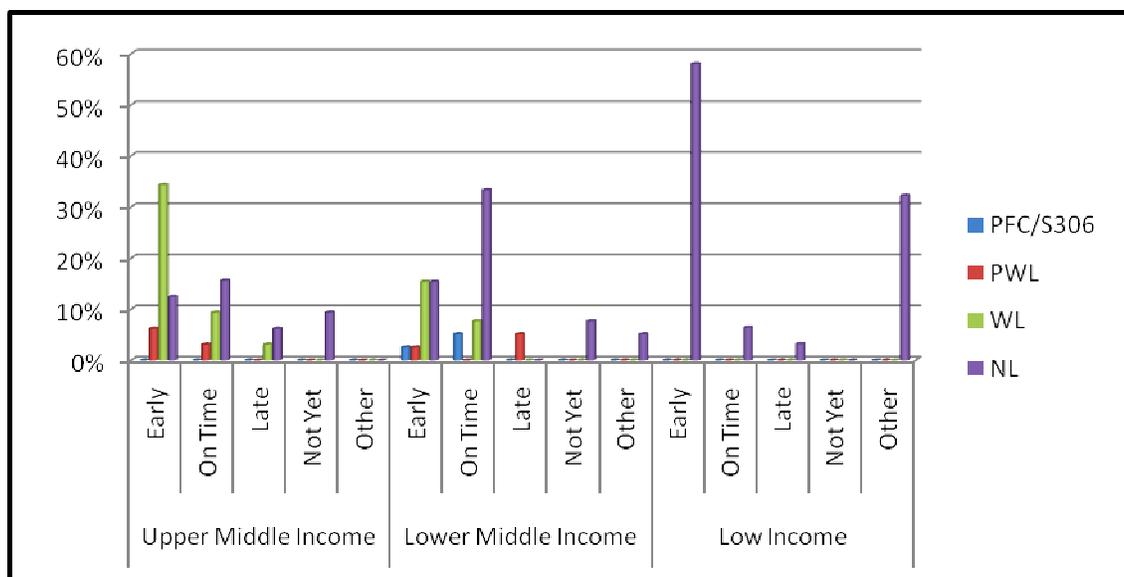
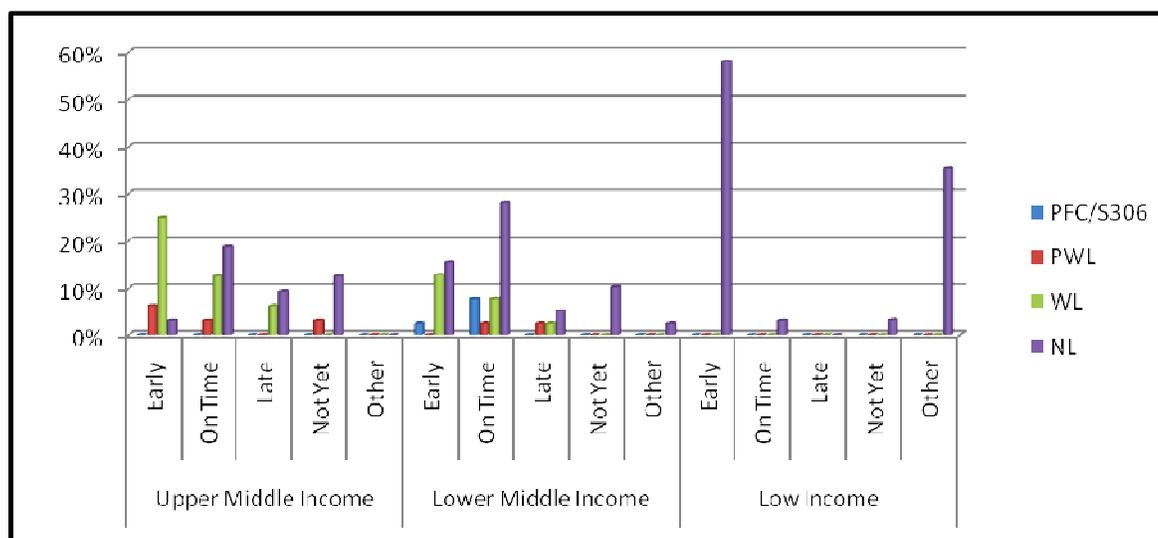


Figure 3.11 Developing Countries' Compliance and the USTR Special 301 Report based on the Timing of Trademark Legislation Adoption



The empirical findings as presented earlier demonstrated that most developing countries that adopted IP legislation prior to the deadline were not on the USTR Special 301 Report during the transition period, 1995 to 2000. On the other hand, only a very limited number of developing countries that adopted IP legislation earlier than they had to were subject to US pressure. Considering this fact, it can be argued, therefore, that neo-realists' expectations on

the correlation between great power coercion and policy adoption are unmet, since US pressure would not seem to be sufficient to cause policy change, and at the same time US pressure also does not appear to be necessary for policy change to take place either.

3.3.1.2 The Quality of IP Legislation Adopted and US Pressure

A closer observation on the pattern of variation in the quality of IP legislation adopted demonstrates that the quality of IP legislation adopted also does not correspond to US pressure, as neo-realism would expect. Most countries that can be identified as being clearly subject to substantial pressure from the US, adopted legislation reflecting the minimum requirement of the TRIPs obligations, according to Deere's (2008) classification (see table 3.5). Only Chile, the Dominican Republic, Guatemala, and Peru, that received such a substantial pressure, adopted TRIPs-Plus protection. Conversely, at least 24 developing countries that were not subject to significant US pressure adopted TRIPs-Plus protection, according to Deere's (2008) classification. This finding highlights the fact that US pressure does not appear to be necessary for developing countries to adopt more rigorous IP legislation.

Table 3.5 Variation in IP Standards of World Bank Country Classification and US Pressure

	Substantial Pressure	No Substantial Pressure
TRIPs-Plus	<u>Chile</u> , <u>Dominican Republic</u> , <u>Guatemala</u> , <u>Peru</u>	Benin, Burkina Faso, Cambodia, Cameroon, Central African Republic, Chad, Colombia, Congo Rep, Côte d'Ivoire, Gabon, Guinea, Guinea Bissau, Honduras, Jordan, Mali, Mauritania, Mexico, Mongolia, Morocco, Nepal, Niger, Senegal, Togo, Tonga
TRIPs Minimum	<u>Argentina</u> , <u>Brazil</u> , <u>China</u> , <u>Ecuador</u> , <u>Egypt</u> , <u>India</u> , <u>Indonesia</u> , <u>Malaysia</u> , <u>Pakistan</u> , <u>Philippines</u> , <u>Thailand</u> , <u>Venezuela</u>	Bangladesh, Bolivia, Cuba, Ghana, Kenya, Malawi, Nigeria, South Africa, Tanzania, Uganda, Zambia
TRIPs Minus	N/A	Angola, Burundi, Djibouti, Gambia, Grenada, Haiti, Lesotho, Madagascar, Maldives, Mozambique, Myanmar, Namibia, Papua New Guinea, Rwanda, Sierra Leone, Solomon Islands, Suriname, Zimbabwe

Source: Adapted from Deere (2008, p.98). There are some countries (Turkey, Uruguay, Paraguay, and Ukraine) that were subject to substantial pressure from the US but do not appear in Deere's classification.

Note: Underlined countries (upper middle income economies), countries in italic (lower middle income economies) and countries in bold (low income economies).

Based on both the timing of the IP legislation adoption and the quality of the legislation adopted, it can be concluded therefore that US pressure would not seem to be sufficient to cause policy change. Furthermore, previous discussion also demonstrated that, for policy reform to take place, it appears that US pressure is unnecessary. If US pressure is neither necessary nor sufficient as the cause of policy change in developing countries' IP legislation, it can be argued that neo-realists' expectations are confounded.

3.3.2 The Legalisation of International Institutions: The TRIPs Agreement and the WTO DSM

In addition to US pressure, this thesis also considers WTO complaints, in order to get at the neo-liberal institutionalist's explanations of change in developing countries' IP legislation as a response to their TRIPs obligations. This is important because such complaints may lead to binding third-party adjudication and ultimately to the imposition of sanctions in the event of non-compliance. WTO complaints, thus, represent the high-watermark of institutionalised enforcement of the TRIPs Agreement. Strikingly, as briefly stated in Chapter 1, only six developing countries—Argentina (twice), Brazil, India (two complaints regarding the same issue), Pakistan, Indonesia (not specifically on TRIPs but in combination with the Trade-related Investment Measures (TRIMs) Agreement), and China (twice for different aspects and one not specifically on TRIPs but in combination with the General Agreement on Trade in Services (GATS Agreement))—have been respondents in a TRIPs complaint as of the end of 2010 (for a summary of the WTO TRIPs disputes involving developing country members as respondents between 1995 and 2010, see Appendix IV). Moreover, there has not been an increase in the use of WTO DSM since the end of the transition period, as predicted by Otten (1998, p.527), with only two such complaints (both against China) having been filed since 2000. Why so few complaints have been brought, given that there has been some non-compliance or at least imperfect compliance, however, is beyond the scope of this thesis.⁴⁸ Nevertheless, as can be observed from the following discussions, a state being specifically targeted in an adverse ruling, does seem to have an impact on the quality of IPR protection.

⁴⁸ For a few possible explanations behind the limited use of the WTO disputes in TRIPs-related issues especially against developing countries, see Pauwelyn (2010).

After being brought for the second time to the WTO dispute in 1999 and 2000, due to the US's complaint related to Argentina's failure to provide a system of Exclusive Marketing Rights (EMR) for pharmaceutical products, and patent protection for pharmaceuticals, and test data protection for agricultural chemicals, Argentina started to issue pharmaceutical patents for the first time in 2000 (USTR, 2001a). Furthermore, Argentina also amended its patent law to provide protection for products obtained from process patents in December 2003, to fulfil its obligation under the 2002 of the US–Argentina Agreement as part of the mutually agreed solution to solve the Argentina–US dispute (USTR, 2004).

A similar example can be observed in the Brazil–US dispute. In 2000, the US initiated a WTO dispute on Brazil's patent law, which requires all patent owners to manufacture their patented products in Brazil, or else be subject to the compulsory licensing of their patent. In June 2001, the United States and Brazil reached an agreement to transfer the dispute to a newly formed US–Brazil Bilateral Consultative Mechanism. As a response to its obligation under this bilateral consultative mechanism, in December 2002, the Brazilian Congress passed a law in an effort to comply with data exclusivity obligations (USTR, 2003). Furthermore, in July 2003, the Brazilian government also amended the criminal code in order to increase the minimum penalty for copyright violations from one to two years' imprisonment (USTR, 2004).

Another case in the TRIPs dispute involving developing countries is the dispute between Pakistan and the US. As a response to its obligations under a mutually agreed solution to solve the dispute with the US, the government of Pakistan issued an ordinance in 1997. This ordinance intended to establish a system for the filling of patent applications for pharmaceutical and agricultural chemical products as demanded by the US (WTO, 1997a).

Somewhat different from previous cases, the disputes between India with both the US (in 1996) and the EU (in 1997), concerning the alleged absence of patent protection for pharmaceutical and agricultural chemical products, could not be solved with a mutually agreed solution during the consultation stage. The DSB ruling in the two cases found that India had failed to meet its obligations under the TRIPs Agreement, and requested India to bring its transitional regime for patent protection of pharmaceutical and agricultural chemical products into conformity with its obligations under the TRIPs Agreement. As a response to the DSB

ruling, a patent legislation (the Patent (Amendment) Ordinance of 1999), which was designed to meet India's initial set of TRIPs obligations, was introduced in January 1999, prior to the April 1999 deadline established by the DSB ruling.⁴⁹ In addition, India's decision in August 1998 to join the Paris Convention and the PCT (Patent Cooperation Treaty), which took effect in December 1998, can also be regarded as India's effort to fulfil its obligations under the TRIPs Agreement.⁵⁰

Related to the most recent dispute between China and the US in 2007, on certain measures pertaining to the protection and enforcement of IPR, the DSB ruling found that China's copyright law and its customs measures were inconsistent with its obligations under the TRIPs Agreement. Therefore, the DSB ruling recommended that China put its legislation into conformity with its obligations. As a response to this, the Chinese government approved the amendments of the Chinese Copyright Law on 26 February 2010, and adopted the decision to revise the Regulations for Customs Protection of Intellectual Property Rights on 17 March 2010. By adopting these laws, the Chinese government had completed all necessary domestic legislative procedures for implementing the DSB recommendations and rulings (WTO, n. d. (h)).

Based on these findings, it can be concluded that there is evidence of institutionalised enforcement, which would suggest that neo-liberal institutionalism's expectations are met. All the cases in which a developing country's IP legislation was challenged before the WTO led to the reform of domestic legislation (Winanti and Young, 2009, pp.70–71). It should be noted, however, since neo-liberal institutionalism only expects developing countries to meet the minimum requirement of the TRIPs obligations and at the deadline, neo-liberal institutionalism is unable to explain developing countries' early compliance and their TRIPs-Plus approach.

⁴⁹ India's responses to the WTO ruling will be discussed in more detail in Chapter 5.

⁵⁰ For a more detailed explanation on this dispute see WTO (1997b, 1997d, 1998b, n. d. (n), (p)). For further information regarding the India–US dispute, see also the US National Trade Estimate Report (USTR, 1998, 2001c).

3.4 Assessment and Implications

The empirical evidence of the change in developing countries' IP legislation as a response to their TRIPs obligations reveals several different patterns of responses that are inconsistent with the expectations of neo-realism, neo-liberal institutionalism, and constructivism. Contrary to the expectations of constructivism, neither the questionable legitimacy of the TRIPs Agreement from developing countries' points of view nor the incompatibility of international norms under TRIPs with their domestic norms, have caused widespread non-compliance by developing countries. As neo-liberal institutionalism would expect, given that WTO is highly legalised, there is a high level of compliance. Moreover, as neo-liberal institutionalism would expect, developing countries' IPR protection has also improved in the wake of WTO complaints against them. Nevertheless, these are very rare compared to the use of the WTO dispute in non-TRIPs cases. In addition, neo-liberal institutionalism has done a poor job in explaining both the timing and the quality of developing countries' IP legislation, particularly because neo-liberal institutionalism is unable to explain the fact that many developing countries reformed their IP legislation before they had to, and/or adopted national legislation that was more stringent than that required by TRIPs. The empirical findings also exhibit the flaws in neo-realists' expectations, because some states that have been targeted by US performed worse than some that have not been targeted. In other words, the adoption of TRIPs-Plus protection does not correspond neatly to the US's demands for stricter IPR protection in specific states. Therefore, contrary to neo-realists' expectations, US pressure would not seem to be sufficient to cause policy change, and at the same time, US pressure does not appear to be necessary for policy change to take place either.

The unexplained variance among countries and across types of IPR indicates that systemic approaches in explaining the change in developing countries' IP legislation are insufficient. This suggests that, in order to find other causes of compliance, it is therefore essential to analyse politics within the domestic sphere. By emphasising the interaction between and aggregation of divergent interests among both domestic societal and political actors, domestic politics of compliance analysis contributes to explain how external pressures (both in the forms of great power coercion and collective enforcement) are perceived by domestic actors and translate into domestic policy outcome (Keohane, 1992; Guzman 2002; Raustiala, 2000). In other words, domestic politics play an important role in determining whether and how

external pressures translate into compliance. Furthermore, domestic politics of compliance analysis also contributes to clarify the mechanisms available in domestic politics for international norms to be accepted in the domestic sphere, and how they influence domestic policy outcomes. Within this context, by providing the necessary tools to locate other causes of compliance in the domestic sphere, the domestic politics of compliance analysis is expected, not only to explain the variance *between* two case studies but also *within* the case study. In this regard, therefore, the domestic politics of compliance analysis can complement major IR theories, in explaining the change in developing countries' domestic IP legislation as a response to their TRIPs obligations. However, establishing how well this approach actually explains the variance in developing countries' IP policy change requires detailed case studies.

3.5 Introducing the Case Studies: Indonesia and India

As explained in more detail in Chapter 2, the TRIPs Agreement was concluded with a hard bargaining by major developed countries led by the US, the EU, and Japan. However, the result of a survey on IP policy change in 102 WTO developing country members, discussed in previous explanations, showed that developing countries demonstrated unexpected responses when the TRIPs Agreement came into effect. Despite the fact the incompatibility of international norms under TRIPs with their domestic norms and their strong resistance during the TRIPs negotiations, most developing countries have taken steps to reform their domestic IP legislation to comply with the TRIPs Agreement. In order to understand this puzzle, this thesis focuses on two developing countries, which represent unlikely cases in the change in developing countries' domestic IP legislation which, according to Keohane (1992, p.176), embodies an 'inconvenient obligation': Indonesia and India.

As discussed in Chapter 2, India is well-known as one of the major developing countries that were strongly against the inclusion of the TRIPs Agreement during the Uruguay Round. However, when the agreement came into force, by the end of its transition period, India had already fulfilled its TRIPs obligations, and even adopted copyright and trademark laws with more rigorous rules than those required by TRIPs. Indonesia was also considered an unlikely case, since IPR protection was essentially unknown in its legal traditions prior to TRIPs and it even contradicted its domestic norms. Yet, after the TRIPs negotiations were concluded, Indonesia was among the WTO developing countries that fulfilled its TRIPs obligation by

reforming its IP legislation earlier than required, and adopted more rigorous rules than those outlined by TRIPs, particularly for its trademark and patent legislation.

Since both neo-realism and neo-liberal institutionalism expect external pressures to play a significant role in determining developing countries' responses to their TRIPs obligations, the degree of external pressure is one of the key variables in selecting the two case studies. As explained earlier, external pressure is measured by both as being a subject of substantial pressure from the US, and by countries' involvement in the WTO dispute as a respondent related to TRIPs. India and Indonesia are, therefore, also selected because both of them received substantial external pressure, particularly from the US, even though they each experienced a different degree of pressure for different types of IPR.

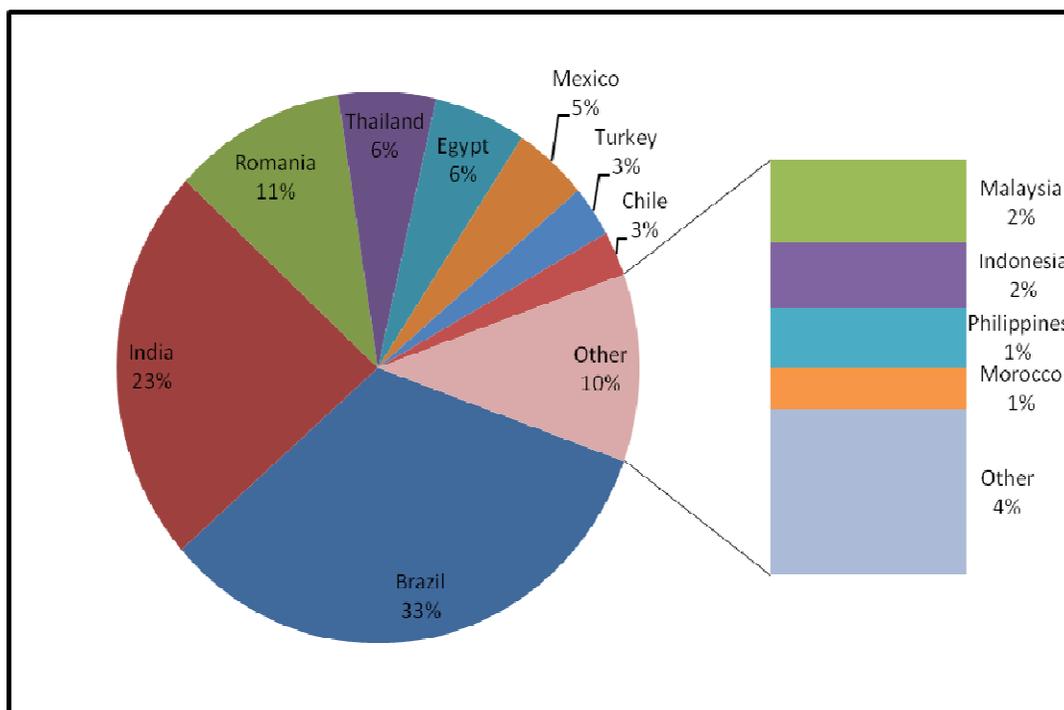
The substantial external pressure received by India is reflected on its status on the USTR Special 301 Report, which has consistently been under PWL status since 1995 to 2010. In addition, as discussed earlier, India was also being a subject of the US and the EU complaints under the WTO TRIPs dispute. With regard to its ineffective judicial system, Indonesia has also been constantly on the USTR Special 301 Report, mostly with PWL status, during the same period. As already explained earlier, even though it has never been a subject of complaints exclusively related to the TRIPs issue, Indonesia once was challenged by the US, the EU, and Japan relating to its national car programme. In this sector, the US expressed concern regarding Indonesia's obligations under the TRIPs Agreement, particularly concerning trademarks.

Despite their similarities, Indonesia and India are also selected because the two have different features concerning their domestic politics, particularly the role of domestic actors in IP policy issues. The role of domestic actors is broadly defined by the degree of the domestic actors' support concerning IPR protection. Domestic actors' support is measured by the number of patent applications by residents which can be considered as one critical indicator for identifying the existence of domestic actors interested in IPR protection.⁵¹ Based on the WIPO statistics database of patent applications by residents in 2000, India was the second top of the developing countries, accounting for 23.3 percent, while, on the other hand, domestic

⁵¹ The point of departure to assess the domestic actors' role is the year 2000, which was the end of the general transition period, even though developing countries were granted an additional transition period for products not previously patented.

applicants from Indonesia only accounted for 1.7 percent of total patent applicants from developing countries (see figure 3.12).

Figure 3.12 Patent Applications by Resident in Selected Developing Countries in 2000



Note: Data is compiled by author from WIPO statistics database on patent applications by patent office (1883-2007) by resident and non-resident (WIPO, n. d. (f)). It should be noted that not all 102 WTO developing country members' data is available from WIPO Statistics Database in 2000 (see also Appendix V for more detail data of patent applications by resident in selected developing countries).

The following table summarises the independent and dependent variables in the case studies selection:

Table 3.6 Case Studies Selection

Country	Independent Variables					
	External Pressures				Domestic Factors	
	US Pressure		WTO TRIPs Disputes		Domestic Actors' Interest in IPR Protection	
India	Strong		Panel Adoption		Strong	
Indonesia	Strong		Panel Adoption ⁵²		Weak	
	Dependent Variables					
	Patent Policy Reform		Copyright Policy Reform		Trademark Policy Reform	
	Timing	Quality	Timing	Quality	Timing	Quality
India	Early	Minus	Early	Minimum	On Time	Plus
Indonesia	Early	Plus	Early	Minimum	Early	Plus

Note: As stated earlier, the timing and the quality of legislation in this table are based on the first adoption of the legislation by the case study countries immediately prior to or after the conclusion of the Uruguay Round. However, after the adoption of the first legislation, both India and Indonesia still undertook a series of IP policy reforms.

Based on previous explanations, both India and Indonesia are selected because the two represent unlikely cases for IP policy change in developing countries. However, as already outlined before, India is also selected as a representative of a developing country with a substantial number of domestic constituents for IPR protection, and is thus expected to have a higher level of domestic societal actors' involvement in the IP policy making process. Whereas, Indonesia is selected as a representative of a developing country with the limited number of domestic constituents for strong IPR protection, and is thus expected to have a lower level of domestic societal actors' involvement in the IP policy making process. The variance in political process whether it is a bottom-up or a top-down process is important for the analysis to locate main domestic actors in IP policy process. In a more 'top-down' political process, domestic actors that is crucial to analyse further is among different domestic political actors (government officials or different government institutions to be more precise) but in a

⁵² As mentioned earlier, this is not specifically on the TRIPs issues but in combination with the TRIMs Agreement.

more ‘bottom-up’ political process, in addition to domestic political actors it is also important to pay attention to the various domestic societal actors’ preference in policy making process. In doing so, it is expected to elucidate the unexplained variance in developing countries’ response to their TRIPs obligations. As will be explained further in Chapter 5, the policy change in developing countries with the strong involvement of domestic societal actors, as reflected from the case study of India, is a result of the interaction of divergent domestic societal actors, and represents the interest of the strongest actors among domestic societal actors. On the other hand, as will be discussed in Chapter 4, the policy change in developing countries with a limited level of domestic societal actors’ involvement in IP policy making, as in the case of Indonesia, can be explained as a result of the calculation (or pragmatism) of the dominant government institutions in order to respond to external pressures.

It is worth mentioning that, in addition to India, Brazil can also be considered as a potential case study, since Brazil, along with India, was part of the G10 Developing Countries who strongly resisted the inclusion of the TRIPs Agreement during the Uruguay Round, and also adopted IP legislation earlier than it had to do so. However, for the purpose of this thesis, India is selected due to the availability of accessible information in English. Indonesia is also not the only developing country that had no IPR protection tradition in its historical tradition prior to the TRIPs. However, Indonesia is selected because, until recently, the analysis of IP policy change in Indonesia was still limited.⁵³ Therefore, analysing Indonesia’s IP policy reform contributes to fill the gap in the literature.

3.6 Conclusion

By presenting the results of a survey of 102 WTO developing country members’ legislation concerning patents, copyrights, and trademarks, this chapter has fulfilled its purpose in providing empirical evidence of the change in developing countries’ IP legislation as a response to their TRIPs obligations. The results of the survey indicated that none of the established IR accounts adequately explain the variance in the change in developing countries’ IP legislation. The fact that the vast majority of developing countries took the necessary steps to reform their IP legislation as a response to their TRIPs obligations, in particular challenges

⁵³ To date, most literature on IP policy change in Indonesia is from a legal perspective and written by law scholars (see Antons, 2000, 2003b; 2006; Kusumadara, 2000a; Butt, 2008). The exception is work by Rosser (1999, 2002) which is a from political economy perspective.

constructivists' expectations of developing countries' non-compliance. Furthermore, the empirical findings also undermined both neo-realists and neo-liberal institutionalists' accounts since external pressures, either in the form of great power coercion or international institution legalisation, would not seem to be sufficient to cause policy change, and at the same time, these pressures do not appear to be necessary for policy change to take place either. By arguing this, the chapter proposes the need to make use of the domestic politics of compliance analysis, which emphasises the interaction between and aggregation of divergent interests among domestic actors, in explaining the change in developing countries' domestic IP legislation, as a response to their TRIPs obligations.

This chapter has also already carried out its second task of introducing two case studies for further analysis. Based on previous explanations, both Indonesia and India are selected because the two represent unlikely cases for IP policy change in developing countries. Since the role of external pressure is essential for both neo-realism and neo-liberal institutionalism accounts, Indonesia and India are also selected because the two received substantial external pressure, particularly from the US, even though it was with a different degree of pressure for different types of IPR. Despite their similarities, Indonesia and India are also selected because the two have different features concerning their domestic politics circumstance, particularly the role of domestic actors on IP policy issues. By focusing on IP policy reform in the three main IP areas, patents, copyrights, and trademarks, in each case study, the analysis is expected to explain the variance, not only *between* these two case studies, but also to understand different approaches taken by the government *within* the same country for different IPR categories. In doing so, the subsequent case study chapters intend to illuminate the unexplained variance among developing countries and across different IPR categories, as a response to their inconvenient obligations under the TRIPs Agreement. By analysing the case studies of Indonesia and India, this thesis also intends to contribute to the limited existing literature utilising domestic politics of compliance analysis, in explaining developing countries' responses to their TRIPs obligations.

Chapter 4

Policy Change in Indonesia's IP Legislation: Where Government Institutions Have a Dominant Role

“Among the new obligations which we consider as a major concession is the agreement on intellectual property... As we make our adjustment, what we need most is technical cooperation and not legal harassment”
 (S.B. Joedono, a former Indonesian Minister of Trade, Statement at the Meeting at Ministerial Level Marrakesh 12 April 1994 – (Indonesia, 1994b, p.1))

4.1 Introduction

Intellectual property rights (IPR) protection was essentially an alien concept in Indonesia's national laws prior to the TRIPs Agreement. However, after the TRIPs negotiations were concluded, Indonesia was among the WTO developing country members that fulfilled its TRIPs obligations by reforming its intellectual property (IP) legislation earlier than required, and adopted more rigorous rules than outlined by TRIPs, notably for its patent and trademark laws. For this reason, the Indonesian case study, therefore, represents a puzzle for IP policy reform in developing countries, since the IP policy reform taken by the Indonesian government to fulfil its TRIPs obligations deviated from the expectations of the leading International Relations (IR) theories. IP policy change in Indonesia in particular undermines constructivists' expectations, which predicted that policy change would be unlikely to take place due to conflicting norms. Neo-realism and neo-liberal institutionalism arguably may provide better explanations by arguing the role of external pressures behind the change.

This chapter however, argues that, contrary to both neo-realists and neo-liberal institutionalists' expectations, IP policy change in Indonesia did not always correspond to the external pressures it received, since IP policy reform took place with the presence and in the absence of these pressures. The empirical findings demonstrate that IP policy reform took place in the absence of substantial external pressure, when there was a shift in some of the government institutions' preference, from being sceptical to being either indifferent or more favourable regarding IPR protection. This suggests the necessity to look at the domestic politics in searching for other causes of compliance. A closer observation on domestic politics further reveals that, with relatively limited domestic societal actors' involvement in the IP policy making process, government institutions play a critical role, and IP policy change is

explained as a result of a change in the balance of the preferences of different government institutions.

The chapter begins by briefly explaining the Indonesian political system, in order to identify the key domestic political and societal actors, and to understand the domestic policy making process. The next section discusses the historical and cultural background of IPR protection in Indonesia, in order to illustrate that IPR protection did not have strong roots in the history of Indonesia's national laws prior to the TRIPs Agreement. Before discussing the development of IP legislation in Indonesia after TRIPs, the role of Indonesia in the TRIPs negotiations during the Uruguay Round will be assessed. This section essentially presents that the TRIPs Agreement was not on the Indonesian government's priority trade agenda during the Uruguay Round. As the core of the chapter, the next section analyses the development of IP legislation in Indonesia, starting from prior to and during the TRIPs negotiations, until the time when the TRIPs Agreement came into force for developing countries. In doing so, it will analyse the role of external pressures and domestic actors (both societal and governmental) in shaping IP policy change.

4.2 Indonesian Policy Making at a Glance

To understand the policy making process in Indonesia, one needs to be aware of the fact that the post-independence Indonesian political system can be divided into three periods, each associated with a different regime, that has a distinct character that influences how the policy making process operated. The first period is the Old Order (*Orde Lama*) under the Sukarno Administration from the independence until 1966, which is also known as 'guided democracy' (*Demokrasi Terpimpin*). The second period is the New Order (*Orde Baru*) under the Suharto Administration from 1966 to 1998. After 1998, the regime is mostly known as the post-Suharto era (*Era Reformasi*). The first two regimes, under Sukarno and Suharto were both authoritarian. Under these regimes, policy making was concentrated in the hands of the President with his restricted elite circle, and there was neither transparency nor public participation in the policy making process. After Suharto stepped down in 1998, Indonesia entered the transition to democracy. Even though the president still plays a key role, other political institutions have started to have a more significant share in the policy making

process. In addition, a steady increase of the public's involvement in the policy making process can also be seen.

According to Soesastro and Soejachmoen (2007, p.1), under the Suharto Administration, the state's policy was centralised at the president's authority, which was supported by a powerful and united technocrat team. Suharto had the authority to appoint all key political positions, including the cabinet ministers, the senior ranks of the military, and the top levels of the judiciary (Rosser, 2002, pp.15–16). Suharto, at that time, also had the position as the head of the Board of Patron (*Dewan Pembina*) of the ruling party (*Golongan Karya* or *Golkar*), which granted him the power to also control the parliament. A control over both the executive and legislative institutions contributed to the creation of a solid and well-coordinated policy making mechanism under the hand of presidential authority (Soesastro and Soejachmoen, 2007, p.1).

In addition, even though the constitution requires the approval from the House of Representatives, or *Dewan Perwakilan Rakyat* (DPR), for a bill to become law, since the majority of the DPR members were also from the ruling party, most legislation initiated by the government were easily passed, and got the parliament's approval. In other words, the parliament during the Suharto Administration mostly served as the rubber stamp of the government's policy (Kusumadara, 2000a, p.221; Smith, 2001, p. 95; Aswicahyono, Bird, and Hill, 2008, p.6). In addition, due to the authoritarian characteristic of the regime, domestic societal actors were also forced to remain silent, and the room for public participation in the policy making process was virtually nonexistent. In short, since the access and participation in the formulation of the state's policy was mostly absent, consequently there was no transparency in the state's policy making under the Suharto Administration.

This situation was extensively changed after 1998 when Suharto was forced to step down, and Indonesia entered the transition to democracy (Robison, 2005, pp.259–60). Under the latest amendment of constitution, the legislative branch is empowered, and is now (almost) as powerful as the president in terms of creating a more significant check and balance mechanism. Under the new general election legislation, political parties can no longer be dissolved and controlled by the government. The survival of a political party depends solely on its achievement during the general elections. Political parties that do not fulfil the minimum

seat requirement on the DPR are not eligible to run in the next general election (General Election of Members of the House of Representatives, the House of Regional Representatives, and the Regional House of Representatives Act No. 12/2003 last amended in 2008 with the adoption of Act No. 10/2008).

The existence of new political parties created a more lively debate in DPR, and the parliament can no longer be considered the rubber stamp of government policy (Bird, Hill, and Cuthbertson, 2008, p.5). In the post-Suharto era, as argued by Smith (2001, p.96), "...the DPR became a highly politicized [sic] debating chamber. DPR now has a dynamic multi-party environment where coalitions have to be constructed to get legislation passed". Compared to previous regimes, most legislation proposed by the government received challenges from the members, and involved wider public participation through open public hearing. Nevertheless, even though there has been a significant change in the role of DPR in the post-Suharto regime, it should be noted that, compared to other domestic issues, IP-related issues still has not drawn significant debate in DPR. Based on Jhamtani and Hanim's (2002, p.91) observations from public hearings during the amendment process of IP legislation in early 2000, this is essentially because not many members of DPR have a sufficient understanding of IPR protection and its consequences for Indonesia's society. In this context, therefore, despite the fact that DPR has been more empowered since 1998 than previously, its role in IP policy change arguably remains irrelevant.

In addition, recent development also shows that, in spite of the fact that Indonesia has become a more democratic country and there is a significant increase in the role of domestic societal actors in the policy making process, the public's involvement is still uneven, depending on the targeted areas. As argued by an Indonesian NGO representative, the involvement of a wider public participation in the policy making process only concentrates on a few 'high politics' issues such as human rights violations, good governance, and freedom of expression, while it does not significantly increase in other 'unfamiliar' areas, such as IPR protection. In this regard, he further argues that "...not many Indonesian NGOs have a comprehensive understanding about IPR protection, let alone Indonesian people in general".⁵⁴ As will be explained in more detail later, one of the reasons behind this is because domestic constituents for strong IPR protection remain limited. Furthermore, the absence of domestic constituents

⁵⁴ Author's interview with an Indonesian NGO representative (Jakarta, 25 August 2009).

for strong IPR protection is also accompanied by a low level of domestic societal opposition to policy reform. In this regard, therefore, despite the change in the political regime, the role of domestic societal actors in the IP policy making process is still relatively absent.

Previous discussions reveals that the executive played a dominant role in Indonesia's domestic politics, whereas other political institutions, such as the DPR, to a large extent were politically weak and nearly absent in the decision making process, especially prior to 1998. Furthermore, with its long tradition under the authoritarian regime, domestic societal actors were also mostly irrelevant in the Indonesian policy making process. Since other domestic actors arguably only have a limited role, in understanding IP policy reform in Indonesia, the analysis will focus more on the difference of preference among government ministries concerning IPR protection. Nevertheless, since prior to 1998, under the Suharto Administration a relatively solid and unified voice of government machinery was in place; the analysis of different ministries' preferences becomes more useful once Indonesia has entered the transition to democracy in 1998. In this context, after 1998, explaining IPR policy reform needs a deeper analysis on the involvement of newly engaged domestic political actors in IP-related issues, especially among different government ministries. As will be elaborated more in subsequent sections, the involvement of these new domestic political actors contributed to the change in the constellation in domestic actors in the IP policy making process.

4.3 IPR Protection in an Indonesian Historical and Cultural Context

This section is crucial for providing a basic historical background of IPR protection in Indonesia, since IPR protection was mainly alien in Indonesia's national legislation prior to TRIPs, due to its conflicting nature with Indonesia's traditions and norms. This is rather different than the Indian case study, which has a long historical attachment with IPR protection. Despite the fact that IP legislation existed in Indonesia as early as 1844, those laws, which were introduced under the Dutch colonial rule, did not apply to native Indonesians.⁵⁵ Under the Dutch colonial rule, the legal system for the indigenous Indonesians was *adat* (an extensive system of Indonesian customary norms), which did not recognise IPR protection. As a consequence, there was no Indonesian legal tradition of protecting IPR.

⁵⁵ The Dutch colonial rule classified the population into three different legal groups (the Europeans, Foreign Orientals and indigenous Indonesians) each with its own legal system (Antons, 2003a, p.16).

Under unwritten *adat* law, individual ownership in intellectual works or inventions is not recognised because knowledge is regarded as public property, and its main function is to serve the public benefit. Furthermore, since knowledge is also regarded as the common heritage of humankind, most traditions in Indonesian communities view that knowledge should be freely accessible and available to all (Butt, 2008, pp.623–24; Kusumadara, 2000b, pp.5–6, n. d., p.4). Such a notion is in conflict with the tradition in Western-industrialised countries, which acknowledges IPR as part of individual rights (Gutowksi, 1999, pp.744–45).

In addition, unlike Western-industrialised countries' traditions which regard commercialisation as the incentive for creativity, in most Indonesian traditional communities, the commercialisation of creative works is prohibited, because of the spiritual element of the works, and they are considered to be a symbol of dedication and contribution to the community (Butt, 2008, p.628). In this context, creative and innovative activities are regarded as part of the individual contribution to the cultural and economic development of the whole society. *Adat* also realises that creativity and invention can be developed through the social benefits of a creative work, instead of through the material benefits for individual owners. In this regard, creativity and innovation are encouraged, not through intellectual property protection, but through the rapid and free dissemination of the invention and knowledge to the society (Kusumadara, n. d., pp.2–4). This kind of norm is also contrary to the common understanding in Western-industrialised societies, which believe that material benefits from strong IPR protection is necessary to foster creativity and innovation (Marron and Steel, 2000, p.166).

Considering this background, it can be argued that IPR protection has no strong roots in Indonesian society. In this context, therefore, IP policy reform taken by the Indonesian government after the TRIPs Agreement, which is at odds with its existing domestic norms, requires further explanation.

4.4 Indonesia during the TRIPs Negotiations: Not on Indonesia's Priority Trade Agenda

Unlike India, which strongly opposed the adoption of the TRIPs Agreement during the Uruguay Round, Indonesia did not have a clear position either for or against the TRIPs Agreement. There are several reasons behind such an ambiguous stance. First of all, TRIPs was a new issue in the Uruguay Round. According to Kartadjoemena (2005, p.148), who was a former Indonesian Ambassador to GATT and was Indonesia's Chief Negotiator in the Uruguay Round from 1987 to 1994, the Indonesian government was not well-equipped to deal with non-traditional trade issues like TRIPs. Since the Uruguay Round covered new issues beyond the traditional realm of trade, the negotiations became more complex, and required a better domestic arrangement involving inter-ministerial coordination beyond the Ministry of Trade. In this regard, Kartadjoemena (2005, pp.146–48) argues that the Indonesian domestic institutional structure dealing with international trade issues during the Uruguay Round was not prepared to meet the challenge of the inclusion of IP-related issues.

In addition, Indonesia's unclear position was also due to the fact that IPR protection was not part of the Indonesian government's priorities during the Uruguay Round. This argument is pointed out in the interview with a former Indonesian diplomat.⁵⁶ In line with this argument, Kartadjoemena (2005, p.149) states that the Indonesian government's focus was on improving the access to developed countries' markets for manufactured and processed goods. The assessment on the official statements made by the high ranking Indonesian delegates, including the Indonesian Minister of Trade, during the Uruguay Round negotiation indicates that Indonesia's main interest was on so-called 'long-standing traditional areas of trade', such as textiles, tropical products, and agricultures.⁵⁷ A closer observation on the documents submitted by the Indonesian government during the Uruguay Round negotiation (either submitted as individual contracting party and/or as a group on behalf of Association of Southeast Asian Nations (ASEAN)/other developing countries), also reveals that the Indonesian government submitted a number of submissions mostly to the Negotiating Group on Textiles and Clothing.⁵⁸ While the Indonesian government also submitted a number of

⁵⁶ Author's interview with a former Indonesian diplomat (Jakarta, 24 August 2009).

⁵⁷ For a more detailed explanation concerning Indonesia's main interests during Uruguay Round negotiation, see ASEAN (1986, 1987, 1989, 1990) and Indonesia (1986a, 1988g, 1988h, 1990d, 1994a, 1994b).

⁵⁸ For a complete list of documents submitted by the Indonesian government to the Negotiating Groups during the Uruguay Round 1986–1994, see Appendix VII.

submissions to the other negotiating groups, including agriculture, tropical products, and services, there were none to the Negotiating Group on TRIPs Including Trade in Counterfeit Goods.⁵⁹

The study on the official statements submitted by the Indonesian government during the Uruguay Round also indicates that the topics regarding the new trade issues were only mentioned briefly, and mostly related to concerns over their implications on the economic development. Based on these statements, the Indonesian government repeatedly expressed that Indonesia (including other ASEAN members) had taken an ‘open-minded attitude’, but also emphasised that these new areas should not undermine their long-term development needs (ASEAN, 1990, pp.3–4; Indonesia, 1988h, pp.3–4, 1990d, p.2, 1994b, p.1). The specific mention of IPR protection occurred on the Indonesian government’s official statements after 1990, which stressed the necessity of providing a more favourable condition for developing countries, including the assurance of a transitional period and technical assistance to implement the agreement (ASEAN, 1990, pp.3–4; Indonesia, 1990d, p.2, 1994b, p.1).

By the end of the Uruguay Round, the Indonesian government accepted the Uruguay Round’s package including the TRIPs Agreement. As can be seen from the statement by the Indonesian Minister of Trade on the ministerial meeting in Marrakesh on 12 April 1994, quoted in the beginning of this chapter, the Indonesian government emphasised the importance of technical assistance from developed countries, since the implementation of the TRIPs Agreement would be costly for developing countries (Indonesia, 1994b, p.1).

It can be concluded that, due to its lack of negotiating and institutional capacity during the Uruguay Round, Indonesia only concentrated on the negotiations concerning its top priority trade agendas. Given the fact that IPR protection was not Indonesia’s main concern during the Uruguay Round, the TRIPs Agreement represents an ‘inconvenient obligation’, in that it obliged the Indonesian government to adopt policies it would otherwise have not. Nonetheless, as a response to its TRIPs obligations, Indonesia took policy reform earlier and with more rigorous rules than required. Explaining policy reform taken by the Indonesian government as a response to its inconvenient obligation, therefore, is the main purpose of the subsequent sections.

⁵⁹ See Appendix VII.

4.5 Explaining Policy Change in Indonesia's IP Legislation and TRIPs Compatibility

Since the concept of IPR protection was essentially unknown in Indonesia's traditions and norms prior to TRIPs, the IP laws in Indonesia therefore, had only a brief historical existence except for trademarks.⁶⁰ The existence of patent and copyright laws could only be traced back to the early 1980s, only a few years before the TRIPs negotiations were started. When the TRIPs negotiations were concluded, in order to meet the minimum standards as required by TRIPs, Indonesia was obliged to reform its existing IP laws. Even though, along with other developing countries, Indonesia was granted a transition period to comply with its TRIPs obligations until January 2000,⁶¹ Indonesia amended its existing IP legislation in 1997, while still in the transition period.

4.5.1 Indonesia's Patent Policy Change: Government Pragmatism and Economic Crisis

As explained earlier, since Indonesia's *adat* customary law does not recognise IPR protection, including patent protection, the swift decision taken by the Indonesian government to reform its existing patent legislation earlier than it had to, as a response to its TRIPs obligations, poses a puzzle that this section seeks to explain. Furthermore, that the Indonesian government introduced more rigorous patent rules than required by TRIPs also demands further explanation. In understanding patent policy reform taken by the Indonesian government, the first part of the section discusses the compatibility of Indonesia's patent law with the TRIPs Agreement, by assessing Indonesia's patent legislation both prior to and after TRIPs. The next section focuses on explaining the reason behind the policy change by analysing the role of external pressures, as well as looking at the preferences of domestic actors (societal and governmental) and how they interact in shaping domestic policy outcomes.

⁶⁰ As explained earlier, this does not count the existence of IP legislation during the Dutch colonial period since those laws did not apply to native Indonesians (Antons, 2003, p.16).

⁶¹ As mentioned in Chapter 2, as a developing country Indonesia was granted an additional transition period until 2005 to introduce patent protection for pharmaceutical and agricultural chemical products (see table 2.2 in Chapter 2).

4.5.1.1 Assessing Indonesia's Patent Legislation and TRIPs Compatibility

After independence, the Indonesian government kept maintaining all the existing laws, which were adopted under the Dutch colonial rule, except patent law. While the Trademark Act of 1912 and the Copyright Act of 1912 were still in force, the Patent Act of 1910 was deliberately abolished by the Indonesian government in the beginning of the 1950s, because it was regarded as conflicting with Indonesia's sovereignty, as it required the patent council in the Netherlands to issue patents (Uphoff, 1991, p.28; Kusumadara, 2000a, p.55; Antons, 2003b, p.397, 2004b, p.112). Revoking the Patent Act of 1910 also fitted with Sukarno's nationalist economic policies, and his strong resistance towards the influence of Western-industrialised countries.

After the abolishment of the Patent Act of 1910, the Sukarno Administration only passed several regulations under the Ministry of Justice,⁶² to accommodate provisional registration for domestic and foreign patents (Kusumadara, 2000a, pp.55–56). Even though these regulations were only intended as interim protection, they lasted for more than three decades, until 1989, when the Indonesian government finally enacted its first national legislation on patents. As table 4.1 illustrates, Indonesia's existing patent law under the Patent Act of 1989 did not meet with the minimum standards of protection under TRIPs. One of the reasons is because, under the Patent Act of 1989, the duration of protection was only 14 years, while the agreement requires a minimum of 20 years of protection. As a TRIPs Agreement signatory, therefore, Indonesia had to reform its patent legislation in order to meet the minimum standards required.

Even though Indonesia was granted an additional transition period to implement its TRIPs obligations for patent protection until 2005, the Indonesian government did not take full advantage of this transitional period, and instead it amended its patent law in 1997.⁶³ As clearly stated in its preamble, the Patent Act No. 13/1997 was intended to improve some provisions that were incompatible with Indonesia's obligations under the TRIPs Agreement. It basically increased the minimum duration of protection to 20 years as required, extended the

⁶² Starting from 2000 the Indonesian Ministry of Justice had become the Ministry of Justice and Human Rights. It should be noted that the main government agency dealing with the administration of IPR—the Indonesian Directorate General of Intellectual Property Rights (DGIPR)—works under the Ministry of Justice and Human Rights' auspices.

⁶³ In addition to the adoption of the Patent Act of 1997, Indonesia also ratified the Patent Cooperation Treaty (PCT) through the adoption of the Presidential Decree No. 16/1997.

scope of patentable areas, redefined the scope of implementation, and established the exclusive rights of patent holders. In terms of the scope, the Patent Act of 1997 retained the provisions from the previous act, relating to the exclusion of methods of examination, care treatment and surgery for humans and animals, as well as theories and methods in science and mathematics from being patentable. However, the act also extended the scope of patentable areas to include the invention of foods and beverages. Under the Patent Act of 1997, the Indonesian government also eliminated provision relating to the exclusion of plants and animals other than micro-organisms from being patentable. By eliminating this provision, it meant that, under its first Patent Act after TRIPs, the Indonesian government adopted more rigorous rules than those required by TRIPs. Under the Patent Act of 2001, however, this provision was introduced again, and, by inserting this provision, Indonesia's patent regime still met the minimum requirements under TRIPs.

Table 4.1 The Indonesian Patent Acts and TRIPs Compatibility

Aspect	TRIPs Obligation	During TRIPs Negotiations (No.6/1989)	After TRIPs (During Transition Period)	
			(No.13/1997)	(No.14/2001)
Subject matter coverage	Products and processes for any inventions in all fields of technology, involving an inventive step, and that are capable of industrial application	Excluded the manufacturing process or products of foods and beverages, chemically processed products of foods and beverages for human or animal consumption	Protected both process and products	Protected both process and products
Flexibility	May exclude inventions which are necessary to protect public order or morality	Excluded inventions that were in conflict with effective legal provisions, religious or moral issues, public security or ethics	Utilised this flexibility	Utilised this flexibility
	May exclude plants and animals other than micro-organisms	Excluded plants and animals other than micro-organisms	Exclusion eliminated	Exclusion included
	May exclude diagnostic, therapeutic and surgical methods for the treatment of humans or animals	Excluded diagnostic, therapeutic and surgical methods for the treatment of humans or animals	Utilised this flexibility	Utilised this flexibility
	Permitted parallel importation	Permitted parallel importation	Permitted parallel importation	Permitted parallel importation
	Permitted compulsory licensing	Permitted compulsory licensing	Permitted compulsory licensing	Permitted compulsory licensing
Duration of protection	20 years	14 years	20 years	20 years
Exclusive rights of patent holders	Protects exclusive rights of patent holders	Not granted	Granted	Granted
Enforcement	Requires civil and criminal enforcement but no minimum requirements	Included provisions for enforcement	Included provisions for enforcement	Included provisions for enforcement
TRIPs compatibility	--	TRIPs-minus	TRIPs-plus	TRIPs-minimum

Note: Author's assessment on the Indonesian Patent Act No. 68/1989 [in Indonesian], the Indonesian Patent Act No. 13/1997 [in Indonesian], and the Indonesian Patent Act No. 14/2001. The first Indonesian Patent Act was adopted during the TRIPs negotiations (the Patent Act of 1989) and the subsequent Acts were adopted during its transition period with the latest Act being the Patent Act of 2001. After the end of the transition period, the Indonesian government had not adopted any other patent acts (as of January 2011).

4.5.1.2 Indonesia's Patent Legislation: Explaining Policy Change

This section argues that the role of external pressures, particularly in the form of great power coercion, as argued by neo-realists, can only provide a partial explanation in understanding patent policy reform in Indonesia. The empirical evidence demonstrates that Indonesia experienced pressures mainly from the US to improve its patent regime. Nevertheless, these pressures only became significant in influencing the Indonesian government's decision to reform its patent law after Indonesia's position as an energy producer was declining. During the oil boom, despite receiving the same level of pressures from the US, the Indonesian government did not take any sufficient steps to reform its patent regime, since the government did not regard a strong patent protection as necessary for its development needs. In this regard, therefore, in order to fully understand patent policy change in Indonesia, it is essential to analyse how the government perceived and responded to these pressures.

4.5.1.2.1 Patent Policy Change prior to and during the TRIPs Negotiations

As briefly stated earlier, the first Indonesian patent law was adopted in 1989, nearly four and a half decades after independence. The extensive length of the adoption of the first patent law after its independence can be understood, since the indigenous Indonesian tradition did not recognise IPR protection. Furthermore, according to Uphoff (1991, p.30), the absence of patent law in Indonesia after its independence was also due to the wide division among the ministries involved with regard to patent protection. On one hand, the Ministry of Industry⁶⁴ viewed strong patent protection as being beneficial for Indonesia's business community, while, on the other hand, the Ministry of Health, which had a close connection with the domestic pharmaceutical industry, resisted the insertion of the pharmaceutical area on patent protection (Uphoff, 1991, p.30). In between, the Ministry of Justice's indifferent position regarding IPR protection can be identified, which argued that adopting international standards was necessary (Uphoff, 1991, p.30). This divergent policy preference among domestic political actors was difficult to reconcile, which in turn contributed to the absence of patent legislation in Indonesia after the independence.

⁶⁴ Uphoff (1991, p.30) also identifies that there were nationalist and internationalist factions within the Ministry of Industry.

In addition, the absence of patent law until the late 1980s, was also due to Indonesia's position as an energy producer, particularly of oil and gas, at least until the mid-1980s. According to Djaic (2000, p.457) from 1973 to 1974 the price of Indonesia's oil soared significantly, from US\$12.60 per barrel to US\$34.50 in 1983, while, between 1974 and 1984, revenue from oil occupied approximately two-thirds of Indonesia's budget and export earnings. During this period, Indonesia was able to implement trade protectionist policies, and was even considered to be the most nationalistic government in the region (Uphoff, 1991, p.28).⁶⁵ The protectionists policies were implemented without worrying too much about providing other important conditions, including ensuring an adequate IPR protection as necessary to attract FDI (Antons, 2003b, 402). In this regard, according to Rosser (2002, p.147), prior to the mid-1980s, the Indonesian government did not put any effort into protecting IPR which was both weak, according to international standards, and had no sufficient enforcement.

Furthermore, unlike in the case of copyright protection which will be explained later, domestic industry support for strong patent protection was relatively absent (Rosser, 1999, p.109; Uphoff, 1991, p.30). This can be seen particularly from a low-level of domestic applicants for patent protection. According to Rosser (2002, p.148), domestic applicants only occupied around 4 percent of patent applications between 1953 and early 1989. In addition, during the 1980s, there were only a few Indonesian pharmaceutical industries that were engaged in scientific research activities. The Indonesian pharmaceutical industries were mostly engaged in generic drugs production, which benefitted from a low-level of patent protection. Furthermore, they were also part of the domestic business of politically well-connected conglomerates in Indonesia (Rosser, 1999, p.109). In this regard, since patent policy reform would threaten the interest of conglomerates in Indonesia, the government did not have any incentives to take any steps to improve the patent regime. In a later development, however, the opposition from domestic pharmaceutical industries was decreasing, since, compared to their interests and investment in other business sectors such as petrochemical, automobiles, and other capital intensive industries, their interest in the pharmaceutical industry was relatively small (Rosser, 2002, p.163).

⁶⁵ As part of its protectionist economic policy to protect its domestic industry, Indonesia pursued an import-substitution policy and protected its import regime by imposing both high tariffs and non-tariff barriers (Kartadjoemena, 2005, p.143). Foreign direct investment was controlled through a compulsory of partnership in joint ventures and a requirement of minimum 51 percent equity participation for domestic partners (Antons, 2009, p.116).

A substantial change occurred in the late 1980s. When Indonesia's position as an energy producer was declining, Indonesia's trade policies shifted to a more liberal approach and opened the market to foreign companies in order to attract revenues from other sectors than oil and gas (Uphoff, 1991, p.34; Rosser, 2002, p.147; Vanzetti, McGuire, and Prabowo, 2005, p.5; Bird, Hill, and Cuthbertson, 2008, pp.3–4). Furthermore, after the collapse of oil prices in the mid-1980s, and with the emergence of new competitors for FDI, Indonesia's dependence on the US market, as one of its major trading partners, was also increasing. During this period, Indonesia's economy relied on exports to the US market, and enjoyed the Generalised System of Preferences (GSP), which granted a beneficiary country the permission to export qualified products into the US market on a duty-free basis. In 1985, for example, Indonesia used this GSP privilege to export duty-free goods to the US that valued up to US\$28 million (Gielen, 1988, p.102). Furthermore, the US was also one of the biggest foreign sources of FDI in Indonesia with US\$758 million in 1988 alone (Kusumadara, 2000a, pp.156–57). As can be seen from the following table, Indonesia was the main destination of US FDI in developing East Asia from 1982–1988. In this regard, when Indonesia's position as an energy producer weakened, Indonesia was no longer able to sustain its protectionist trade policy, nor was it immune from the escalating demand from the US government to improve its IPR protection during this period.

Table 4.2 United States Foreign Direct Investment to Developing East Asia 1982–1988 (in US\$ millions)

Country	1982	1983	1984	1985	1986	1987	1988	Total
Indonesia	2,281	2,051	1,337	1,176	1,178	999	758	9,780
Hong Kong	2,928	482	428	443	342	266	301	5,910
Malaysia	1,199	498	440	357	336	541	491	3,862
Singapore	1,745	282	243	245	226	246	416	3,403
Thailand	777	413	373	192	95	94	217	2,161
Philippines	1,308	194	156	114	126	119	140	2,157
Taiwan	521	125	140	154	147	133	254	1,474
South Korea	641	88	105	76	78	74	185	1,247

Source: Modified from Guisinger (1991, p.34).

Considering this background, when the Indonesian government finally adopted its first patent law in 1989, the existing literature mainly considers that the enactment of this Act was intended to accommodate external pressures (Gielen, 1988, p.102; Rosser, 1999, p.103;

Antons, 2000, p.134; Kusumadara, 2000a, p.133). Such an argument is not unjustified. During the process of the enactment of the new patent act, for instance, the US embassy constantly lobbied the Indonesian government to ensure that the new patent act would provide sufficient protection (Rosser, 1999, p.111).

As a response to these constant lobbies, on 30 July 1986, President Suharto announced the establishment of a Working Team on IP, which consisted of representatives from all the ministries involved, to assess the condition of IPR protection in Indonesia.⁶⁶ A study by Uphoff (1991, p.33) reveals that, within the Working Team, there was the disagreement among the ministries. Strong supporters for the adoption of new patent legislation were the Ministry of Research and Technology and the Ministry of Industry. The Ministry of Trade was also more responsive to US demands on the IPR protection issue expecting trade privileges and market access to the US market as the concession. On the other hand, the Ministry of Health⁶⁷ opposed the inclusion of the pharmaceuticals as patentable, and the Ministry of Agriculture opposed the inclusion of plant and animal varieties as patentable. Nevertheless, due to the nature of the authoritarian regime at that time, this disagreement was reconciled by the decision from the Minister of State Secretariat, who held a powerful control over the Working Team, authorised directly by President Suharto (Uphoff, 1991, p.33), who tended to be more sceptical concerning IPR protection. This can be seen from the statement of the Minister of State Secretariat during the process of the enactment of the first Indonesian patent act, arguing that Indonesia's effort to enact the new patent act was not driven by Indonesia's economic needs:

“...the enactment of the *Patent Act* in Indonesia was not concerned with technological development or the protection of existing patent, but rather was about the politics of law. [Moreover] The *Patent Act* was not necessarily important for Indonesian economic development because a good patent system did not guarantee the effective, optimal, and substantive transfer of technology” (the statement of the Minister of State Secretariat, as quoted by Kusumadara (2000, pp.64-65).

⁶⁶ This Working Team worked under the coordination of the Minister of State Secretariat, who was appointed as the President's deputy and had a powerful control (Uphoff, 1991, pp.30–32). Uphoff (1991, p.34) further argues that by appointing the Minister of State Secretary as his deputy, Suharto had a critical role in the working team, which also meant full control of the outcome. As will be explained later, due to a substantial pressure to improve copyright regime compared to that on patent, the main task of the Working Team was to provide a recommendation to amend the existing copyright act.

⁶⁷ As mentioned earlier, the Ministry of Health has a strong connection with the domestic pharmaceutical industry. In addition, according to Rosser (2002, pp.159–60) among these domestic pharmaceutical manufacturers are state-owned enterprises such as PT Kimia Farma, PT Indonesia Farma, PT Bio Farma, and Phapros which also engaged in the production of copied drugs.

Kusumadara (2000, pp.64–65) further argues that key decision makers at that time, including members of the Indonesian parliament and the Minister of Justice, also admitted that the main reason behind the enactment of the Patent Act of 1989 was not driven by the concern of encouraging innovation in Indonesia, but more to respond to foreign business and trade partners complaints.

Previous discussions demonstrated that Indonesia indeed received external pressures, mainly from the US, in the forms of diplomatic pressures to improve its patent regime. This may lead to the conclusion that patent policy reform in Indonesia can be explained as a result of great power coercion as argued by neo-realists. Nevertheless, a closer observation on patent policy reform across time does not appear to support the neo-realist's account. The empirical findings revealed that great power coercion only played a significant role in influencing the government's decision concerning IP policy reform after the decline of Indonesia's position as an energy producer. Prior to the oil crisis, however, since the Indonesian government did not find any advantage to having a strong patent protection, the government did not put any effort into reforming its patent regime, despite receiving similar pressures. In this regard, since patent policy reform in Indonesia does not correspond neatly with the external pressures it received, therefore the external pressure explanation, as argued by neo-realists, can only provide a partial explanation to understanding the patent policy reform prior to and during the TRIPs negotiations.

4.5.1.2.2 Patent Policy Change during the Transition Period

After the TRIPs negotiations were concluded and Indonesia entered its transition period, the Indonesian government proposed a bill to amend the existing patent legislation. Responding to government's plan to introduce a new patent act, the head of the Indonesian Pharmaceutical Association as the official representative body of the domestic pharmaceutical industry, urged the government to delay the amendment of Patent Act until 2000, to give more time for the domestic companies to adjust themselves to the stringent rules as required by TRIPs (Rosser, 1999, p.113, 2002, p.163–64). In response to this objection, the Minister of Justice stated that Indonesia could no longer tolerate IPR violations, because of its damaging effect on Indonesia's reputation and its quest for foreign investment (Rosser, 1999, p.114). It should be

noted, however, domestic pharmaceutical industries' objection during this period was not as strong as their opposition back to the 1980s. This was not only because the interests of the conglomerates in the pharmaceutical industry were relatively small compared to their interests in other business sectors, but also, in the early 1990s, many of them had already established a licensing agreement and developed a new marketing and strategic partnership with the foreign pharmaceutical industry (Rosser, 2002, 163; Hoekman and Kostecki, 2011, p.296). According to Hoekman and Kostecki (2001, p.296), knowing that the government would adopt a new patent act as a response to Indonesia's TRIPs obligations, one of the leading Indonesian pharmaceutical companies, Kalbe Farma, developed a new marketing strategy involving foreign companies, in order to secure marketing rights in Indonesia. Given the fact that there was no solid opposition from the domestic pharmaceutical industry, the government successfully amended the patent legislation in 1997.

In addition, during 1997–1998, Indonesia was also hit by a financial crisis which was accompanied by political instability and social unrest. As could be seen during the oil crisis in the mid-1980s, in order to deal with the financial crisis, the Indonesian government had to reform its economic policy again (Vanzetti, McGuire, and Prabowo, 2005, pp.5-6). This can be seen, for example, when the Indonesian government was forced to sign the extensive International Monetary Fund (IMF) conditions, including more deregulation and privatisation of state-owned companies (Hadiz and Robison, 2005, p.221). Furthermore, according to Rosser (2002, p.147), among other policies that were under strong pressure to introduce liberal economic reform during this period was IP legislation. In this regard, with the need to recover from the crisis, the Indonesian government then also perceived that improving its patent regime would provide a better environment in which to attract FDI.

In order to meet its TRIPs obligations, the Patent Act of 1997 omitted the provisions relating to the importation of patented products without the consent of the patent holders. According to Jhamtani and Hanim (2002, p.87), the removal of the provision relating to the rights of patent holders was demanded primarily by US pharmaceuticals industries, as mainly represented by the Pharmaceutical Research and Manufacturers of America (PhRMA).⁶⁸ PhRMA considered the provision under previous patent acts which allowed domestic

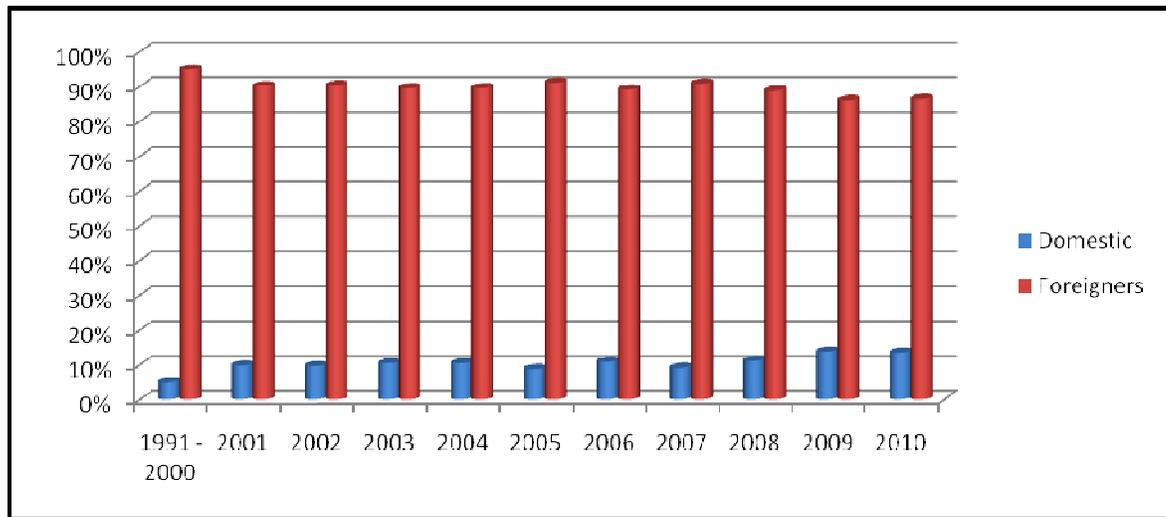
⁶⁸ The PhRMA represents US leading pharmaceutical research and biotechnology companies (see PhRMA, n. d. (a)).

pharmaceutical companies to import patented materials without the patent holders' consent, as unfair to their business, since the domestic pharmaceutical companies were able to supply the domestic market with cheaper non-patented medicine. Nevertheless, despite the fact that under the Patent Act of 1997, the patent regime in Indonesia was already beyond the TRIPs requirements, PhRMA still expressed their dissatisfaction regarding ambiguity in the legislation wording, which in their opinion, would make it difficult to deal with patent infringement cases (PhRMA, 1998).⁶⁹ For this reason, PhRMA urged the US government to classify Indonesia with Priority Watch List (PWL) status on the USTR Special 301 Report in 1998.⁷⁰ As can be seen from the USTR Special 301 Report, Indonesia was placed with PWL status in 1998 and 1999. After being lowered to WL status shortly in 2000, Indonesia was placed again with PWL status in 2001 until 2006, and also in 2009 and 2010. It should be noted, however, even though during this period Indonesia received pressure from the US to improve its patent regime, as explained earlier, external pressures started to play a crucial role only after Indonesia was hit by the crisis. In this regard, great power coercion can only provide a partial explanation in understanding patent policy change in Indonesia. This suggests the need to search for other causes of compliance in the domestic sphere.

A closer observation on domestic actors' preference reveals that there was no significant change in the percentage of domestic applicants compared to foreign applicants in patent applications in Indonesia even after the improvement of patent regime through the adoption of several patent legislations. Based on the data from the Indonesian Directorate General of Intellectual Property Rights (DGIPR), foreign applicants for patent applications in Indonesia constantly occupied more than 89.93 percent of applications from 1991 to 2010 (see figure 4.1 and Appendix VI (table VI.1)). Furthermore, despite a steady improvement in domestic applicants, the high percentage of foreign applicants compared to the domestic ones still did not change significantly even after a decade of the adoption of the first Indonesian patent act in 1989.

⁶⁹ For a more detailed explanation see PhRMA's report on Indonesia in 1998 (PhRMA, n. d. (c)).

⁷⁰ This is reflected from their documents submitted both to USTR for 301 Special Report in 2000 and National Trade Estimate in 1998 and 1999. For the full documents see PhRMA, n. d. (c), (e), (k).

Figure 4.1 Patent Applications in Indonesia (1991–2010)

Source: The Indonesian Directorate General of Intellectual Property Rights (DGIPR, n. d. (a)) [as of 15 January 2011].

In this regard, given the fact that there was only a low number of domestic constituents for a strong patent regime, the Indonesian government's decision to reform its patent legislation prior to the deadline, and also with more rigorous rules, is better explained by looking at the shift in the preferences of some government institutions regarding patent protection, which had started to develop when the Indonesian government reformed its patent legislation in 1997. A more favourable preference for strong IPR protection among the Indonesian government officials in recent years was also pointed out by an Indonesian NGO representative in the interview with the author.⁷¹ The change in government institutions' preference concerning patent protection is mostly noticeable from the Ministry of Justice and Human Rights' preference. Contrary to its IP-indifferent position during the adoption of the first patent act in 1989, during the amendment process of IP legislation (patents and trademarks) in the early 2000s, the Ministry of Justice and Human Rights had shifted to a Pro-IP position. In this context, the Minister of Justice and Human Rights stated that the enactment of a series of IP laws in the early 2000s was mainly to regain international trust in Indonesia, to promote international trade, to attract foreign investment, to encourage the transfer of technology, as well as to fulfil the Indonesian obligations under the TRIPs Agreement (Lindsey et al., 2006, pp.70–71). In other words, the adoption of patent (and also trademark) laws in 2001 was intended to accommodate both national interests and international demands:

⁷¹ Author's interview with an Indonesian NGO representative (Jakarta, 25 August 2009)

“[T]he main purpose of these bills is to accommodate both national and international requirements and to incorporate each respective field of intellectual property rights, including patents and trademark...With the endorsement of the bills we hope to create a more favourable climate for the public to pursue new creations, innovations and inventions. The bills are also expected to enhance trade, foreign investment and the holistic system of the intellectual property rights” (Statement by the Indonesian Minister of Justice and Human Rights at the House plenary session after the House of Representatives, *Jakarta Post*, 3 July 2001).⁷²

The above statement from the Minister of Justice and Human Rights can be considered as the evidence of the shift in the Ministry’s preference regarding patent protection, from being IP-indifferent to having a more favourable preference concerning IPR protection. With this shift, the preference of the Ministry of Justice and Human Rights is now in line with the Ministry of Research and Technology as well as the Ministry of Industry as the long-established pro-IP actors in Indonesia. Within this context, in the interviews with the author, Indonesian government officials argued that the IPR protection is needed, not only to provide a suitable condition for attracting foreign direct investment, but also to improve domestic creativity and innovation, which in the long term will be beneficial for Indonesia’s technological development. Furthermore, they argue that “...improving IPR regime would be beneficial for Indonesia’s reputation and therefore Indonesia could gain the trust from foreign investors to invest in Indonesia...”⁷³ The shift in the Ministry of Justice and Human Rights’ preference regarding patent protection has contributed to the change in domestic actors’ constellation on patent policy reform, and thus also, provided a more conducive condition for patent policy reform to take place.

It should be noted, however, that one significant change under the new Patent Act of 2001 is the reinsertion of the provision to exclude living creatures of any kind, with the exception of microorganisms, as well as all biological processes essential for the production of plants or animals, with the exception of non-biological processes and microbiological processes, from patentability, which was removed under the Patent Act of 1997. By inserting this provision again, Indonesia’s patent regime under the Patent Act of 2001, is utilising the flexibility available on the TRIPs Agreement, and, therefore, can be considered as TRIPs-minimum instead of TRIPs-plus, as under the previous act. A closer observation on the domestic politics

⁷² It should be noted that the Patent Act of 2001 and the Trademark Act of 2001 were adopted at the same time on 1 August 2001.

⁷³ Author’s interview with Indonesian government officials (Jakarta, 26 August 2009).

suggests that this roll back was possible mainly due to the demands from newly engaged domestic actors in IP-related issues. As Indonesia entered its transition to democracy, new constituents on IP-related issues, particularly from wider government institutions, started to play significant roles in influencing the decision making process. In this regard, the Ministry of Environment, which had a limited role in previous policy reform, began to actively engage in the IP policy making process. Due to the fear of negative implications of having strong IPR protection, including the misappropriation of traditional work and knowledge, and bio-piracy,⁷⁴ the Ministry of Environment—which were also supported by the Ministry of Agriculture and local NGOs—perceived the necessity of having safeguards in Indonesian patent law (Jhamtani and Hanim, 2002, p.91).⁷⁵ The engagement of these new domestic actors made the insertion of the safeguards into the Patent Act of 2001 become possible, and the flexibilities available in TRIPs were able to be accommodated. This signified the roll back in Indonesia's patent act from adopting a commitment going farther than TRIPs to only meeting the minimum TRIPs requirements. Within this context, the decision of the Indonesian government to roll back its patent legislation depicts the flaw in the neo-realist's account of the role of great power coercion. Since adopting more rigorous rules is in line with the interest of the dominant state, neo-realism is unlikely to expect a weaker state to roll back its domestic policy.

4.5.1.2.3 Patent Policy Change after the end of the Transition Period

Even though developing countries were granted a longer transition period to reform their patent legislation, until 2005, as explained earlier, Indonesia did not take full advantage of this transition period by reforming its patent legislation while still in its transition period, in 1997 and 2001. Since after the last amendment in 2001 (as of January 2011), the Indonesian government has not adopted any other patent legislation; the patent protection in Indonesia is still governed under the Patent Act of 2001, which already met the TRIPs minimum requirements.

⁷⁴ For a bio-piracy definition, see Chapter 1.

⁷⁵ Some of the local NGOs involved in the campaign against bio-piracy include the Indonesian Consumers Foundation (*Yayasan Lembaga Konsumen Indonesia*—YLKI) and the Pesticide Action Network (*Jakarta Post*, 2000b).

To conclude, empirical findings demonstrate that external pressures can only provide a partial explanation for understanding patent policy reform in Indonesia. Indonesia did indeed receive external pressure, mainly from the US, in the forms of diplomatic and industry pressures, as well as being on the USTR Special 301 Report, mostly with PWL status. Nevertheless, empirical findings also indicate that external pressures only played a significant role after the crisis which intensified Indonesia's dependence on foreign markets and investments. Responding to external pressures to improve patent was in line with the need of the government to recover from both the oil and financial crises in order to attract foreign investment. Prior to the crisis, despite receiving similar level of pressure, the Indonesian government did not put any effort into protecting IPR, since the government did not regard a strong patent protection as necessary for its development needs. In this regard, to fully understand the patent policy reform in Indonesia, it is important to understand the way in which domestic actors responded to external pressures.

The empirical findings also demonstrate that when there was no significant change in external pressures, policy reform took place because there was a shift in the preferences, particularly among government institutions, concerning IPR protection. Previous discussion indicates that, by the end of the 1990s, there were more government institutions that displayed a more favourable preference concerning patent protection. This is noticeable from the shift in the preference of the Ministry of Justice and Human Rights from IP-indifferent to being more favourable regarding IP protection. With the shift in the Ministry of Justice and Human Rights' preference, there were more Pro-IP actors among government institutions, which thus contributed to provide a more favourable condition for IP policy change to take place. Previous discussion also showed that the newly engaged government institutions for IP-related issues, such as the Ministry of Environment, during the last patent amendment process, has made reversing patent legislation, from more rigorous rules to only meeting the minimum TRIPs requirements, possible.

4.5.2 Indonesia's Copyright Policy Change: An Extensive Effort of Policy Reform

As can be seen from the patent policy reform, policy reform in copyright protection, taken by the Indonesian government after TRIPs, also deviates from the expectations of major IR theories, particularly concerning the role of external pressures. The copyright policy reform in Indonesia took place both with the presence and in the absence of external pressures. A closer observation on domestic politics indicates that, unlike in the patent policy reform, the existence of significant domestic constituents for a strong copyright protection contributes towards shaping the policy reform process.

4.5.2.1 Assessing Indonesia's Copyright Legislation and TRIPs Compatibility

Unlike the Dutch Patent Act of 1910, which was formally abolished, the Indonesian government retained the Dutch Copyright Act of 1912 after the independence. However, due to unstable economic and political situations, this law had never been effectively implemented. Furthermore, considering the Indonesian government's inability to fulfil its obligations due to the severe economic situation, the Indonesian government formally withdrew its membership of the Berne Convention in 1958. The government argued that, as a newly independent poor country, if it retained its membership of the Berne Convention, Indonesia would not be able to pay royalties to foreign copyright holders (Suwanto, 1993, p.267). In addition, the government also argued that, considering its poor condition, to improve the quality of education it was essential for the society to be able to copy expensive books freely (Antons, 2000, p.49). This means that, in reality, after the independence until the early 1980s, Indonesia did not have any effective regulations concerning copyright protection, nor did it commit to any international obligations to provide such purpose.

It took almost four decades for the government to enact its first copyright law after the independence, when, in 1982, the Indonesian government under the Suharto Administration finally replaced the Dutch Copyright Act of 1912 with the Copyright Act no. 6/1982. As table 4.2 illustrates, under this act, the Indonesian government drastically reduced the duration of copyright protection from the life of the author plus 50 years, under the Dutch Copyright Act 1912, to the author's lifetime plus 25 years. Also, the Act did not provide copyright protection to foreign works, unless the author of the foreign work published his/her work for the first

time in Indonesia. With this provision, the government intended to protect the national interest of ensuring the availability of foreign works for education and development. Consequently, almost all creations or works made by foreigners and published for the first time outside Indonesia, could be published, reproduced and translated in Indonesia without the authorisation of the creators (Gielen, 1988, p.101; Kusumadara, 2000a, p.151).

After the enactment of its first copyright law in 1982, the Indonesian government adopted another Copyright Act in 1987. As summarised in table 4.2, under the new legislation, the Indonesian government removed controversial appropriation provisions, extended the duration of copyright protection, expanded the scope of protection to new areas, and included the protection for foreign works, as well as increased the sanctions for piracy. The Copyright Act of 1987 increased the duration of copyright protection for original works to the author's lifetime plus 55 years, and 25 years of protection for adaptations. The scope of the copyright protection was extended to include video recording, sound recording, computer programmes, and the Indonesian traditional *batik* art. Nevertheless, the Copyright Act 1987 still maintained several safeguard provisions to allow for limited copying or duplicating of copyrighted works by public libraries, scientific and educational institutions, and documentation centres for non-commercial purposes only. It also allowed the making of a back-up of computer software, by the owner of the software, for personal use only. The Copyright Act 1987 also retained some provisions under the Copyright Act 1982, which were related to the restrictions of the freedom of expression for reasons of political stability, which reflected the authoritarian character of Suharto's regime.

As a response to its TRIPs obligations, the Indonesian government amended its copyright law again in 1997. The amendment of this copyright law was mainly intended to further extend the scope of the copyrighted works, and increase the duration of protection for certain areas. Under this law, the scope of copyright protection is extended to rental rights for cinematographic works, and neighbouring rights that cover protection for performers, producers of sound recordings, as well as broadcasting institutions (see table 4.2). The Copyright Act of 1997 also contains provision on copyright protection for unknown authors or creators. In this regard, for unpublished works, the state will become the copyright holder on behalf of the unknown author, while the copyright will be granted to the publishers if the works have been published. To complement the enactment of the Copyright Act 1997, the

government also issued the Presidential Decree No. 18/1997 to ratify and rejoin the Berne Convention, reversing its withdrawal in 1958 (Kusumadara, 2000a, pp.226–27). Furthermore, in the same year, the Indonesian government became the first nation to ratify the WIPO Copyright Treaty by Presidential Decree No. 19/1997 (Antons, 2008b, p.238).

Even though, by adopting a new Copyright Act in 1997, Indonesia arguably had already met its TRIPs obligations, the Indonesian government once again amended the copyright law, through the enactment of the Copyright Act No. 19/2002. It extended the scope of the copyrighted works to include databases and optical discs. The Copyright Act of 2002 clearly prohibited parallel importation for copyrighted work. However, it still maintained some safeguard provisions, such as the rights of the government to hold the copyright for works from prehistoric remains, historical and other national cultural objectives and folklores. It also used the flexibility granted under the TRIPs Agreement to exclude copyright infringement for education, research, and scientific purposes, as long as the sources are properly cited. It also retains the provision related to the authorisation of back-up copies of computer programmes for personal use.

Table 4.3 The Indonesian Copyright Acts and TRIPs Compatibility

Aspects	TRIPs Obligations	Prior to and during TRIPs Negotiations		After TRIPs	
		Prior to Negotiations (No.6/1982)	During Negotiations (No.7/1987)	During Transition (No.12/1997)	After in force (No.19/2002)
Subject matter coverage	Scientific, literary, and artistic works	Protected	Protected	Protected	Protected
	Computer programmes, video recording, sound recording	Not protected	Protected	Protected	Protected
	Rental rights	Not protected	Not protected	Protected	Protected
	Related rights	Not protected	Not protected	Protected	Protected
	Database and optical discs	Not protected	Not protected	Not protected	Protected
Duration of protection other than photographic work and applied art	Life of author +50 years	Life of author +25 years	Life of author +50 years	Life of author +50 years	Life of author +50 years
Duration of protection for performers and producers of phonograms	50 years	Not protected	Not protected	50 years	50 years
Duration of protection for broadcasting organisations	20 years	Not protected	Not protected	20 years	20 years
Duration of protection for computer programmes	50 years	Not protected	15 years	50 years	50 years
Eligible copyright holders	National treatment and MFN principles	Only for Indonesian citizens and foreign works where the first publication of the creation took place in Indonesia	Granted national treatment and MFN principles	Granted national treatment and MFN principles	Granted national treatment and MFN principles
Enforcement	Requires civil and criminal enforcement but no minimum requirements	Included provisions for enforcement	Included provisions for enforcement	Included provisions for enforcement	Included provisions for enforcement
TRIPs Compatibility	--	TRIPs-minus	TRIPs-minus	TRIPs-minimum	TRIPs-minimum

Note: Author's assessment on the Indonesian Copyright Act No. 6/1982 [in Indonesian], the Indonesian Copyright Act No.7/1987 [in Indonesian], the Indonesian Copyright Act No.12/1997 [in Indonesian], and the Indonesian Copyright Act No.19/2002. It should be noted that related rights include performers, producers of phonograms, and broadcasting organisations rights.

4.5.2.2 Indonesia's Copyright Legislation: Explaining Policy Change

As explained previously, even though it took several decades for the Indonesian government to adopt its first copyright legislation after independence, the Indonesian government extensively altered its existing copyright policy reform after the adoption of its first copyright act. Within less than 5 years after the adoption of its first Copyright Act in 1982, the Indonesian government amended that act in 1987. Furthermore, as a response to its obligations under the TRIPs Agreement, Indonesia amended the copyright law in 1997, and again in 2002. The rapid and extensive response of the Indonesian government in fulfilling its TRIPs obligations on copyright protection is puzzling, since, like other aspects of IPR protection, copyright protection also has no historical roots in Indonesian society, nor had it become the priority of the Indonesian government's development plan. In addition to the mounting external pressures, other explanations can be traced from the fact of the existence of several significant Pro-IP domestic societal actors who were in favour of a strong copyright protection.

4.5.2.2.1 Copyright Policy Change prior to and during the TRIPs Negotiations

Since the intention of the Copyright Act of 1982 was to accommodate mostly the needs of domestic actors, it can be understood if the act did not provide similar treatment to protect foreign works. Furthermore, despite the fact that the US government had already expressed its concern regarding the lack of copyright protection for foreign works in Indonesia during bilateral trade negotiations, the Indonesian government did not take any action to respond to such pressures. The demand from the US government in the mid-1980s to revise the Copyright Act of 1982, to include a foreign works protection as a condition for US investment in Indonesia, was rejected by the Indonesian government (Rosser, 1999, p.104). In this regard, responding to the proposal from the US trade official, the Head of the Indonesian National Development Planning Agency (*Badan Perencanaan Pembangunan Nasional*–Bappenas) stated that the Indonesian government was willing to take the necessary steps to simplify

investment and procedures as requested by the US government, however, the Indonesian government was not willing to introduce a new copyright law (Uphoff, 1991, pp.28–29; Rosser, 1999, p.104). As explained earlier, as with patents, during the first period of the copyright policy reform, Indonesia's economy still relied on its high revenue from oil and gas (Lindsey et al., 2006, p.67), which permitted the Indonesian government to be more sceptical towards external pressures.

In this regard, when the government amended the Copyright Act in 1987, as can be seen in the case of patents, the existing literatures also pointed out that external pressure, particularly from the US and the EU, was the main reason behind the enactment of the Copyright Act of 1987 (Gielen, 1988, p.102; Rosser, 1999, p.103; Antons, 2000, p.134; Kusumadara, 2000a, p.133). The pressures took several forms, including being on the USTR list mostly with PWL status, being criticised in the reports of US business lobby groups, and threat of trade sanctions. According to Rosser (2002, p.152), one senior US Department of Commerce official, stated that IPR protection issues constituted more than half the duties of USTR officials' visits to Indonesia throughout the 1980s and the 1990s. As with the patent policy reform, after the collapse of oil prices in the global market in the mid-1980s, the Indonesian government could no longer be immune from external demand to improve its copyright protection (Lindsey et al., 2006, p.67; Rosser, 1999, p.102). In this regard, as can also be observed from the patent policy reform, a previous government's sceptical response to these external pressures changed extensively with the deterioration of Indonesia's position as an energy producer.

In addition to the collapse of oil prices, there were two significant events in late 1985 which also contributed to add international pressure to the Indonesian government to improve its copyright regime (Uphoff, 1991, p.29; Rosser, 1999, p.104, 2002, pp.153–54). First, the world wide publicity of the production and sale of pirated recordings of the Live Aid charity concert by Indonesian producers. Second, the arrest of an Indonesian businessman who was using a diplomatic pouch for breaking US customs and copyrights, through the arrangement of the shipment of pirated cassettes to a US firm (Uphoff, 1991, p.29; Rosser, 1999, pp.104–105, 2002, pp.153–54). These two events, which put Indonesia in the international spotlight, had made the Indonesian government become more aware of the need to improve its copyright

protection.⁷⁶ According to Uphoff (1991, pp.30), after these incidents, President Suharto gave a direct order to the involved ministries to deal with ‘the embarrassment’ promptly. The order from the President to deal with this issue had also contributed to the shift in the preference of some government institutions concerning copyright protection from IP-sceptics to IP-indifferent due to their growing concern not only over avoiding trade sanctions but also regarding Indonesia’s damaging reputation as a haven of pirated products. This shift was mainly evident from the position of the Ministry of State Secretariat as the direct representative of the President in the Working Team on IP.

Following these events, US pressure to the Indonesian government to improve its copyrights regime was also intensified. Based on the USTR findings on IPR protection in Indonesia, the US government threatened to reconsider Indonesia’s benefits under the GSP due to lack of its copyright protection. The US government gave the Indonesian government until March 1987 to improve its law concerning copyright protection (Gielen, 1988, p.102). Similarly, in May 1987, the EU⁷⁷ declared that there would be an investigation into the Indonesian copyright law, to see whether it provided sufficient protection for sound recordings or not (Rosser, 1999, p.106; Antons, 2000, p.54; Gielen, 1988, p.102; Kusumadara, 2000a, p.160). In this context, based on the complaint from the International Federation of Phonogram and Videogram Producers (IFPI), the European Commission initiated an investigation into the copyright protection condition in Indonesia (Gielen, 1988, p.102).

Furthermore, the diplomatic appeal can also be seen from the fact that the IPR violation in Indonesia was one of the issues raised by US President Ronald Reagan, when he visited Indonesia and met with Indonesian President Suharto in 1986 (Uphoff, 1991, p.30; Rosser, 1999, p.106). Following to this visit, the US government sent several US delegates to Indonesia, in order to deal particularly with IPR protection issue (Rosser, 1999, p.106). Through a constant flow of meetings, the US embassy was also trying to persuade top-level officials in various ministries, including the Ministry of Justice, the Ministry of Health, the Ministry of Trade, the Ministry of Industry, and the Ministry of Research and Technology to emphasise the need for the Indonesian government to improve its copyright law (Uphoff,

⁷⁶ It should be noted that, by the mid-1980s, Indonesia had a reputation as one of the havens of pirated products countries in the world (Rosser, 2002, p.149).

⁷⁷ As Gielen (1988, p.102) argues, “[U]nder Regulation (EC) 2641/84 of the Council of the European Communities, trade policy measures can be taken against third countries on the basis of unfair trade practices in such countries”.

1991, p.29). Furthermore, the US Ambassador to Indonesia at that time also constantly appealed to the Indonesian government to improve its IPR protection and emphasised that no improvement would jeopardise the relationship of the two countries (Rosser, 1999, p.106).

As explained in the section on patents, as a response to these pressures, on 30 July 1986, in order to prepare the new IP laws, President Suharto announced the establishment of a Working Team on IP, which consisted of representatives from all the ministries involved, to assess the condition of IPR protection in Indonesia (Uphoff, 1991, pp.30–31). Even though it was not as striking as in the case of patent policy reform, there was also the disagreement among the ministries involved in the Working Team regarding copyright policy reform. Nevertheless, as briefly mentioned earlier, due to the world wide publicity incidents in 1985, the preference of the Ministry of State Secretariat on copyright protection has shifted to IP-indifferent, even though the Ministry still displayed an IP-sceptic preference regarding patent protection.

The Working Team recommended a bill to amend the existing copyright act, which was then approved by the parliament on 9 September 1987 (Uphoff, 1991, p.31). Under the new legislation, the Indonesian government inserted several provisions, including a provision related to the protection of foreign works, extending the duration of copyright protection, expanding the scope of protection to new areas, as well as increasing sanctions for piracy (Antons, 2003b, p.398, 2008b, p.237).

In this regard, based on Article 48c, the Copyright Act of 1987 granted a protection for foreign works even if the first publication did not take place in Indonesia, with a bilateral treaty, or from members of an international organisation in which Indonesia is a member. Following the adoption of this act, a bilateral treaty was concluded in April 1988 with the EU on sound recordings (Uphoff, 1991, p.31; MacLeod, 1992, p.366; Antons, 2000, p.54). A similar bilateral agreement was also concluded with the US in March 1989, to provide copyright protection in books, sound recordings, films, computer software, and other creative works (MacLeod, 1992, p.366; Antons, 2000, p.54). After the conclusion of this bilateral treaty, USTR then recommended that Indonesia's GSP status would be maintained (Kusumadara, 2000a, p.162).

Previous explanations illustrated that, prior to and during the TRIPs negotiations, Indonesia experienced substantial external pressures, mainly from the US, in the form of threats of the withdrawal of GSP benefits, to improve its copyright regime. The empirical findings, however, also demonstrated that, prior to the oil crisis, the Indonesian government did not take any of the necessary steps to reform its existing copyright, despite receiving these pressures. In this regard, external pressures only played a significant role in influencing the government's decision, when Indonesia's position as an energy producer was declining and the Indonesian government was forced to accommodate foreign demands to improve its copyright regime. Previous discussion also demonstrated that, by the end of the 1980s, the preference of some of government institutions regarding IPR protection had started to shift from IP-sceptics to IP-indifferent, because of a growing concern over avoiding trade sanctions and Indonesia's damaging reputation as a haven of pirated products. The shift in some of government institutions' preferences regarding copyright protection, therefore, also contributed to creating a more favourable condition in which copyright policy reform could occur.

4.5.2.2 Copyright Policy Change during the Transition Period

As can be seen from previous discussions, prior to and during the TRIPs negotiations, the Indonesian government had already reformed its existing copyright legislation. However, due to the continuation of dissatisfaction amongst the US business community at the lack of an improvement in copyright protection in Indonesia, even after the adoption of the new legislation in 1987, external pressures did not reduce significantly. During the 1990s, the International Intellectual Property Alliance (IIPA)⁷⁸ and the Business Software Alliance (BSA) demanded that the US government impose trade sanctions, in order to pressurise the Indonesian government to initiate further improvements in IP laws (Rosser, 1999, p.107). The US government responded to this demand by lowering Indonesia's status from Watch List (WL) status to Priority Watch List (PWL) status in the USTR Special 301 Report in 1996, and put Indonesia as a subject for further investigation, as well as increasing the surveillance level (Rosser, 1999, pp.107–8).

⁷⁸ The IIPA, which was established in 1984, is a private sector coalition of seven trade associations representing U.S. copyright-based industries including publishers, businesses and entertainment software producers, music publishers, and the recording industry (IIPA, n. d.).

As a response to both diplomatic and industry pressures, mainly from the US, the Indonesian government amended the copyright law in 1997, by enacting the Copyright Act No. 12/1997. As explained earlier, the amendment of this law is mainly intended to accommodate the demands from the US to extend the scope of the copyright protection. Nevertheless, despite a series of the amendments of the copyright legislation, Indonesia's status on the USTR Special 301 Report did not change significantly. Indonesia has been constantly on the USTR Special 301 Report mostly with Priority Watch List (PWL) status, essentially due to its lack of copyright protection, which resulted in a high instance of the piracy of software and other copyrighted products.

4.5.2.2.3 Copyright Policy Change after the end of the Transition Period

Despite the fact that under the Copyright Act of 1997, Indonesia already met the minimum TRIPs requirements, the Indonesian government once again amended the copyright law through the enactment of the Copyright Act No. 19/2002. Much of the existing literature considers that a considerable external pressure, mainly from the US and the EU, again, can be seen as one of the reasons behind the enactment of this new copyright act. Haryanto (n. d.) argues that extensive pressure from the US is the main reason behind the amendment of Copyright Act, particularly because it is Indonesia's only national legislation that has been amended more than 3 times within 20 years. Furthermore, being on the list, mostly with PWL status is considered to be a problem by the government, since the US is still Indonesia's biggest export market, accounting for around 16 percent of total export sales (Witular, 2002). As stated by the Deputy Director of the Indonesian Directorate of Copyright, Industrial Designs, Integrated Circuit, Layout Designs, and Trade Secret, "[B]eing on the their [USTR] priority watch list, Indonesia risks facing punitive measures from the US such as export bans, embargo, and other penalties" (quoted by Setiogi, 2004). Similarly, the Deputy Recording of Anti-Piracy Association of Indonesia stated that if the Indonesian government was not able to reduce the high level of piracy rate from 500 percent to 30 percent within the next few months, the US government threatened to boycott Indonesia's export to the US market (GATRA, 7 February 2002).

As can be seen from the following table, the IIPA Report estimated that the level of motion pictures piracy from 1995 to 2004 in Indonesian market was continuously above 90 percent,

with the estimated trade losses around US\$15 million to US\$30 million per year. Meanwhile, the level of business software piracy from 1995 to 2009 was also constantly above 80 percent, with estimated annual trade losses starting from US\$33.2 million to US\$482 million. In total, the estimated annual trade losses since 1995 has never been less than US\$134 million per year.

Table 4.4 Estimated Trade Losses and Level of Piracy in Indonesia 1995–2009 (in US\$ millions)

Industry	1995		1996		1997		1998		1999	
	Loss	Level								
Motion Pictures	15.0	98%	19.0	85%	19.0	85%	25.0	90%	25.0	90%
Records & Music	2.0	9%	12.0	15%	9.0	12%	3.0	12%	3.0	20%
Business Software	117.3	98%	170.3	98%	139.6	93%	47.3	92%	33.2	85%
Entertainment Software	82.6	80%	86.0	82%	87.2	89%	81.7	95%	80.4	92%
Books	45.0	NA	47.0	NA	47.0	NA	30.0	NA	32.0	NA
TOTALS	261.9		334.3		301.8		187.0		173.6	
Industry	2000		2001		2002		2003		2004	
	Loss	Level								
Motion Pictures	25.0	90%	27.5	90%	28.0	90%	29.0	92%	32.0	92%
Records & Music	21.6	56%	67.9	87%	92.3	89%	44.5	87%	27.6	80%
Business Software	55.7	89%	63.1	88%	109.6	89%	94.0	88%	100.0	87%
Entertainment Software	NA	99%	NA	NA	NA	NA	NA	NA	NA	NA
Books	32.0	NA	30.0	NA	30.0	NA	30.0	NA	32.0	NA
TOTALS	134.3		188.5		259.9		197.5		191.6	
Industry	2005		2006		2007		2008		2009	
	Loss	Level								
Motion Pictures	NA	87%	NA	NA	NA	NA	NA	NA	N/A	N/A
Records & Music	13.8	88%	17.2	91%	20.2	92%	20.0	95%	24.7	95%
Business Software	153.0	87%	191.0	85%	226.0	84%	299.0	85%	487.3	86%
Entertainment Software	NA	NA	NA	NA	NA	NA	NA	NA	N/A	N/A
Books	32.0	NA	32.0	NA	32.0	NA	NA	NA	N/A	N/A
TOTALS	198.8		240.2		278.2		319.0		512	

Sources: IIPA Special 301 Report on Copyright Protection and Enforcement on Indonesia (2001–2009) and IIPA 2010 “Special 301”

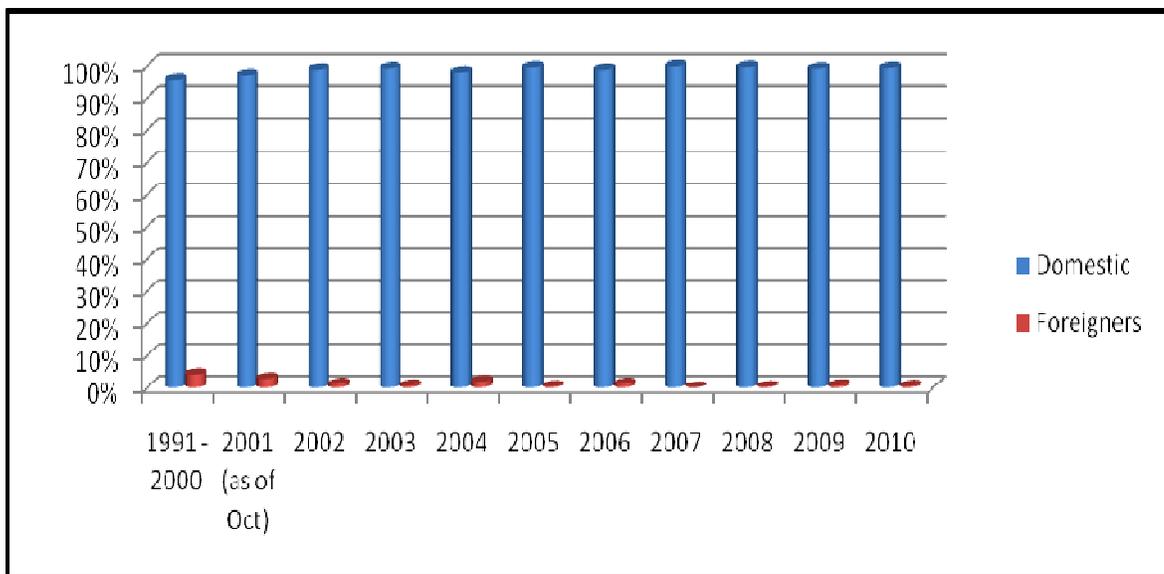
Nevertheless, external pressure is not the only reason behind the copyright policy reform in Indonesia. Unlike in the case of patents, where the existence of domestic constituents for strong patent protection is generally limited, there can be found a significant number of domestic constituents for strong copyright protection in domestic societal actors. These actors advocate the policy reform for adequate copyright protection, either because they are driven by material benefits, or due to the concern for Indonesia's reputation in the international arena. These domestic societal actors include publishers, authors, musicians, music directors and a newly born domestic IT business.⁷⁹ In recent years, domestic actors' supports for a strong copyright protection regime include the establishment of the Indonesian Creative Act Foundation, the Indonesian Intellectual Property Rights Society, and the Society against Piracy and Pornography (Jakarta Post, 2000a). It should be noted, however, even though a number of organisations, mainly representing the publishers and authors, have been established to promote copyright protection in Indonesia since the 1960s, due to the authoritarian nature of the political regime, it took almost two decades for these domestic societal actors to be able to endorse the enactment of the first Indonesian Copyright, which was finally adopted in 1982 (Antons, 2004a, p.33; Uphoff, 1991, p.35). As Antons (2003b, p.400) argues, the existence of these actors can even be traced back to the role of the Indonesian Publishers Association (*Ikatan Penerbit Indonesia*–IKAPI), which had been trying to demand adequate copyright protection since the 1960s.

In addition, in recent years, the newly emerging business community, particularly in the IT sector also contributed to the demands for a more adequate IPR protection. Their main concern was related to Indonesia's bad reputation as an illegal software haven, which had a detrimental effect for the IT business in Indonesia (Gunadi, 2003). The lack of IPR protection also resulted in unfair competition among the business community. Copyrighted computer programme is generally beyond the purchasing power of the majority of Indonesian society; meanwhile, illegal software is widely accessible at a very low price. Therefore, in order to encourage and to ensure fair competition in Indonesia, the IT business community argued that it is imperative to have strong legal protection for IPR (Gunadi, 2003).

⁷⁹ Compared to the other domestic societal actors, domestic IT business in Indonesia is relatively new. This can be observed from the Indonesian Directorate General of IPR data, prior to 2004 there were no domestic applications for copyright of computer programme. On the other hand, the role of other domestic societal actors in copyright protection could be traced back to the 1960s when a number of publishers and authors organisations were established to promote copyright protection (Antons, 2003a, p.400).

The domestic support for strong copyright protection is also reflected in the significant number of domestic copyright applicants compared to foreign applicants. As can be seen from the following figure, the domestic copyright applications constantly reached above 95.85 percent from 1991 to the end of 2010 as opposed to foreign applicants, which on average, only accounted for less than 4.15 percent (see figure 4.2 and Appendix VI (table VI.2)). In addition, unlike in the case of patent, domestic opposition for strong copyright protection mainly came from small-medium producers of counterfeit products, which had no strong political connection, compared to that of the pharmaceutical industry as in the case of the patent policy reform.⁸⁰ As Rosser argues (2002, p.156), in the illegal production of copyrighted products, the involvement of large, politically well-connected conglomerates could not be found.

Figure 4.2 Copyright Applications in Indonesia (1991–2010)



Source: The Indonesian Directorate General of Intellectual Property Rights (DGIPR, n. d. (b)) [as of 15 January 2011].

In conclusion, as can be seen from the patent policy reform, the role of external pressure only provides a partial explanation in understanding the copyright policy reform in Indonesia. Empirical findings demonstrate that Indonesia experienced pressure to improve its copyright regime, in the form of threats of withdrawal of its GSP benefits and other trade sanctions. However, prior to the oil crisis in the mid-1980s, copyright policy reform did not take place,

⁸⁰ These small-medium industries include internet café providers using illegal software to run their business. By using illegal software they can reduce the cost and are able to provide affordable internet access in a low income level of Indonesian society (Magdalena, 2005).

despite these substantial pressures. A closer observation suggests, as can be seen from the patent policy reform, the shift in the preference of some of government institutions (as mainly evident from the preference of the Ministry of State Secretariat), from IP-sceptic to IP-indifferent, also played a crucial role in the copyright policy reform. Some significant events in the mid-1980s, including the worldwide publication of the production and sale of pirated recordings of the Live Aid charity by Indonesian producers, contributed to a growing concern regarding Indonesia's damaging reputation as a haven of pirated products among government officials. In addition, unlike in the case of patents, a significant number of domestic constituents for strong copyright protection can be found, while opposition mainly comes from small-medium counterfeit goods producers, without strong political support. Along with the shift in the government's preference towards copyright protection, the existence of domestic constituents for strong copyright protection, therefore, also contributed to the extensive process of copyright policy reform in Indonesia.

4.5.3 Indonesia's Trademark Policy Change: An Easy Case of Policy Reform

Compared to the other two IP categories, trademark protection can be considered as having the longest historical existence in Indonesia. Unlike the other two IP categories, which had to wait for decades to be protected under national legislation, the Dutch Trademark Act of 1912 was promptly adopted into national legislation through the enactment of the first Indonesian Trademark Act in 1961. The swift effort of the newly established government on the trademark issue reflects the fact that, compared to the other two IP categories, trademark protection has a sounder basis in Indonesian values and was a widely accepted concept in Indonesian society (Kusumadara, 2000a, p.90). Furthermore, as can be found in the case of copyright, domestic constituents for strong trademark protection is considerably high, while the opposition is mainly coming from politically poorly-connected producers of counterfeit products.

4.5.3.1 Assessing Indonesia's Trademark Legislation and TRIPs Compatibility

Unlike patent and copyright legislation, which were adopted in 1980s, the first Indonesian trademark law was adopted much earlier, in 1961. The enactment of this act was intended to protect the Indonesian public from being misled by counterfeited goods (Kusumadara, 2000a, 90). This intention is rooted in the principle of communalism in Indonesian culture, which is reflected in *adat*, to put public interest first over private interests. In this regard, the concept of trademark protection relatively corresponds to the underlying principle of *adat*, since the primary purpose of trademark protection is not to protect the trademark owners but to protect public interest. Since the main purpose is to protect public interest, the protection of well-known trademark is not recognised under the Trademark Act of 1961, because the acknowledgement of well-known trademark is regarded as giving the privilege to the trademark owners instead of protecting wider public interests. Furthermore, under this act, the government adopted the principle of first use, and granted the protection period for ten years, which can be extended for another ten-year period upon application (Antons, 1991, p.81; 2003b, p.396; 2008a, p.186).

In 1992, the Indonesian government enacted a new trademark act to amend the considered outdated Trademark Act of 1961. The new Act, which came into force on 1 April 1993, indicated a major change in the underlying principle of trademark protection in Indonesia. Unlike the previous act, which was designed to protect Indonesian consumers, the Trademark Act of 1992 put emphasis more on protecting the trademark owners (Kusumadara, 2000a, pp.117–18). The Trademark Act of 1992 also granted a protection for well-known trademarks. As table 4.3 illustrates, the Trademark Act of 1992 also extended the scope of protection, not only for goods, but also for service marks, and collective marks.⁸¹ Under this act, the Indonesian government also maintained the duration of protection for 10 years. By maintaining the duration of the protection, therefore, Indonesia is enforcing a more stringent rule than necessary, since TRIPs only requires 7 years for trademark protection.

⁸¹ Based on Article 1 (4) Trademark Act No. 15/2001 collective mark (*merk kolektif*) is defined as, "...a Mark that is used on goods and/or services having the same characteristics that are traded jointly by several persons or legal entities to distinguish the goods and/or services from others of the same kind".

In 1997, the government amended the Trademark Act of 1992 with the Trademark Act No. 14/1997. Compared to the previous trademark laws, the only significant difference is the inclusion of a provision related to geographical indication and appellations of origin, which were unknown in the previous laws. Together with the enactment of the Trademark Act of 1997, the government also ratified the Trademark Law Treaty with the Presidential Decree No. 17/1997.

However, even though, under the Trademark Act of 1997, Indonesia had already adopted more rigorous rules than required by TRIPs, the Indonesian government adopted a new trademark act in 2001. The major difference this had with the previous acts is only in terms of the criminal provisions, through the increased jail terms and fines. It also introduced separate criminal provisions for the violation of geographical indication. As will be explained later, in response to the demands by the owners of foreign well-known trademark, the Trademark Act of 2001 also introduced a new provision that prohibits the renewal of the registration for well-known trademark by an unauthorised individual or company.

Table 4.5 The Indonesian Trademark Acts and TRIPs Compatibility

Aspect	TRIPs Obligations	Prior to and during TRIPs Negotiations		After TRIPs	
		Prior to Negotiations (No.21/1961)	During Negotiations (No.19/1992)	During Transition (No.14/1997)	After in force (No.15/2001)
Subject matter coverage	Goods	Protected	Protected	Protected	Protected
	Services	Not protected	Protected	Protected	Protected
	Well-known trademark	Not protected	Protected	Protected	Protected
Duration of protection	7 years	10 years	10 years	10 years	10 years
Enforcement	Requires civil and criminal enforcement but no minimum requirements	Included provisions for enforcement	Included provisions for enforcement	Included provisions for enforcement	Included provisions for enforcement
TRIPs compatibility	--	TRIPs-minus	TRIPs-Plus	TRIPs-Plus	TRIPs-Plus

Note: Author's assessment on the Indonesian Trademark No.21/1961, the Indonesian Trademark Act No.19/1992 [in Indonesian], the Indonesian Trademark Act No. 14/1997 [in Indonesian], and the Indonesian Trademark Act No.15/2001. Since the Indonesian Trademark Act No. 21/1961 is not publicly available, the assessment of this Act is based on Antons (2000) and Kusumadara (2000).

4.5.3.2 Indonesia's Trademark Legislation: Explaining Policy Change

As can be found in the case of patent and copyright policy reforms, the external pressures explanation can only provide a partial explanation in understanding the trademark policy reform in Indonesia. Despite the fact that Indonesia did not receive a substantial pressure to reform its trademark regime as it can be found in the case of copyright, Indonesia adopted trademark laws earlier than it had to do so, and also with more rigorous rules than required by TRIPs. As in the case of copyright, however, empirical findings suggest that the shift in some of government institutions' preference regarding IPR protection, and the existence of a significant number of domestic constituents for strong trademark protection, determine the course of the trademark policy reform in Indonesia.

4.5.3.2.1 Trademark Policy Change prior to and during the TRIPs Negotiations

Compared to the other two IP categories, trademark legislation has the longest historical existence in Indonesian history since the independence. Unlike the other two IPR categories, which had to wait for decades to be enacted, the Dutch Trademark Act of 1912 was promptly adapted into national legislation through the enactment of the first Indonesian Trademark Act in 1961. As briefly explained earlier, since the enactment of the Trademark Act of 1961 was mostly intended to protect consumers rather than to protect the trademarks itself (Lindsey et al., 2006, p.69), the concept of well-known trademarks was not recognised. The absence of the protection of well-known trademarks had become the main source of external pressure, mainly from the US and EU's business communities. In this regard, as can be seen in the case of the patent policy reform, during the 1980s Indonesia experienced industry pressure and threats from multinational companies, particularly from the US and EU's business communities to improve its trademark regime. This can be seen, for example, during the early to mid-1980s, when there were several cases involving the owners of foreign well-known trademarks such as 'Levis' of Levi Strauss & Co. from the US, and 'Pierre Cardin' who took legal actions against domestic producers who first registered those trademarks in Indonesia (Kusumadara, 2000a, pp.108–10). In addition, the owners of these trademarks also directly visited top Indonesian officials, including the Minister of Justice, to demand a trademark policy reform (Antons, 2000, p.205).

In response to the pressure from US and EU business communities, the Indonesian government then adopted several ministerial decrees, which were intended to deal with the protection of well-known trademark (Antons, 2000, p.205). In June 1987, for example, the Minister for Justice issued a ministerial decree concerning well-known trademark even though it was only limited to the use in Indonesia of similar goods. The decree stipulated that a trademark can be regarded as well-known if it was known and used in the Indonesian territory for a certain period of time, and, therefore, the registration of such a trademark by another party for the same kind of goods must be rejected (Antons, 2000, p.205). Since it was limited only to its use in Indonesia, and only covered the same kind of goods, major developed countries, in particular the US and the EU, still considered the decree inadequate to protect their well-known products.⁸² Since then, Indonesia has constantly received mounting pressures from the business community, which was reflected by repeated visits from Pierre Cardin, the owner of the Sarl De Gestion Pierre Cardin, and his direct representation to the Indonesian Minister for Justice in the late 1980s, to demand an improvement in trademark protection (Kusumadara, 2000a, p.111). According to Rosser (2002, p.151), in the early 1990s, a number of foreign companies, including well-known trademark manufacturers, cancelled their plan to invest in Indonesia, due to inadequate IPR protection. After receiving these constant pressures, the Indonesian Minister for Justice, in 1991, issued another Ministerial Decree, to extend the protection of well-known trademark to goods not of the same kind (Antons, 2008a, p.186), and also gave protection to well-known trademarks which were used, not only in Indonesia, but also overseas (Kusumadara, 2000a, p.111).

Following the adoption of these ministerial decrees, the Indonesian government adopted a new Trademark Act in 1992 which, as explained earlier, introduced the provision that give protection for well-known trademark. Nevertheless, the adoption of the Trademark Act of 1992 was not followed by a decrease in the external pressure demanding an adequate trademark protection in Indonesia. Complaints from foreign companies continued coming in, mainly because trademark registrations made under the previous acts were still valid, as long as they had not expired by the time the new legislation was adopted. In this regard, therefore, many local producers of counterfeit goods were still able to use well-known trademarks, even after the adoption of this law (Rosser, 2002, p.166). One of the high profile cases in late 1993

⁸² The investigation by the owner of 'Pierre Cardin' Paris found that the 'Pierre Cardin' trademark had been registered by sixteen Indonesian companies for a variety of goods (Kusumadara, 2000a, p.111)

was a legal action taken by a local producer of counterfeit goods against the foreign owners of well-known trademarks including Pierre Cardin (Rosser, 2002, p.166). As a response to this, as can be seen during the dispute in the 1980s, Cardin with the support of the French Ambassador and Trade Attaché for Indonesia, made another visit to the Indonesian Minister of Justice, and threatened to withdraw his investment from Indonesia if there was no significant improvement for trademark protection in Indonesia (Rosser, 2002, p.167). In response to this complaint, the Minister of Justice gave an assurance that the government would introduce a new legislation, which would not grant a renewal of registration for well-known trademarks by an unauthorised individual or company (Rosser, 2002, p.167). It should be noted, however, that the new trademark law which was adopted in 1997, did not incorporate any provision regarding this issue. The new provision to prohibit the renewal of a registration for well-known trademarks, by an unauthorised individual or company was introduced in the Trademark Act of 2001 (Article 37 (a)).

4.5.3.2.2 Trademark Policy Change during the Transition Period

As explained earlier, by adopting the Trademark Act in 1992, essentially Indonesia had already fulfilled its TRIPs obligations. However, due to the lack of enforcement, foreign governments and companies still pressurised the Indonesian government to improve its trademark regime. In addition to a continuation of a foreign companies lobby, in 1996, Indonesia was challenged by the US, the EU, and Japan in the WTO dispute regarding its national car programme. As briefly mentioned in Chapter 3, the dispute was not exclusively related to the TRIPs issues but in combination with the Trade-related Investment Measures (TRIMs) Agreement. One of the US concerns was that, Indonesia's policy on 'national motor vehicle' benefited only to motor vehicles bearing a unique Indonesian trademark, owned by Indonesian nationals. The US contended that, this policy discriminated against foreign-owned trademarks and their owners, and therefore, was inconsistent with the TRIPs Agreement, in particular under Article 3 (national treatment); Article 20 (the use of trademarks); and Article 65 (5) (member's obligation to avoid adopting legislation that lower than TRIPs during its transition period) (WTO, 1998a, n. d. (o)). Based on the Panel Report circulated on 2 July 1998, even though the Panel concluded that Indonesia violated most of its obligations under the TRIMs Agreement as the main issue of the dispute, the Panel, however, found that Indonesia did not violate its obligations under the TRIPs Agreement (WTO, 1998a, n. d. (o)).

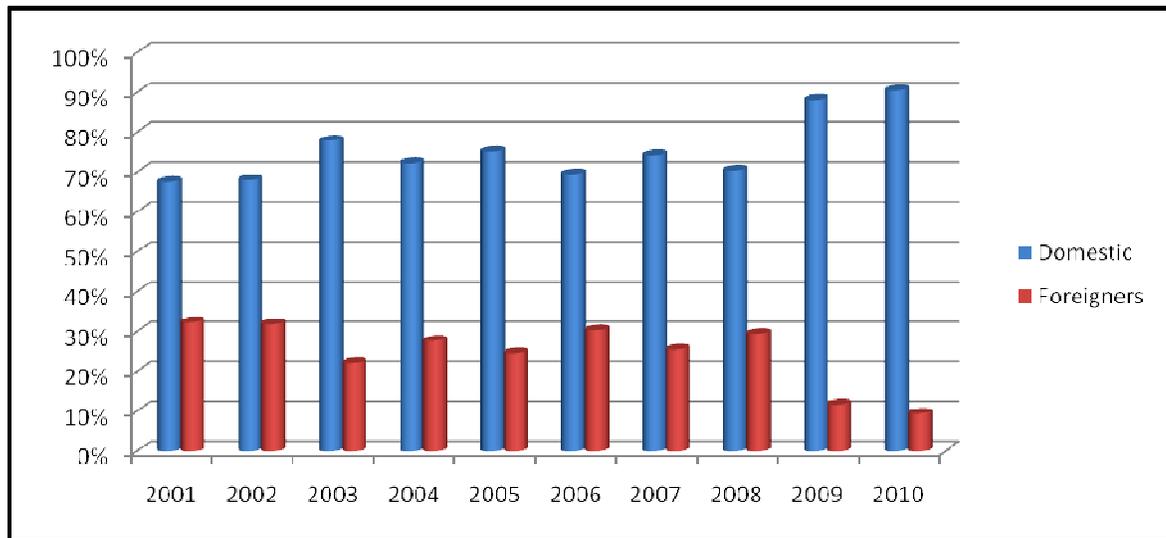
In 1997, the government amended the Trademark Act of 1992 with the Trademark Act No. 14/1997. As already explained earlier, under the Trademark of 1997, the provision relating to geographical indication and appellations of origin was introduced. Since under the previous act, Indonesia's trademark regime was already in line with the TRIPs Agreement, the adoption of this act did not have much affect on Indonesia's obligations under TRIPs. Nevertheless, Indonesia still received pressures, due to its inadequate enforcement.

4.5.3.2.3 Trademark Policy Change after the end of the Transition Period

Despite the fact that Indonesia had already fulfilled its TRIPs obligations, in 2001, the Indonesian government enacted a new trademark act again. Furthermore, unlike previous periods, during the adoption process of this new legislation, Indonesia did not receive any external pressures. In this regard, therefore, the external pressure account cannot provide satisfactory explanation for understanding the trademark policy change taken by the Indonesian government after its transition period ended. A closer observation on domestic actors' preference reveals that during this period, the preference of the Ministry of Justice and Human Rights had shifted from IP-indifferent to being more favourable concerning trademark protection (see the statement by the Minister of Justice and Human Rights during the amendment process of IP legislation in 2001 as quoted earlier).

In addition, similar to copyright, the existence of domestic constituents for strong trademark protection can be found. As figure 4.3 illustrates, the domestic trademark applications increased from around 67.61 percent in 2001 to 90.53 percent by the end of 2010 while foreign applicants decreased from 32.39 percent in 2001 to only 9.47 percent by the end of 2010 (see also Appendix VI (Table VI.3)). The significant rise in the number of trademark applications can be understood because, compared to the other two IPR categories, trademark protection is the only IP category that suits the Indonesian society's norms and tradition. It should be noted that the opposition to reform trademark law also existed. Nevertheless, as can be found in the case of copyright, the opposition was mainly coming from small-medium producers of counterfeit products, which had no strong political connections.⁸³

⁸³ These small-medium producers of counterfeit products usually are home-based garment industries, involving in the unauthorised production of well-known trademark. Imran (2003) reported that, many of these small-medium

Figure 4.3 Trademark Applications in Indonesia (2001–2010)

Source: The Indonesian Directorate General of Intellectual Property Rights (DGIPR, n. d. (c)) [as of 15 January 2011].

To sum up, as can be seen from the other two IP laws, both neo-realism and neo-liberal institutionalism cannot provide a satisfactory explanation in understanding trademark policy reform in Indonesia. Despite only receiving a moderate level of external pressure in the form of pressure from foreign companies, the Indonesian government fulfilled its TRIPs obligations for trademark protection earlier than it had to do and adopted more stringent rules than required. A deeper analysis of the domestic politics demonstrates that, compared to the other IPR categories, particularly patents, the protection of trademark has a sounder basis in Indonesian traditions. Furthermore, as can be seen in copyrights, the domestic societal actors interested in trademark protection are also high. The shift in the preference of the Ministry of Justice and Human Rights from IP-indifferent to being more favourable concerning trademark protection notably also played a critical role behind trademark policy reform in Indonesia.

producers were not fully aware of the fact that their business was illegal until recently, when the Indonesian government enacted the new regulations on trademark protection in 2001. According to Rosser (2002, p.150), however, some of them also have the capacity to export their products.

4.6 Analysing IP Policy Change in Indonesia: Competing Perspectives

The empirical evidence presented in the case study of Indonesia reveals the flaws in the existing expectations of developing countries' compliance particularly regarding the role of external pressures, as argued by both neo-realism and neo-liberal institutionalism. While Indonesia indeed received significant external pressures especially from the US—threats of trade sanctions, diplomatic and industry pressures, being on the USTR Special 301 Report mostly with PWL status, as well as being brought to the WTO dispute—the most tangible pressure in the form of trade sanctions had a noticeable impact primarily on copyright protection (see table 4.6). Yet, IP policy reform taken by the Indonesian government as a response to its TRIPs obligations did not correspond neatly with pressures it received. For instance, despite repeated US threats to withdraw GSP benefits unless Indonesia improved its copyright legislation prior to the TRIPs negotiations, Indonesia did not substantially reform its copyright legislation until the mid-1980s. By contrast, despite only receiving relatively moderate pressure in the forms of industry and diplomatic pressure, Indonesia adopted more stringent rules for its trademark legislation during the TRIPs negotiations and also adopted more rigorous rules for its patent legislation during its transition period.

Indonesia's experience also indicates that the legalisation of international institutions as represented by the WTO DSB cannot provide sufficient support for neo-liberal institutionalist account. This is because Indonesia was brought to the WTO dispute which was not exclusively related to a TRIPs issue. Furthermore, neo-liberal institutionalism is also unable to explain early compliance and TRIPs-Plus approaches taken by the Indonesian government for its patent and trademark legislation, since neo-liberal institutionalism would suggest policy reform should all be both on time and to minimum for all different IP categories. In this context, the empirical evidence in Indonesia's case study is insufficient to support neo-liberal institutionalists' arguments regarding the role of authoritative international institutions in influencing the change in developing countries' IP legislation. It can be concluded, therefore, that the IP policy reform taken by the Indonesian government as a response to its TRIPs obligations cannot adequately be explained by focusing solely on the role of external pressures, as argued by both neo-realism and neo-liberal institutionalism.

Table 4.6 Indonesia's IP Policy Change and External Pressures

The Timing of Policy Change	IPR Categories	External Pressures		Policy Change
		Forms	Degree	
Prior to and during the TRIPs negotiations	Patents	Diplomatic and industry pressures	Moderate	Not substantial (adopted below the minimum TRIPs requirements)
	Copyrights	Threats of trade sanctions in the form of the withdrawal of GSP benefits	Strong	Not substantial (adopted below the minimum TRIPs requirements)
	Trademarks	Diplomatic and industry pressures	Moderate	Substantial (adopted more rigorous rules than TRIPs)
During the transition period	Patents	Diplomatic and industry pressures as well as the USTR Report with PWL status	Moderate	Substantial (adopted more rigorous rules than TRIPs and rolled back the rules from more rigorous to only meeting the minimum TRIPs requirements)
	Copyrights	Threats of trade sanctions, diplomatic and industry pressures, as well as the USTR Report with PWL status	Strong	Substantial (into compliance with TRIPs)
	Trademarks	Diplomatic and industry pressures as well as WTO complaint ⁸⁴	Moderate	Not substantial (already beyond TRIPs requirements)
After the end of the transition period	Patents ⁸⁵	No pressure	None	No policy reform
	Copyrights	Threats of trade sanctions, diplomatic and industry pressures, as well as the USTR Report with PWL status	Strong	Not substantial (already in compliance with TRIPs)
	Trademarks	No pressure	None	Not substantial (already beyond TRIPs requirements)

⁸⁴ As explained previously, Indonesia was brought to the WTO dispute on a matter not exclusively related to the TRIPs issue.

⁸⁵ As can be seen from earlier explanation, the last amendment of patent legislation was taken by the Indonesian government when Indonesia was still in its transition period.

As external pressure is neither sufficient nor necessary for policy change to take place, it is necessary to analyse the interaction among pro-IP, IP-indifferent, and IP-sceptic domestic actors both societal and governmental. Tables 4.7; 4.8; 4.9 summarise the preferences of domestic actors regarding IPR protection and its implications to policy taken by government in each type of IPR categories.

Table 4.7 Indonesia's Patent Policy Change and Domestic Politics Analysis

The Timing of Policy Change	Preferences of Domestic Actors		Policy Change
	Preferences	Actors	
Prior to and during the TRIPs negotiations	Pro-IP	Ministry of Research and Technology, Ministry of Industry	Not substantial (adopted below the minimum TRIPs requirements)
	IP-Indifferent	Ministry of Justice, Ministry of Trade	
	IP-Sceptics	Ministry of State secretariat, Ministry of Health, Ministry of Agriculture, pharmaceutical industry	
First amendment during the transition period	Pro-IP	Ministry of Research and Technology, Ministry of Industry	Substantial (adopted more rigorous rules than TRIPs)
	IP-Indifferent	Ministry of State Secretariat, Ministry of Justice, Ministry of Trade	
	IP-Sceptics	Ministry of Health, Pharmaceutical industry	
Second amendment during the transition period	Pro-IP	Ministry of Research and Technology, Ministry of Industry, Ministry of Justice and Human Rights,	Substantial (rolled back the rules from more rigorous to only meeting the minimum TRIPs requirements)
	IP-Indifferent	Ministry of State Secretariat, Ministry of Trade	
	IP-Sceptics	Ministry of Environment, Ministry of Agriculture, Ministry of Health, Pharmaceutical industry, NGOs	

Note: As explained in the previous sections, the last amendment of the patent policy reform was taken by the Indonesian government during the transition period. However, even though both acts were adopted during the transition period, the domestic actors involved in the amendment process of each act are different.

Table 4.8 Indonesia's Copyright Policy Change and Domestic Politics Analysis

The Timing of Policy Change	Preferences of Domestic Actors		Policy Change
	Preferences	Actors	
Prior to and during the TRIPs negotiations	Pro-IP	Publishers and musicians	Not substantial (adopted below the minimum TRIPs requirements)
	IP-Indifferent	Ministry of Justice	
	IP-Sceptics	Ministry of State Secretariat, ⁸⁶ producers of counterfeit products	
During the transition period	Pro-IP	Ministry of Industry, publishers and musicians, IT industry	Substantial (into compliance with TRIPs)
	IP-Indifferent	Ministry of State Secretariat, Ministry of Justice, Ministry of Trade	
	IP-Sceptics	Producers of counterfeit products	
After the end of the transition period	Pro-IP	Ministry of Industry, Ministry of Justice and Human Rights, publishers and musicians, IT industry	Not substantial (already in compliance with TRIPs)
	IP-Indifferent	Ministry of State Secretariat, Ministry of Trade	
	IP-Sceptics	Producers of counterfeit products	

Table 4.9 Indonesia's Trademark Policy Change and Domestic Politics Analysis

The Timing of Policy Change	Preferences of Domestic Actors		Policy Change
	Preferences	Actors	
Prior to and during the TRIPs negotiations	Pro-IP	Ministry of Industry	Substantial (adopted more rigorous rules than TRIPs)
	IP-Indifferent	Ministry of State secretariat, Ministry of Justice	
	IP-Sceptics	Producers of counterfeit products	
During the Transition period	Pro-IP	Ministry of Industry	Not substantial (already beyond TRIPs requirements)
	IP-Indifferent	Ministry of State Secretariat, Ministry of Justice, Ministry of Trade	
	IP-Sceptics	Producers of counterfeit products	
After the end of the transition period	Pro-IP	Ministry of Industry, Ministry of Justice and Human Rights	Not substantial (already beyond TRIPs requirements)
	IP-Indifferent	Ministry of State Secretariat, Ministry of Trade	
	IP-Sceptics	Producers of counterfeit products	

A closer observation on the domestic politics also reveals that IP policy reform took place in the absence of substantial external pressure, when there was a shift in some of the government

⁸⁶ As explained earlier, the preference of the Ministry of State Secretariat on copyright protection has started to shift during the amendment process of the Copyright Act of 1987.

institutions' preferences from being sceptical of IPR protection to being either indifferent or in favour of IPR protection. In particular, in contrast to government statements during IP policy reform in the 1980s, which indicated that IPR protection was not seen as crucial for Indonesia's development, by the end of the 1990s, the need of IPR protection to improve Indonesia's technological development is commonly seen as a necessity among government officials. The change in some government institutions' preferences regarding IPR protection, as evident for instance, from the change in the preference of the State Secretariat (from IP-Sceptics to IP-indifferent) and the Ministry of Justice and Human Rights (from IP-indifferent to Pro-IP), therefore, contributed to providing a more favourable condition for policy change to take place.

The existing literature offers a few possible explanations for finding the reasons behind the change in the government's preference. From a rationalist perspective, the change in the government's preference can be understood as the government's response to the 'inducement' through various IP-related support programmes, provided by developed countries and international institutions to improve the IP regime.⁸⁷ Alternatively, the change in the government's preferences regarding IPR protection could be due to 'policy learning' (Freeman, 2006, p.376). Within this context, the change in the government's preference concerning IPR protection can also be a result of the government's learning process, from the outcomes of the implementation of previous IP policies when adopting the new ones. Following sociological constructivists' approach regarding the role of socialisation and the internalisation of international norms in the domestic sphere, the change in the government's preference concerning IPR protection, therefore, can also be explained as a result of socialisation and the internalisation of IPR norms under TRIPs. Within this context, various IPR-related support programmes, provided by international institutions and developed countries, did not only provide material incentives for developing countries, but, at the same time, these activities also contribute to create what May (2004, p.822) refers to a 'TRIPs mind-set' among government officials in developing countries. The fact that Indonesia received numerous IP-related support programmes including training for government officials on IP issues was also pointed out by Indonesian researchers in the interviews with the author.⁸⁸

⁸⁷ As briefly mentioned in Chapter 1, as with many other developing countries, Indonesia also received numerous IP-related support programmes provided by developed countries and various international institutions (Finger and Schuler, 2000, p.522; May, 2004, p.826).

⁸⁸ Author's interview with Indonesian researchers (Jakarta, 01 September 2009).

However, locating the answer as to whether the shift in preference among Indonesian policy makers regarding IPR protection was as a result of socialisation, policy learning, or ‘inducement’ requires a deeper analysis. While explaining the reason behind the shift in the Indonesian government’s preference is beyond the scope of this thesis, the shift itself indicates that domestic actors’ preferences are a dynamic and critical factor. The chapter therefore argues that analysing domestic actors’ preferences over time, for different IPR categories, is essential in order to explain IP policy change in developing countries.

4.7 Conclusion

Previous discussions illustrated that policy change in Indonesia’s domestic IP legislation as its response to its TRIPs obligations revealed the flaws in the major IR theories’ expectations on developing countries’ compliance with the TRIPs Agreement. IPR protection had no historical attachment in its national legislation prior to TRIPs and it even contradicted its norms and traditions, as reflected in its *adat* customary laws. Yet, after the TRIPs negotiations were concluded, Indonesia took the necessary steps to reform its IP domestic policy earlier than it had to, and for trademark and patent legislation (at least before the adoption of the last Patent Act in 2001) Indonesia even adopted more rigorous rules than required.

This chapter demonstrated that external pressure is not irrelevant, but neither is it necessary nor sufficient to explain policy change. A closer observation of IP policy reform in Indonesia also suggests that in order to understand fully the implications of great power coercion to policy change, other important factors such as economic crisis also need to be taken into account. Only during the economic crisis did the Indonesian government become sensitive to external pressures. Moreover, this chapter has established that Indonesia strengthened aspects of IPR protection even in the absence of external pressures, where the government’s preferences became more favourable to IPR protection. In addition, this chapter also argued that, based on the experience of Indonesia, there was no sufficient evidence to support the neo-liberal institutionalist’s argument regarding the role of authoritative international institutions in influencing policy change. This is particularly because, neo-liberal institutionalism, which would suggest the timing and the quality of reforms and variance in both across different IP categories should all be on time and to minimum, is unable to explain early compliance and

TRIPs-Plus approaches taken by the Indonesian government for its patent and trademark legislation. In this regard, earlier discussions suggested the importance of analysing the interests of various domestic actors, both societal and governmental, and how they shape policy outcomes, in order to understand IP policy change in Indonesia.

By looking at domestic politics, the Indonesian case study also revealed that, with relatively limited domestic societal actors' involvement in the policy making process, domestic political actors, particularly the executive, played a crucial role in determining IP policy reform. However, a deeper analysis also showed that the executive cannot be treated as a single unitary actor since it consists of different ministries, which represent divergent interests, according to the specific roles they hold. A comprehensive understanding of policy change in Indonesia, as a response to its TRIPs obligations, therefore, requires a deeper analysis of the preferences of different government institutions concerning IPR protection. By doing so one can identify that the shift in some of government institutions' preference, from sceptical to being either indifferent or more favourable concerning IPR protection, contributes to creating a more conducive condition for a policy reform to take place, particularly when there was no significant change in external pressures. This chapter, therefore, has demonstrated the importance of domestic politics of compliance analysis in understanding IP policy change in Indonesia, as a response to its TRIPs obligations.

Chapter 5

Policy Change in India's IP Legislation: Where the Domestic Societal Actors Take the Lead

“...My idea of a better aided world is one in which medical discoveries would be free of patent and there will be no profiteering from life or death...”
(Indira Gandhi, World Health Assembly in Geneva, 6 May 1981)⁸⁹

5.1 Introduction

The above quotation, from former Indian Prime Minister Indira Gandhi, represents India's long and strong resistance against having a robust international patent system, which would be considered damaging for the vast majority of Indian citizens. Such a resistance was also evident during the Uruguay Round of multilateral negotiations, when India strongly opposed the adoption of the TRIPs Agreement. After the conclusion of the TRIPs negotiations, however, India was among the developing countries that took the necessary steps to reform its existing IP legislation, in order to fulfil its TRIPs obligations by the end of its transition period, and adopted more stringent rules, notably for both copyright and trademark legislations. Considering its strong resistance during the TRIPs negotiations, India's IP policy change as a response to its TRIPs obligations is puzzling, since it deviated from the expectations of the leading IR theories. As can be seen in the case of Indonesia, India's policy reform particularly poses a challenge to constructivist expectations, which predicted that policy change would be unlikely to take place, because the TRIPs Agreement is seen as a lack of legitimacy in the eyes of India. The role of external pressures, as argued by both neo-realism and neo-liberal institutionalism plausibly offer a better explanation.

The chapter, however, argues that IP policy reform in India did not correspond neatly to external pressures. As in the case of Indonesia, India's IP policy reform took place both with the presence and in the absence of these pressures. Moreover, the external pressure explanation is unable to capture the difference in India's responses to its TRIPs obligations for different IPR categories. In the case of the patent policy reform, despite receiving strong external pressure since the end of the TRIPs negotiations, the Indian government did not make a substantial policy reform until the end of its transition period, and India also exploited most

⁸⁹ As quoted by a member of parliament in *Lok Sabha* during the debate on the patent (amendment) bill, 1999 on 10 March 1999 (*Lok Sabha*, 1999b, p.21)

of the flexibilities available under TRIPs. Whereas, in the case both of copyrights and trademarks, in spite only receiving low to moderate levels of external pressures, policy reform was done rather easily. Empirical findings demonstrate that India's responses to its TRIPs obligations across IPR types correlate strongly with the relative strength of the IP domestic constituency for different IPR categories. This chapter argues, therefore, that the role of external pressures can only provide a partial explanation in understanding India's responses to its TRIPs obligations.

The chapter develops this argument, first by providing the basic background information of the Indian political system, in order to identify key domestic actors, and describe the interaction of these actors in the decision policy making process. The chapter then discusses India's role during the TRIPs negotiation process, highlighting India's leading role in resisting the TRIPs Agreement. The elaboration on India's IP policy reforms and TRIPs compatibility is the main focus of the subsequent section, which focuses on the role of external pressures, and the role of domestic actors, in influencing policy making in each type of IPR protection. The last part concludes the discussion, by underlying both the theoretical and empirical contributions from analysing the case study of India. It basically affirms the limitation of the external pressures explanation in explaining change in developing countries' IP legislation, and the necessity of analysing the government's different responses in correlation to the variation in domestic actors' preferences for the different IPR categories.

5.2 Indian Policy Making at a Glance

Under the parliamentary system, the central political actor in India is the prime minister, and his/her cabinet. Most legislation drafts introduced to parliament—which consists of two Houses the *Lok Sabha* (the Lower House/House of the People) and the *Rajya Sabha* (the Upper House/Council of States)—are initiated by the prime minister and the cabinet (Hardgrave and Kochanek, 2008, p.84).⁹⁰ In some cases, particularly on important issues, such as in the case of the patent policy reform, as will be explained later, the bill can be referred to a Select Committee, or can be referred to a Joint Committee of both Houses (Hardgrave and

⁹⁰ The *Lok Sabha* or House of the People is the most essential political body and much more politically significant than the *Rajya Sabha* or Council of States. The ultimate control of the *Lok Sabha* over the executive rests in its power to set the motion of no confidence that can bring down the government, while on the other hand the *Rajya Sabha* has no power to set a motion to bring down the government (Hardgrave and Kochanek, 2008, pp.86–87; Thakur, 1995, p.147).

Kochanek, 2008, p.88). To become an act, the bill must be passed by both Houses and needs the president's approval in order for it to finally be adopted. If the two Houses cannot reach an agreement regarding the bill, the president may intervene by appointing a joint sitting of parliament, and the disputed provision is decided on by a simple majority vote (Thakur, 1995, p.148; Hardgrave and Kochanek, 2008, p.88).

Even though under the parliamentary system, the president's role is mostly symbolic (Thakur, 1995, p.101; Kohli, 2000, p.266; Kohli and Basu, 2009, p.174), under political instability and an emergency situation, the president has a vital role, which include appointing the prime minister and dissolving parliament (Hardgrave and Kochanek, 2008, pp.75–76). Furthermore, under exceptional circumstances, which require a swift response from the government, when parliament is not in session, on the advice of the prime minister, the president may adopt an ordinance (Thakur, 1995, p.105; Hardgrave and Kochanek, 2008, p.78). However, to become an act, an ordinance requires parliament's approval within six weeks. As will be explained later, when parliament failed to pass the patent law, the president took a decision to enact the ordinance several times on patent protection.

Even though most legislation was initiated primarily by the prime minister and the cabinet, with its democratic nature, the Indian political system also allows wide public participation in the policy process, through open hearings and public consultations, particularly on major domestic issues (Hardgrave and Kochanek, 2008, p.89). During public consultations, interested domestic societal actors have a chance to submit their suggestions on the proposed bill. In order to gather information from various groups in society, particularly on a controversial bill, the government can also appoint a specific commission consisting of prominent citizens. Based on its findings, the commission provides the government with policy recommendation which then can be used by the cabinet in drafting the legislation (Hardgrave and Kochanek, 2008, p.89).

Given the fact that India adopts a parliamentary system, in understanding IP policy change in India, it is necessary to scrutinise the parliamentary debates during the amendment process, in order to grasp the domestic political actors' preference, particularly political parties' preferences, concerning IPR protection. In addition, with its democratic nature, the Indian political system provides a considerable means for domestic societal actors to play an active

role in the policy making process. For this reason, understanding IP policy change in India also requires a deeper analysis on the interaction between domestic political actors and domestic societal actors in the policy making process, particularly to illuminate how domestic political actors respond to domestic societal actors' demands concerning IPR protection. As can be seen in the subsequent explanations, the analysis of the interaction between domestic political and societal actors helps to explain the reason behind the different approaches taken by the Indian government concerning the different IPR categories.

5.3 India during the TRIPs Negotiations: A Leader of Developing Country Opposition⁹¹

As discussed in chapter 2, along with Brazil, India was on the forefront to resist the adoption of the TRIPs Agreement during the Uruguay Round of multilateral trade negotiations (UNESCAP, 2001, p.2). Based on the official submissions of the Indian government during the Uruguay Round, there were several main issues raised by the Indian government concerning IPR protection during the TRIPs negotiations. These include opposing to any negotiations on IPR protection beyond the discussion of trade in counterfeit goods; proposing limited coverage of both of patentable subject matter and the duration of patent protection; demanding the necessity to take the country's development stage into consideration; opposing to a uniform standard for IPR protection; and questioning GATT as the appropriate venue for the TRIPs negotiations (India, 1989).

India insisted that the scope of the negotiations agendas should be limited to the restrictive and anti-competitive practices of the owners of IPR, since these practices can be considered to be trade-related, and they can distort or impede international trade (India, 1989). Furthermore, India also made the clear point that other aspects of IPR need to be placed in a wider developmental and technological context. India also argued that the protection of IPR should be governed by the concerns and public policy objectives underlying the national systems. In this regard, by taking into consideration its own socio-economic, developmental, technological, and public interest needs, the Indian delegation then argued that every country should be free to determine both the general categories and the duration of patent protection under its national legislation (India, 1989). Therefore, given the enormous economic and

⁹¹ See also the discussions in Chapter 2 particularly on the G10 developing countries' position during the Uruguay Round.

technological gap between industrialised and developing countries, India opposed the uniform standard for IPR protection. In this context, India also requested more favourable treatment for developing countries. India also strongly opposed the suggestion from developed countries to integrate the national treatment and most-favoured nation treatment principles on TRIPs, since these principles are only related to trade in goods (Gervais, 2003, p.15). In addition to the scope of IPRs protection, India also questioned GATT as the venue for the IPR protection negotiations. This is not only because the protection of IPR has no direct or significant relationship to international trade, but also considering the existence of a more competent and appropriate international organisation under the World Intellectual Property Organisation (WIPO), which would be better suited for dealing with this issue (Matthews, 2002, p.31).

India was still persistent in its strong position against developed countries' proposals until almost the end of the Uruguay Round, even after some other developing countries that were initially against TRIPs started to change their position due to US pressure. India, in fact, also received considerable pressure from the US during the negotiation process. As explained in chapter 2, like many other developing countries, such as Mexico and Thailand, in 1992 India also came in for Generalised System Preference (GSP) losses of US\$80 million (Henderson, 1997, p.652; Drahos and Braithwaite, 2002, p.88). Nevertheless, India was the only country that kept maintaining its strong opposition to accepting the final draft of the TRIPs Agreement, until nearly the end of the Uruguay Round. As Drahos and Braithwaite (2002, p.146) argue, "[I]f any country could have mustered the will power to resist the US agenda on TRIP[S] to the end it would have been India".

India finally accepted the TRIPs Agreement, for several reasons. First of all, as can be found from Indonesia's acceptance, the single-undertaking principle played a significant role in India's final decision to accept the TRIPs Agreement as part of the Uruguay Round result. In addition, as mentioned earlier, India's acceptance to the TRIPs Agreement is also due to its inability to resist constant pressure, particularly from the US. Furthermore, India eventually accepted the TRIPs Agreement also because the final draft of the TRIPs Agreement accommodated the flexibilities that were proposed by the Indian government. These included the transition period for developing countries, a provision on compulsory licensing, and

parallel import.⁹² India was also willing to accept TRIPs in exchange for concessions on other trade objectives, such as market access to developed countries in significant areas particularly agriculture and textiles (Gutowski, 1999, p.756; Sell, 2000, p.176; Capling, 2004, p.188; Richards, 2004, pp.133–38).

It can be concluded, therefore, that, due to India's strong resistance against its adoption, the TRIPs Agreement evidently also represented an 'inconvenient obligation' for India, as was the case for its Indonesia counterpart. Nevertheless, also similar to the case of Indonesia, in order to fulfil its TRIPs obligations, India had already reformed its IP legislation by the end of its transition period, and even adopted more rigorous rules for some of its IP laws. Explaining India's unexpected responses to its inconvenient obligations, therefore, is the main purpose of the rest of the chapter.

5.4 Explaining Policy Change in India's IP legislation and TRIPs Compatibility

This section explains policy change in India's IP legislation as a response to India's TRIPs obligations. As explained earlier, the IP policy reform taken by the Indian government is puzzling, since it was at odds with major IR theories expectations regarding developing countries' responses to their TRIPs obligations. As can be seen from the case of Indonesia, the external pressures explanation, as argued by both neo-realism and neo-liberal institutionalism, can only provide a partial explanation in understanding India's IP policy reform, since it is unable to explain the difference in India's responses to its TRIPs obligations for different types of IP category. Empirical evidence reveals that the variety of approaches taken by the Indian government for different types of IPR was consistent with the divergence in the domestic actors' preferences regarding corresponding IPR categories.

⁹² The accommodation of some flexibilities as proposed by India as one of the reasons behind India's acceptance to the TRIPs Agreement was also pointed out by a counsellor of the WTO IP Division in the interview with the author (Geneva, 19 November 2009)

5.4.1 India's Patent Policy Change: Reconciling International Obligations and Domestic Opposition

Patent protection is the most controversial issue in India's IP policy reform (Shiva, 2001, p.38). Despite the fact that India received substantial external pressures from both the US and the EU to improve its patent regime, due to strong opposition from major domestic societal actors, represented mainly by the national pharmaceutical industry, the Indian government did not make any substantial effort to reform its existing patent laws. Furthermore, due to persistent domestic opposition in patent protection, unlike in other types of IPR, India not only took full advantage of its transition period to reform its existing patent law, but also exploited most of the flexibilities available under TRIPs. In this regard, empirical findings demonstrate that substantial policy reform only took place when there was a shift in the preferences of major domestic societal actors regarding patent protection.

5.4.1.1 Assessing India's Patent Legislation and TRIPs Compatibility

Unlike many other developing countries, IP laws have a long history in India, which can be traced back to 1856, when India was still under the British colonial rule. India's first patent law was adopted in 1856, and then replaced by the 1911 Indian Patent and Design Act (Baldia, 2003, pp.434–35). India's first patent law after the independence was enacted in 1970. This law granted limited terms of protection for 14 years for most products, and only 5 to 7 years for process patent for food, drugs, and medicines (see table 5.1). This act also obliged the patent owners to manufacture as well as to use the patented products in India. In this regard, the importation of patented products registered in other countries could not be considered as a working patent in India, and, therefore, did not enjoy patent protection.

After the conclusion of the TRIPs negotiations, the Indian government adopted several patent laws as a response to its TRIPs obligations. In 1999, the Indian government adopted a new patent act, which was mainly intended to fulfil the obligations required by the WTO Dispute Settlement Body (DSB) ruling, to provide the necessary procedures related to Exclusive Marketing Rights (EMR). Under this new act the government also introduced a provision to grant exclusive rights of patent holders (see table 5.1). Nevertheless, since India was still in its transition period, this act did not incorporate other important provisions under TRIPs, such as

setting the minimum 20-year duration of protection, or granting a patent protection for pharmaceutical products.

The minimum 20 years protection as required by TRIPs was then introduced in 2002 when the government amended the previous Patent (Amendment) Act of 1999. Under this new act, the Indian government accommodated a uniform period of 20 years, which would be applicable to all inventions. The Patent (Second Amendment) Act of 2002 also removed several provisions under the Patent Act of 1970, relating to the requirement of working of patent, which were aimed at ensuring that the manufacture of the patented product took place in India. Accordingly, following the requirement under the TRIPs Agreement, the Patent (Second Amendment) Act of 2002 extended the right of the patentee to include the importation of the patented product or process, through the recognition that the importation of the product into India is treated as the working of the patent (Chaudhuri, 2002, p.3354). However, this act still did not incorporate patent protection for pharmaceuticals, foods, and chemical products, since India was still within the transition period, and had until 2005 before it had to grant protection for these areas (see table 5.1).

By the end of its transition period, the Indian government introduced another patent act in order to fulfil the remaining obligation under the TRIPs Agreement. Under the Patent (Third Amendment) Act of 2005, the Indian government finally granted patent protection for pharmaceuticals, foods, and chemical products. In addition, this act also clarified that both parallel importation and compulsory licensing were now permitted. By adopting this act, the Indian government completely fulfilled its TRIPs obligations, and the Indian patent regime met the minimum standards as required by TRIPs. It should be noted, however, as will be explained later, in addition to these main legislations, the Indian government also adopted several ordinances, under the authority of the president, to serve as temporary regulations whenever parliament failed to enact a new law.

Table 5.1 The Indian Patent Acts and TRIPs Compatibility

Aspect	TRIPs Obligation	Prior to TRIPs No 39/1970	During Transition Period		By the end of Transition No. 15/2005
			No. 17/1999	No.38/2002	
Scope	Products and process for any inventions in all fields of technology involve an inventive step, and are capable of industrial application	Excluded patent protection for foods, medicines, drugs, and chemical products	Excluded patent protection for foods, medicines, drugs, and chemical products	Excluded patent protection for foods, medicines, drugs, and chemical products	Protected patent for foods, medicines, drugs, and chemical products
Flexibility in the scope	May exclude inventions which are necessary to protect public order or morality	Utilised this flexibility	Utilised this flexibility	Utilised this flexibility	Utilised this flexibility
	May exclude plants and animals other than micro-organisms	-	-	Utilised this flexibility	Utilised this flexibility
	May exclude diagnostic, therapeutic and surgical methods for the treatment of humans or animals	Utilised this flexibility	Utilised this flexibility	Utilised this flexibility	Utilised this flexibility
	Permitted parallel importation	-	-	-	Permitted parallel importation
	Permitted compulsory licensing	-	-	-	Permitted compulsory licensing
Duration of protection	20 years	14 years (for general patent) 5 or 7 years (for process patent for food, drug, medicine)	14 years (for general patent) 5 or 7 years (for process patent for food, drug, medicine)	20 years (for all patented inventions)	20 years (for all patented inventions)
Exclusive rights of patent holders	Protects exclusive rights of patent holders	Not granted	Granted	Granted	Granted
Enforcement	Requires civil and criminal enforcement but no minimum requirements	Included provisions for enforcement	Included provisions for enforcement	Included provisions for enforcement	Included provisions for enforcement
TRIPs compatibility	--	TRIPs-minus	TRIPs-minus	TRIPs-minus	TRIPs-minimum

Note: Author's assessment on the Indian Patent Act No. 39 of 1970, the Indian Patent (First Amendment) Act No. 17 of 1999, the Indian Patent (Second Amendment) Act No. 38 of 2002,

and the Patent (Third Amendment) Act No. 15 of 2005. It should be noted that the table only presents the main patent laws adopted by parliament. In addition to these acts, as mentioned earlier, there were several other temporary laws, in the form of ordinances adopted by the president, the 1994 Patent Ordinance (31 December 1994), the 1999 Patent Ordinance (8 January 1999), and the 2004 Patent Ordinance (26 December 2004).

5.4.1.2 India's Patent Legislation: Explaining Policy Change

The history of India's patent policy reform demonstrates the Indian government's effort to reconcile both its obligations under the international agreement, and the persistence of domestic societal actors' opposition for patent policy reform. On the one hand, as a signatory of the agreement, the Indian government obliged to fulfil its obligations under the TRIPs Agreement to reform its patent legislation. On the other hand, the Indian government's effort to fulfil its TRIPs obligations faced a serious challenge from domestic societal actors, who benefitted from the existing patent legislation. In this regard, due to strong domestic societal actors' opposition, external pressures in the form of great power coercion had less impact on patent policy reform in India. However, the empirical findings also show that collective external pressure, represented by the WTO DSB played a crucial role, since it was used by the government to overcome domestic societal actors' opposition. This was particularly evident after India had to comply with the WTO DSB ruling, after it lost its case in the dispute with the US and the EU.

5.4.1.2.1 Patent Policy Change prior to and during the TRIPs Negotiations

India's meticulous consideration on the patent issue can be traced back to its initial attempt in reforming the patent policy soon after the independence, through the establishment of the *Tek Chand* Committee in 1948. This committee was responsible for assessing India's existing patent system, in order to ensure that the patent system under new patent act would reflect the Indian national interests (Baldia, 2003, p.439; Mathur, 2007, p.33). In their report submitted in 1950, the *Tek Chand* Committee concluded that the existing patent system was insufficient to promote industrial development and suggested the importance of compulsory licensing to address the problem (Garde, 2009, p.59). Nevertheless, the *Lok Sabha* was dissolved before it was able to introduce the new patent act.

In 1957 the Indian government established another committee, the *Ayyangar* Committee, to perform a similar task (Baldia, 2003, p.439; Mathur, 2007, p.33; Garde, 2009, p.59). One of the most significant results of the *Ayyangar* Committee's assessments indicated that the existing patent system in India was mainly exploited by foreign companies. This can be seen from the fact that, during the time when the assessment was being conducted, not only up to 90 percent of the patent granted in India were owned by foreigners, but also more than 90 percent of these patent were not utilised in India (Henderson, 1997, p.658; Baldia, 2003, p.439; Mukherjee, 2006, p.132; Rammana, n. d., p.3). In addition, since the patent for medicines were mostly owned by foreign companies, the price of medicines was extremely high (Mukherjee, 2006, p.132). The report also found that India's existing patent system failed to stimulate invention among Indians, let alone served the benefits of the Indian public (Garde, 2009, p.59). Based on these findings, the committee recommended the government adopt a regime of patent protection which should be beneficial for Indian society, by providing a guarantee of the access to pharmaceutical products at lower prices (Mathur, 2007, p.33).

Based on the committee's recommendation, the 1970 Patent Act, which was more inclined towards the social and wider benefits of IP over its monopolistic nature of private gain, was finally enacted (Thomas, 2001, p.2147). In this regard, even though it was rooted in the 1949 British Patent Act, the patent system in India, under the 1970 Patent Act that came into force in 20 April 1972, was far more limited in both scope and terms of protection, than the corresponding English patent law, and the previous patent act under the colonial rule (Baldia, 2003, p.439). A less strict patent protection under the 1970 Patent Act, was mainly intended to ensure the availability of affordable basic medicine and health care for Indian society (Koshy, 1995, p.1).

A limited-scope patent regime, under the Patent Act of 1970, has also contributed to the development of the indigenous Indian pharmaceutical industry, which managed to grow impressively. In addition, by only granting process patents, and not patents for pharmaceutical products, the 1970 Patent Act provided an incentive for national producers to patent cheaper processes for making pharmaceutical products (Drahos and Braithwaite, 1999, p.152). A low level of patent protection has also allowed the domestic Indian pharmaceutical industries to develop technical expertise in the reverse engineering of existing medicines, and they were then able to modify the manufacturing process in order to become an efficient producer of

generic medicines (Tellez, n. d., p.1; Keayla, 2005). This, in turn, has also made India, not only capable of becoming self-reliant in producing drugs, but also emerge as a major player in the global pharmaceutical industry, which gave India world wide recognition as a low-cost producer of quality drugs (Chaudhuri, 2005, p.2). According to Mathur (2007, p.27), based on the volume of the medicines they produced, by the 1990s, the Indian pharmaceutical companies had become the fourth largest in the world. Furthermore, Eren-Vural (2007, p.114) demonstrates that, during the 1980s, 98 percent of the domestic demand for pharmaceuticals in India was supplied by local manufacturers. In this regard, as will be explained in more detail later in this section, the India's pharmaceutical industry emerged as one of the dominant domestic actors, which played a significant role in defining the course of patent policy reform in India.

Previous discussions indicate that the first Indian Patent Act of 1970 can be seen as the evidence of the Indian government's preference for a low level of patent protection. Such a preference was highly influenced by India's condition as a newly independent poor country. Furthermore, prior to the 1980s, there were relatively few international pressures, since, at that time, IPR protection was still not the trade agenda priority for most of the major developed countries, particularly the US. As will be explained later, this circumstance changed significantly after the 1980s, when IPR protection became the priority of developed countries, particularly the US, and contributed to the inclusion of IPR protection in international trade negotiations. As explained earlier, when IPR protection was introduced and negotiated during the Uruguay Round, the US also intensified its pressure to developing countries, including India, to improve their IPR protection. Subsequent development also demonstrates that, domestically, domestic societal actors (mainly pharmaceutical manufacturers), benefitting from the existing patent act also began to play a significant role, which determined the course of the patent policy reform in India.

5.4.1.2.2 Patent Policy Change during the Transition Period

After the TRIPs negotiations concluded, as a response to its TRIPs obligations, the Indian government set up an expert group, with the task of providing suggestions to the government regarding the essential amendments that needed to be taken, in order for India to comply with its TRIPs obligations (Ganguli, 1999, p.279; UNESCAP, 2001, p.8). Immediately after it ratified the WTO Agreement on 30 December 1994, on the basis of this expert group's recommendation, the Indian government enacted the 1994 Patent Ordinance on 31 December 1994. Under this ordinance, the Indian Patent Office would accept the applications for patents for pharmaceutical and agricultural chemical products, and provide the necessary mechanism for granting the EMR (Ganguli, 1999, p.279; UNESCAP, 2001, p.8). However, an ordinance issued by the president, as explained earlier, can be regarded as only a temporary solution, as it would expire within six weeks, unless parliament adopted it. As argued by a former Indian government official in the interview with the author, the Indian government chose this route because it was aware of the fact that patent protection was a very sensitive issue, and it would create a lengthy debate in parliament. In the interview, a former Indian government further argued that "...the executive believed that adopting an ordinance as a temporary step would suffice to meet the deadline to comply with India's TRIPs obligations".⁹³

Nevertheless, realising that the Patent Ordinance of 1994 was insufficient in the long term, the Indian government undertook another important effort to comply with the TRIPs Agreement, by proposing the Patent (Amendment) Bill in the *Lok Sabha* in March 1995 (UNESCAP, 2001, p.9). After the *Lok Sabha* passed the bill, the government then brought the Bill to the *Rajya Sabha*. However, since the ruling party did not have a majority in the *Rajya Sabha*, the opposition parties diverted the bill to the Select Committee on Patents (UNESCAP, 2001, p.9). Before the Select Committee finished its task, *Lok Sabha* was dissolved in May 1996. With the dissolution of *Lok Sabha*, the ongoing amendment process also automatically terminated (Ganguli, 1999, p.279; UNESCAP, 2001, p.9; Chaudhuri, 2005, p.5).

Unlike previous periods, during its transition period, India received strong pressures from the US and the EU to improve its patent protection regime. One important indicator of the pressure is the fact that India had consistently been placed with Priority Watch List (PWL)

⁹³ Author's interview with a former Indian government official (Geneva, 23 November 2009).

status from 1994 to 2010, on the USTR Special 301 Report. Based on the USTR Special 301 Reports from 2000 to 2010, the main reason behind India's PWL status is principally due to inadequate patent protection particularly related to the protection of pharmaceutical and agricultural chemical products.⁹⁴

In addition to that, because of the failure to enact the Patent (Amendment) Bill, the US (in 1996) and the EU (in 1997) initiated complaints before the WTO Dispute Settlement Body (DSB). They contended that the 1994 Patent Ordinance was inadequate to serve as the purposed legal protection for patent applications for pharmaceuticals and agricultural chemical products (WTO, 1997a; 1998b, p.51). In defence, India argued that, even though it was still unable to provide a legal arrangement, it had issued administrative instructions for accepting patent applications for pharmaceuticals and agricultural chemical products. Furthermore, India argued that the TRIPs Agreement did not require a country to provide such measures through legislative, rather than administrative practices (Garde, 2009, p.65). Nevertheless, the WTO DSB concluded that India had violated its TRIPs Agreement, since it failed to provide a system for filing patent applications for pharmaceutical and agricultural chemical products by the 1st of January 1995 (WTO, 1997a; WTO, 1998b). India appealed to the WTO Appellate Body on 15 October 1997, and, on its report dated 19 December 1997, the WTO Appellate Body upheld the ruling of the previous decisions on substantive issues.

A patent bill which was designed to meet India's obligations to the WTO DSB ruling was introduced by the Indian government in the *Rajya Sabha* on 16 December 1998. After the *Rajya Sabha* passed the Bill on 22 December 1998, the bill was brought to *Lok Sabha* to become an act (UNESCAP, 2001, p.10; Chaudhuri, 2005, p.5). Nevertheless, due to strong resistance from the members of parliament, the *Lok Sabha* opposed to pass the bill. During the debate, some members of parliament, including some from minority parties such as the *Janata Dal* (JD) Party, argued that the bill proposed by the government did not provide sufficient safeguards, and also did not incorporate certain exemptions, which were permitted under TRIPs (*Lok Sabha*, 1999c, p.3). With this failure, as a temporarily solution, the government, therefore had to adopt another ordinance, through the Patent (Amendment) Ordinance on 8 January 1999. In this regard, despite receiving substantial external pressures, due to strong

⁹⁴ As will be explained in the subsequent section on copyrights, another important reason for India's constant PWL status was also related to the piracy of motion pictures, music, software, books, and other copyrighted work.

domestic resistance, the Indian government failed to make substantial patent legislation reforms to fulfil its TRIPs obligations (Ramanna, n. d., p.4).

During the debate in *Lok Sabha* in March 1999, many members of parliament criticised the decision of the executive to adopt the 1999 Patent (Amendment) Ordinance, which granted the EMR. A member of parliament from one of the opposition parties, the Revolutionary Socialist Party (RSP), criticised that the ordinance was adopted without taking into account the recommendations from the Standing Committee on Commerce, which stated that granting EMR would place India under “...the absolute surrender to the dictates of the transnational corporations” (*Lok Sabha*, 1999b, p.26). However on the other hand, members from the ruling party argued that the enactment of a new patent act was a necessity, as part of India’s obligations as a member of WTO and it was part of India’s commitment to the international system (*Lok Sabha*, 1999b, p.11).⁹⁵ In the interview with the author, a former Indian government official stated that “...the opposition agreed to meet the TRIPs obligations because India as a responsible international player adheres to its international obligations even if they cost a lot”.⁹⁶

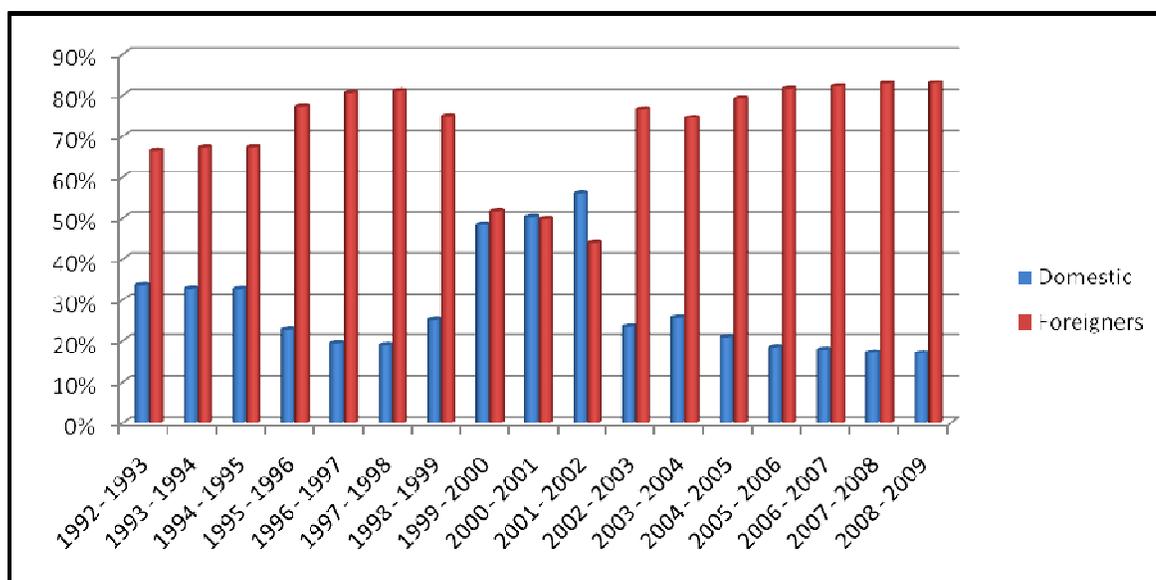
After contentious debate, which was also included a walk-out by some members of the parliament, mostly from the Communist Party of India (Marxist) CPI (M) and the *Rashtriya Janata Dal* (RJD), the *Lok Sabha* finally passed the Bill on 13 March 1999 (*Lok Sabha*, 1999b, p.52). The *Rajya Sabha* also then agreed to pass the bill. The new Patent (Amendment) Act came into effect on 26 March 1999, just in time to meet the deadline of 19 April 1999, set by the Appellate Body of WTO. However, this patent act was basically only intended to fulfil the obligations required by the WTO DSB ruling, to provide the necessary procedures related to EMR. In this context, since India was still eligible for the transition period until 2005, the Indian government did not find it necessary to incorporate other important TRIPs provisions, such as the minimum 20-year duration of protection, and granting patent for pharmaceutical products. Furthermore, the decision for not incorporating these aspects was also to avoid further controversy, particularly considering the strong domestic resistance.

⁹⁵ The wide division between the opposition mostly from left wing parties, and the ruling party, in *Lok Sabha*, during the debate on the first Patent (Amendment) bill process, is pointed out in the author’s interview with a former Indian government official (Geneva, 23 November 2009). The *Bharatiya Janata Party* (BJP) was a ruling party during the Twelfth *Lok Sabha* from 10 March 1998 to 26 April 1999 (*Lok Sabha*, n. d. (b)). See Appendix IX (table IX.2) for a complete list of the political parties in *Lok Sabha* during this period.

⁹⁶ Author’s interview with a former Indian government official (Geneva, 23 November 2009).

Strong domestic resistance to reform patent legislation can be understood, since the domestic constituency interested in strong patent protection in India was relatively small. Figure 5.1 illustrates that foreign applicants dominated the total patent applicants in India, except during the short period from 1999 to 2002, when there was a significant increase in domestic applications for patent protection.⁹⁷ Aside from that short period, foreign applicants accounted for more than 66.50 percent of total patent applications in India, while domestic applicants only accounted for less than 33.50 percent since 1992 (see also Appendix VIII (Table VIII.1)). This figure, however, is still higher than the domestic applicants for patents in the Indonesian case study, as explained in the previous chapter, which only accounted only for around 10 percent.

Figure 5.1 Patent Applications in India (1992–2009)



Sources: Annual Reports of the Indian Controller General of Patents, Designs, and Trade Marks 2001–2002 to 2008–2009.

As part of its effort to further reform its existing patent legislation, the Indian government then undertook several initiatives, involving both government institutions and domestic societal actors, through the establishment of several committees, expert groups, and working groups. These initiatives were intended to thoroughly examine all aspects relating to the amendments, in order to be consistent with the TRIPs Agreement, while still maintaining the necessary

⁹⁷ It should be noted, however, explaining a sudden increase in short period which then followed by a dramatic decline is beyond the scope of this thesis.

mechanism to safeguard India's public interest, including the guarantee of affordable medicines (UNESCAP, 2001, p.11). Based on the result of these consultations, the government of India introduced another patent bill in the *Rajya Sabha* on 20 December 1999. The *Rajya Sabha* passed a motion to refer the Bill to a Joint Select Committee on patent. The *Lok Sabha* also agreed with this motion, on 22 December 1999 (UNESCAP, 2001, p.10).

In his opening statement in *Rajya Sabha*, and then also when introducing the bill to *Lok Sabha*, the Minister of Commerce and Industry⁹⁸ stated that the enactment of the new patent bill was not only intended to honour India's international commitment, but also to protect India's interest, which had already emerged as the new world leader of the knowledge-based drug industry in the world (*Lok Sabha*, 2002, pp.2–3; *Rajya Sabha*, 2002, p.253). In this regard, the Indian Minister of Commerce and Industry stated, “[N]ow it is the time for the rest of the industry to come out of its ‘reverse-engineering’ mode and move forward into the era of innovative ‘research and development’ mode...” (*Lok Sabha*, 2002, pp.2–3; *Rajya Sabha*, 2002, p.253). Nevertheless, on the other hand, the Minister of Commerce and Industry also clearly stated that the proposed bill did not introduce patent protection for drugs, pharmaceuticals, and agro-chemical products, considering that India was still not obliged to provide the protection for these areas until 2005 (*Lok Sabha*, 2002, p.2; *Rajya Sabha*, 2002, p.253). Based on the joint committee's recommendation, the bill was finally approved by *Lok Sabha* in May 2002, as the Patent (Second Amendment) Act of 2002 (Chaudhuri, 2005, p.6).

Nearly approaching the end of its transition period, the Indian government introduced another patent bill in parliament in December 2003. However, the *Lok Sabha* was dissolved before the bill could be passed (Chaudhuri, 2005, p.6). According to Mahapatra (2004), the differences within the ruling coalition contributed to the failure of the enactment of the new act. Under this circumstance, since the Indian government only had a limited time to fulfil its TRIPs obligations before its transition period expired on 1 January 2005, the president adopted a Presidential Decree (the Patent (Amendment) Ordinance) on 26 December 2004 (Chaudhuri, 2005, p.6). The decree included a provision to protect patents for pharmaceuticals, foods, and agricultural chemical products (*Rajya Sabha*, 2005, p.59). By adopting this provision, India

⁹⁸ It should be noted that, as argued by Narlikar (2008b, p.277), the Indian Ministry of Commerce and Industry is one of the most powerful bureaucracies in the Indian political system. Even though the Ministry of Commerce and Industry consults with relevant ministries concerning certain trade issues, the ministry is the dominant state executive, and plays a key role as the agenda-setter (Narlikar, 2008, p.277) including in IP issues.

can be considered as TRIPs compliant, since this was the only TRIPs obligation that had not been fulfilled by India's existing patent law (see table 5.1). Nevertheless, a permanent solution for India to become TRIPs-compliant was only achieved when the parliament finally approved the Patent (Third Amendment) Act, on 4 April 2005.

As can be seen from previous debates in *Lok Sabha*, after the president adopted the ordinance in 1999, many members of parliament also criticised the decision of the executive to adopt the ordinance in 2004, and the proposed bill (*Lok Sabha*, 2005). During the debate, a member of parliament from the opposition party *Bharatiya Janata Party* (BJP) stated that the proposed bills would jeopardise India's relations with other developing countries, because many lesser developed countries depended on India's affordable medicine, which would be affected by the new regulation under the proposed bill (*Lok Sabha*, 2005, p.8). In addition, the opposition did not only come from the opposition coalition but also from the left wing political alliance of the ruling government (Mukherjee, 2006, p.133).⁹⁹ During the debate, it can also be observed that India's credibility in the international arena was one of the main reasons argued by the members of dominant ruling party, the Indian National Congress (INC) (*Lok Sabha*, 2005, p.30). Since India already enjoyed 10 years of transition period, a member of parliament from the INC argued that it was time for India to fully comply with its international commitment, otherwise India would lose its credibility in the international arena (*Lok Sabha*, 2005, p.30). As summarised in table 5.1, the Patent (Third Amendment) Act of 2005 included a provision to protect patents for pharmaceuticals, foods, and agricultural chemical products. By the adoption of this provision, the Indian patent law met the minimum standards of its TRIPs requirements.¹⁰⁰

⁹⁹ In 2004, during the Fourteenth *Lok Sabha* (17 May 2004–18 May 2009), a coalition government, the United Progressive Alliance (UPA) came to power. The Indian National Congress (INC) dominated the coalition, but the coalition included the Communist Party of India (Marxist) CPI (M) (Kohli and Basu, 2009, pp.155–56). The major opposition party was the *Bharatiya Janata Party* (BJP) (*Lok Sabha*, n. d. (d)). See Appendix IX (Table IX.4) for a complete list of the political parties in *Lok Sabha* during this period.

¹⁰⁰ After the adoption of the Patent (Third Amendment) Act of 2005, in April 2005 the government of India established a technical expert group on patent law issues, to assess whether the amendment act had already fulfilled India's TRIPs obligations or not. The technical expert group produced a report which was published in December 2006, and the report was known as the Mashelkar Report, after the name of the expert group chairman, Dr. R.A. Mashelkar. The report concluded that the Indian (Third Amendment) Act of 2005 was not TRIPs compliant, since it only restricted patent protection for new chemical entities and micro-organisms. The publication of this report triggered controversy because of plagiarism issue, since the conclusion of the report was accused as only a copy of a report published by the Intellectual Property Institute, a UK-based industry think tank, which was financially supported by Interpat, a Swiss association of major European, Japanese and US research-based pharmaceutical companies (Sharma and Hiddleston, 2007). Due to the controversy, the technical expert group withdrew the report and the government of India gave an additional period in which to resubmit the report. The technical expert group resubmitted the report in August 2009. For a more detailed discussion on the

During the policy reform process which resulted in the adoption of the Patent (Third Amendment) Act of 2005, there was a significant development in the domestic actors' preferences regarding IPR protection, as evident from a shift in the interests of the Indian national pharmaceuticals industry. Prior to the late 1990s, most small-medium national pharmaceuticals companies, focused on generic manufacturing and relying on reverse engineering, opposed the patent policy reforms, due to their fear that the implementation of the TRIPs obligations would have detrimental effects for their interests in generic manufacturing (Tellez n. d., p.2). They were mainly represented by the Indian Drug Manufacturers' Association (IDMA). In this context, the Indian pharmaceuticals manufacturers were united to urge the Indian government to fully exploit flexibilities available under TRIPs (Eren-Vural, 2007, p.131). By the late 1990s, however, some of these national pharmaceutical companies, that were not only focusing on generic manufacturing but were also able to build on their research and innovative capacity started to change their preference. These companies became the demanders of the patent laws amendment (Tellez, n. d., p.2). In this regard, in 1999, the Indian Pharmaceutical Alliance (IPA) was established to "...represents the interests of firms that want to utilize [sic] their patent potential but also capitalize [sic] on their generic manufacturing capability" (Ramanna, n. d., p.9). The shift in the preference of some small-medium pharmaceutical industries in India, regarding patent protection, was also pointed out by a former Indian government official in the interview with the author.¹⁰¹

The shift in the preference of some of the national Indian pharmaceutical companies contributed to the change in domestic societal actors' constellations in patent protection. Prior to the late 1990s, domestic societal actors demanding a patent policy reform to provide stronger patent protection, were mostly coming from multinational companies that had already established their business in India, represented by the Organisation of Pharmaceutical Producers of India (OPPI) (Gupta, 2004, pp.615–16). According to Ramanna (n. d., p.7), one of the main reasons behind the change in some Indian national pharmaceutical industries' preferences towards patent protection was because they sought to gain the potential benefits

Mashelkar Report controversy, see Park and Prabhala (2007), Sharma and Hiddleston (2007), CENTAD (2007a, 2007b), Golikeri (2009), Gopakumar (n. d.), Lawyers Collective (n. d.).

¹⁰¹ Author's interview with a former Indian government official (Geneva, 23 November 2009).

from the new patent regime.¹⁰² After being able to impressively develop under government protection for several decades, they found themselves to have the ability to transform from reverse engineering to concentrating their activity on new drug discovery (see also Lawton, Lindeque, and McGuire, 2009, pp.8–9). At the same time, some of the Indian national firms also began to seek the opportunity to export their products overseas, particularly to developed countries, rather than to other developing countries (Cullet, 2002b, p.5). In addition, the study by Lawton, Lindeque, and McGuire (2009, pp.8–9) further demonstrates that the Indian pharmaceutical firms also started to establish a network with developed countries-based pharmaceutical companies to work on certain drugs, which required a sufficient patent protection. The change in the preference of the Indian pharmaceutical industries regarding patent protection can be seen from the following statement by the Chief Executive of one of India’s most prominent research-based companies:

“China is already ahead, having a strong patent act as well as data protection laws. India needs to shift its mindset from becoming a leader of developing countries to taking its place at the table of developed nations. It is China and Korea that will be India’s real competitors and not the small countries in sub-[S]aharan Africa” (Sikka (2005) as quoted in Mukherjee, 2006, p.138).

Another crucial development regarding domestic societal actors’ preference during the patent policy reform in the 2000s was the emergence of a pro-IP policy reform among Indian NGOs and research-based institutions. Prior to 2000, the majority of Indian NGOs strongly opposed patent policy reform. One of the prominent Indian NGOs, the National Working Group on Patent Laws (NWGPL)¹⁰³ was actively engaged in mobilising political opposition against patent reform. The NWGPL was also directly involved in the process of patent policy reform, not only through facilitating a public awareness campaign and supporting the joint resistance movement, but also working closely with parliament by establishing the Forum of Parliamentarians on Intellectual Property and WTO Issues, during the late 1980s to mid-1990s (Tellez n. d., p.2; Ramanna, n. d., p.5; Matthews, 2006, p.21). Furthermore, the NWGPL also established the People’s Commissions on TRIPs which consisted of leading senior former

¹⁰² It should be noted that the shift in the preference can be found mainly at the Indian firms with a greater sales and export competition as well as a higher level of research and development capacity (Ramanna, n. d., p.7). Meanwhile, the position of smaller pharmaceutical firms, which had no sufficient research and development capacity with which to compete internationally, in opposing patent policy reform, remained unchanged.

¹⁰³ The National Working Group on Patent Law (NWGPL) is an informal public interest expert group established in 1988, which mainly concerned with the impact of the TRIPs Agreement on the access to affordable generic medicines for Indian society (Tellez n. d., p.2; Ramanna n. d., p.5).

government officials and experts, in order to provide a forum for public consultations. The People's Commissions also provided suggestions to parliament to ensure the amended act would prioritise national interest and access to medicines (Tellez n. d., p.2; Thomas, 2001, p.2155). The NWGPL and other prominent NGOs¹⁰⁴ were able to carry political weight in the Indian policy making process, and contributed to prevent a substantial patent policy reform in India, at least until the end of the 1990s.

Nevertheless, the domestic societal actors' constellation changed in the late 1990s, when there was a movement from some of the Indian national research institutes towards having a more constructive opposition regarding the patent policy reform. They argued that engaging in the patent policy reform is important for ensuring the amended act would provide sufficient public health safeguards (Tellez n. d., pp.2–3). These domestic societal actors also stated that, instead of opposing patents, India should have a more strategic means of securing gains from IP by trying to extend IPR protection to protect traditional knowledge and innovation including protecting farmers' rights (Ramanna, n. d., p.10).¹⁰⁵ In this regard, the active involvement of these actors, therefore, contributed towards creating a more favourable condition in which policy reform could take place.

5.4.1.2.3 Patent Policy Change after the end of the Transition Period

Previous discussions demonstrated that India took advantage of its full 10 year transition period in order to fulfil its TRIPs obligations for patent protection, which was given until 2005. The empirical evidence also shows that, during its transition period, the Indian government amended its patent legislation several times, in 1999, 2002, and 2005. Fulfilling its TRIPs obligations through several amendment processes exhibited the Indian government's strategic effort to reconcile its international obligations and domestic opposition. During this process, India utilised most of the flexibilities available under TRIPs as well as leaving the

¹⁰⁴ These include the Research Foundation for Science, Technology, and Nature Resource Policy led by Vandana Shiva, the Federation of Medical Representatives Association of India (FMRAI), and the Affordable Treatment and Action Campaign (AMTC) (Tellez n. d., p.2).

¹⁰⁵ One of these domestic societal actors is the Society for Research and Initiatives for Sustainable Technologies and Institutions (SRISTI) which focused its activities on defending the IPRs protection for third world farmers (Ramanna, n. d., p.11; SRISTI, n. d.). These pro-patent reform research institutes, however, according to Ramanna (n. d., pp.11–12) had strong connections with industry and policy networks, and were well-equipped with their own biotechnology research facilities, which would enable them to commercialise the traditional and local innovations.

most controversial provisions until the end of its transition period. By amending its patent act in 2005, the Indian government finally fulfilled its obligations under the TRIPs Agreement, and, after this last amendment in 2005, the Indian government has not adopted any other patent legislation (as of January 2011).

As explained earlier, despite receiving substantial pressures from the US (in various forms such as threats of trade sanctions; being on the USTR Special 301 Report mostly with PWL status; and also being brought to the WTO dispute), India still did not make a substantial policy change in its patent legislation until the end of its transition period. In this regard, by choosing to take advantage of the full transition period, India gradually introduced controversial provisions under TRIPs in separate amendment processes. The empirical evidence shows that, prior to the late 1990s, domestic societal actors through various means, including mobilising political opposition, establishing expert groups on the patent issue, as well as facilitating public awareness campaigns, were able to gain influence in the patent policy making process, and contributed to the failure of the Indian government to reform the patent law, despite strong external pressures. Given India's persistence, despite receiving such pressures, indicates that the role of external pressures cannot fully explain India's response towards its TRIPs obligations. The empirical findings further demonstrate that a substantial policy reform took place in the 2000s when there was a shift in domestic societal actors' preference regarding patent protection.

5.4.2 India's Copyright Policy Change: Complying without Substantial Policy Reform

Compared to patents, the copyright policy reform in India did not create a strong controversy. This is because, even prior to TRIPs, India's existing copyright act to a large extent had already resembled the international standards for copyright protection under the Berne Convention. In this regard, therefore, in order to respond to its TRIPs obligations, the government of India only needed to take minor reforms on its existing copyright act. Furthermore, unlike in the case of patents, the domestic supports demanding a higher level of copyright protection was also constantly high. In this regard, the Indian government did not only reform its existing copyright legislation before the deadline, but also adopted even more rigorous rules than required by TRIPs.

5.4.2.1 Assessing India's Copyright Legislation and TRIPs Compatibility

The existence of the Indian copyright law can be traced back to 1914, when India was still under the British colonial rule (Baldia, 2003, pp.434–35). The first Indian copyright law after independence was adopted in 1957, much earlier than its patent law. After the adoption of this act, the government of India amended its copyright legislation twice, even before the TRIPs Agreement was introduced in multilateral trade negotiations in 1983 and 1984. The government of India took another policy reform on copyright protection when the TRIPs Agreement was still being negotiated, in 1992 and again in 1994. After the TRIPs Agreement negotiations were concluded, India again amended its copyright law in 1999. To date, in total, the Indian government has adopted 6 copyright acts since the independence. Based on the timing of its first copyright law after TRIPs, the Indian copyright law already met the minimum requirement of TRIPs. Furthermore, based on the quality of the last amendment of its copyright law, India even adopted regulations beyond the minimum standards as required by TRIPs (see table 5.2).

The first Indian copyright act after the independence was essentially the extension of the previous copyright act under the British colonial rule (the Copyright Act of 1911), and also closely mirrored the British Copyright Act of 1956 (Baldia, 2003, p.435; Indian Copyright Office, n. d.). To a large extent, the 1957 Copyright Act, as amended several times prior to the TRIPs Agreement, was already consistent with the international standards for copyright protection under the Berne Convention. Nevertheless, the 1957 Copyright Act also provided an extensive list of non-infringing uses of copyrighted work for educational purposes, private use, and research activities (Garde, 2009, p.71). The 1957 Copyright Act provided protection for original works of a literary, dramatic, musical and artistic kind, inclusive of architecture, art, cinema and sound recording (Thomas, 2001, p.2152; Gopakumar and Unni, 2003, p.2935). The duration of protection for some of the areas under the original 1957 Copyright Act already fulfilled the minimum requirement of the TRIPs Agreement. Under the 1992 Copyright (Amendment) Act, the length of protection for literary works, dramatic works, musical works, and artistic works was extended to the life of the author plus 60 years, meanwhile the minimum terms of protection under TRIPs is life of author plus 50 years (see table 5.2). In addition, photographs, cinematography films, sound recordings, and computer programmes enjoy a similar duration of protection. Furthermore, as consistent with the Berne Convention

and the Universal Copyright Convention, the 1957 Copyright Act also reserved several provisions for granting compulsory licenses for translation and the reproduction of foreign works for educational purposes (UNESCAP, 2001, p.14).

As mentioned earlier, the existing copyright act in India was more or less already in compliance with the TRIPs Agreement. Therefore, when the TRIPs negotiations were finally concluded, the government of India just needed to undertake minor adjustments. This could be done by broadening the scope of protection to wider areas, such as broadcasting reproduction rights and performers' rights, and a new area to include IT and the software industry. In doing so, the Indian government introduced a new Copyright Act in 1994, which granted protection for broadcasting reproduction rights and performers' rights (see table 5.2). The Indian government then introduced another copyright act in 1999. The main revision under the newly enacted act was extending the term of protections for performers rights from 25 to 50 years (UNSECAP, 2001, p.14).

Table 5.2 The Indian Copyright Acts and TRIPs Compatibility

Aspects	TRIPs Obligations	Prior to TRIPs No.14/1957	During Transition Period No. 38/1994	By the end of Transition No. 49/1999
Subject matter coverage	Scientific, literary, and artistic works	Protected	Protected	Protected
	Computer programmes, video recording, sound recording	Not protected	Protected	Protected
	Rental rights	Not protected	Protected	Protected
	Related rights	Not protected	Protected	Protected
	Database and optical discs	Not protected	Not protected	Protected
Duration of protection for original work (literary, dramatic, musical, artistic works)	Life of author +50 years	Life of author +50 years	Life of author +60 years	Life of author +60 years
Duration of protection for performers and producers of phonograms	50 years	Not protected	25 years	50 years
Duration of protection for broadcasting organisation	20 years	Not protected	25 years	25 years
Duration of protection for computer programme	50 years	Not protected	50 years	50 years
Eligible copyright holders	National treatment and MFN principles	Only for Indian citizens and foreign works where the first publication of the creation took place in India	Granted national treatment and MFN principles on the basis of reciprocity	Granted national treatment and MFN principles on the basis of reciprocity
Enforcement	Requires civil and criminal enforcement but no minimum requirements	Included provisions for enforcement	Included provisions for enforcement	Included provisions for enforcement
TRIPs Compatibility	--	TRIPs-minus	TRIPs-minimum	TRIPs-Plus

Note: Author's assessment on the Indian Copyright Act No.14 of 1957, the Indian Copyright (Amendment) Act No. 38 of 1994, and the Indian Copyright (Amendment) Act No. 49 of 1999. This table is the author's assessment on the main copyright acts only. It does not include the assessment of the amendment in 1983, 1984, and 1992, since the most substantial reform after the Copyright Act of 1957 was under the amendment of 1994 (Indian Copyright Office, n. d. (a)). Under the Copyright Act of 1994, for some aspects, India adopted more rigorous rules than

required by TRIPs including longer terms of protection for original work, but India still did not protect databases and optical discs as required. Therefore, the Copyright Act of 1994 can only be categorised as TRIPs minimum instead of TRIPs-Plus. It should be noted that related rights include the rights of performers, producers of phonograms, and broadcasting organisations rights.

5.4.2.2 India's Copyright Legislation: Explaining Policy Change

India's extensive policy reform, as a response to its TRIPs obligations on copyright protection, cannot be explained by only focusing on external pressures. This is particularly because, compared to its patent reform, India did not receive strong external pressures on copyright issues, yet India reformed its copyright act earlier, and adopted more rigorous rules. A closer observation demonstrates that, unlike in patents, domestic support for strong copyright protection in India was considerably high. Moreover, given the fact that the existing copyright legislation prior to TRIPs already provided sufficient protection for copyrights according to international standards, copyright policy reform after TRIPs in India took place easily, without any substantial domestic opposition.

5.4.2.2.1 Copyright Policy Change prior to and during the TRIPs Negotiations

As explained earlier, India's existing copyright legislation prior to TRIPs, as can be seen from the Copyright Act of 1957, was already in line with international standards under the Berne Convention. After the adoption of its first copyright law after independence, the Indian government undertook several policy reforms, until it adopted the Copyright Act of 1994. During this period, the evidence of external pressures can only be seen from the fact that India was always attributed with PWL status on the USTR Special 301 Report, which was due to the high rate of piracy of motion pictures, music, software, books, and other copyrighted work (USTR Special 301 Reports 2001–2009, see table 5.3). As can be seen from table 5.3, the level of motion pictures piracy in India, from 1995 to 2004, was continuously above 60 percent, with the estimated trade losses from US\$46 million to US\$80 million per year. The table also illustrates that the level of piracy for business software in India, from 1995 to 2009, was steadily above 61 percent, with estimated trade losses from US\$114.6 million to US\$1,505 million per year. In total, due to piracy in India, the trade losses increased from US\$233.4 million in 1995 to approximately US\$1,522.7 billion in 2009.

Table 5.3 Estimated Trade Losses and Level of Piracy in India 1995–2009 (in US\$ millions)

Industry	1995		1996		1997		1998		1999	
	Loss	Level	Loss	Level	Loss	Level	Loss	Level	Loss	Level
Motion Pictures	58.0	99%	66.0	85%	66.0	80%	66.0	80%	66.0	80%
Records & Music	10.0	30%	7.0	30%	6.0	40%	6.0	30%	8.0	40%
Business Software	114.6	78%	182.4	78%	148.7	69%	158.0	65%	160.2	61%
Entertainment Software	25.8	76%	31.4	82%	35.9	82%	36.8	84%	42.8	86%
Books	25.0	NA	25.0	NA	22.0	NA	30.0	NA	35.0	NA
TOTALS	233.4		311.8		278.6		296.8		312.0	
Industry	2000		2001		2002		2003		2004	
	Loss	Level	Loss	Level	Loss	Level	Loss	Level	Loss	Level
Motion Pictures	47.0	60%	70.0	60%	75.0	60%	77.0	60%	80.0	60%
Records & Music	6.0	40%	NA	40%	6.6	40%	6.0	40%	67.3	50%
Business Software	181.6	63%	256.0	70%	257.7	70%	187.0	73%	239.0	74%
Entertainment Software	NA	80%	NA	NA	NA	NA	113.3	84%	59.5	86%
Books	36.0	NA	37.0	NA	36.5	NA	36.5	NA	38.0	NA
TOTALS	270.6		363.0		375.8		419.8		483.8	
Industry	2005		2006		2007		2008		2009	
	Loss	Level	Loss	Level	Loss	Level	Loss	Level	Loss	Level
Motion Pictures	NA	29%	NA	NA	NA	NA	NA	NA	NA	NA
Records & Music	56.4	57%	52.7	55%	13.8	55%	36.2	55%	17.7	60%
Business Software	255.0	72%	574.0	71%	1013.0	69%	1384.0	68%	1505.0	66%
Entertainment Software	65.2	86%	85.6	86%	129.9	89%	NA	NA	NA	NA
Books	42.0	NA	40.0	NA	38.0	NA	NA	NA	NA	NA
TOTALS	418.6		752.3		1194.7		1420.2		1522.7	

Sources: IIPA Special 301 Report on Copyright Protection and Enforcement on India (2001–2009) and IIPA 2010 “Special 301”.

5.4.2.2.2 Copyright Policy Change during the Transition Period

Despite the fact that India did not receive extensive external pressures to improve its copyright protection, India amended its copyright legislation again in 1999, just nearly at the end of its transition period. This, in essence, illustrates the flaw in the role of the external pressures explanation in understanding copyright policy reform in India. A closer observation on domestic politics shows that a relatively swift copyright policy reform is reflected in an unproblematic process in the parliament debate. Unlike the impact of the TRIPs Agreement on the patent regime, which drew contentious debate in parliament, the effort to strengthen the copyright system did not receive comparable critical attention. This can be seen from the fact that the support to reform India's existing copyright law was high among the members of parliament. Members of parliament, such as from the *Bharatiya Janata Party* (BJP), believed that strong copyright protection would be beneficial for protecting India's rich cultural activities (*Lok Sabha*, 1999d, p.3). The low level of opposition against copyright policy reform in parliament was also because India's existing copyright act was largely in conformity with India's obligation under TRIPs. In this context, therefore, India's obligation to implement the TRIPs Agreement did not constitute an immense burden, as it was on India's patent regime. However, even though compared to the patent amendment process, the amendment process of the copyright bill could be passed without substantial resistance from members of parliament, there was still a minor objection from members of parliament from left wing minority parties, such as the Communist Party of India (Marxist) CPI (M), who argued that the amendment was only serving foreign interest, particularly the US (*Lok Sabha*, 1999d, p.5).

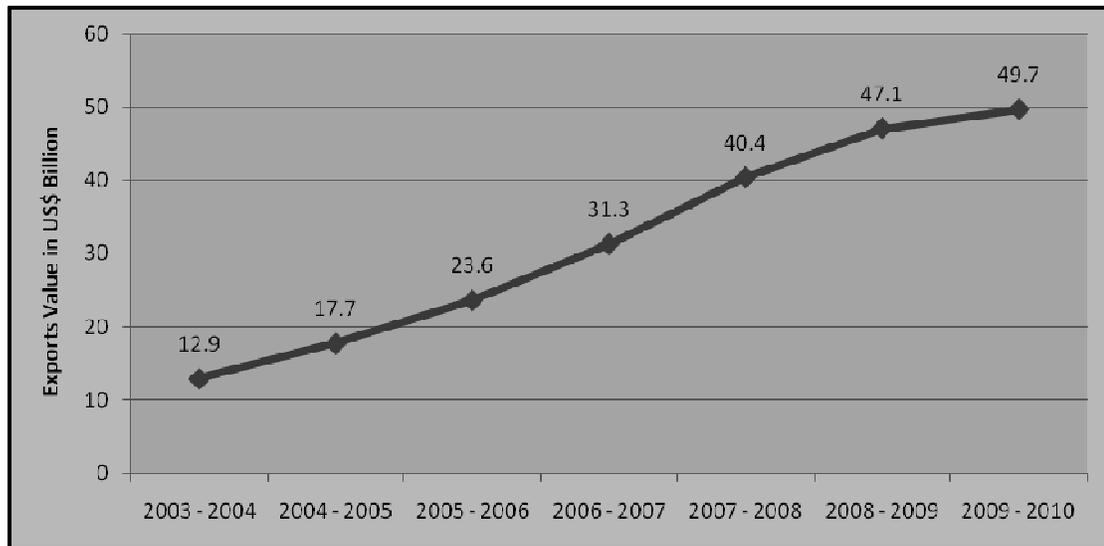
Another reason behind the rapid copyright policy reform in India was also because of the existence of domestic constituents for strong copyright protection which is reflected in the impressive development of its local companies, particularly in the IT, services, and entertainment sectors. As Thomas (2001, p.2151) argues, the key sectors of economic growth in India today are IT, in particular software and allied services, as well as the entertainment industry. Furthermore, the services sectors dominated the Indian economy, and contributed to more than half of the national income, which reached 54.4 percent during 1999 to 2000 (Thomas, 2001, p.2151). A Study on Copyright Piracy in India by the Indian Ministry of Human Resource Development (Indian Copyright Office, 1999, p.1) confirmed that India in 1999 was among the top seven publishing nations of the world. In addition, according to this

study, India is also the largest market for audio cassettes, and the country produces more than 600 films per year.¹⁰⁶ This cultural industry, therefore, became a potential and actual source of revenue for both the government and the private sector (Thomas, 2001, p.2153). In this regard, therefore, as pointed out by the counsellors of the WTO IP Division in the interview with the author, strong copyright protection is clearly in line with the interest of India's domestic film industries, which became powerful domestic constituents demanding strong copyright protection.¹⁰⁷

Furthermore, with the rapid growth of the software industry above 50 percent since the beginning of the 1990s, India had a remarkable market potential for the computer software industry (Indian Copyright Office, 1999, p.1). According to Mathur (2006, p.1), the share of the software industry in India's export increased from 4.9 percent in 1997, to 20 percent of India's total export revenue in 2003–2004. This figure, according to Mathur (2006, p.1) was predicted to increase to up to 40 percent of India's annual exports by 2010. In terms of its contributions to India's export revenue, the value of the software industry increased from US\$0.50 million in 1990 to US\$23.6 billion in 2005–2006 (Mathur, 2006, p.1). As can be seen from the following figure, the software export value steadily increased from US\$12.9 billion in 2003–2004 and reached an estimated US\$49.7 billion in 2009–2010 (see figure 5.3 and Appendix VIII (Table VIII.2)). In this regard, it can be concluded, therefore, that the Indian government's effort to strengthen its copyright laws further would benefit India's software and IT industry.

¹⁰⁶ According to Thomas (2001, p.2153), the data on the film industry in India is even higher, with a 27,000 feature film database and an average of 800 productions per year. While Chowdhury (2008, p.109) argues that Indian biggest film industry 'Bollywood', produces over 1000 films a year.

¹⁰⁷ Author's interviews with the counsellors of the WTO IP Division (Geneva, 17 November 2009 and 19 November 2009).

Figure 5.2 The Indian Software Exports (2003–2010)

Sources: Annual Reports of the Indian Ministry of Communications and Information Technology 2004–2005 to 2009–2010.

5.4.2.2.3 Copyright Policy Change after the end of the Transition Period

As explained earlier, after the adoption of the Copyright Act of 1999, India had already fulfilled its TRIPs obligations. Furthermore, under this new act, India had adopted more rigorous rules than those required by TRIPs. It should be noted, that in December 2009, the parliament of India approved a proposal to introduce a bill to amend the Copyright Act of 1999, in order to bring the act into conformity with WIPO Internet Treaties, the WIPO Copyright Treaty (WCT), and the WIPO Performances and Phonograms Treaty (WPPT) (Indian Copyright Office, 2009). As of the time of writing, this bill is still under the examination of the parliament.

In conclusion, unlike during the patent policy reform, for which India received strong external pressure, during its copyright policy reform, India only received a moderate level of external pressure. Despite a moderate level of external pressure, however, the Indian government still undertook the necessary steps to amend its copyright law. Furthermore, compared to the patent policy reform, India's copyright policy reform could be regarded as a relatively trouble-free process, since it did not draw contentious debate in parliament, and was relatively absent of opposition from domestic societal actors. This is mainly because India's obligation under TRIPs did not require the Indian government to make any major changes in its existing

copyright law, since it was mainly already compatible with its TRIPs requirements. The reason that copyright policy reform in India took place without difficulty was also because the policy reform was in accordance with India's domestic societal actors' economic interest, which was evident from the existence of domestic constituents for strong copyright protection.

5.4.3 India's Trademark Policy Change: Another Case of Compliance without Substantial Policy Reform

As with copyright policy reform, trademark policy reform in India also did not cause a strong controversy. However, unlike the copyright act which was amended several times after the adoption of its first act, India's first trademark act, which was adopted in 1958, survived until 1999 without any amendments. This is because the existing trademark legislation was arguably already in line with the international standards as governed under the Paris Convention. Furthermore, as can be seen from the copyright policy reform process, the support from domestic constituents for strong trademark protection was also high. In this regard, therefore, India's effort to reform its existing trademark legislation, as a response to its TRIPs obligations, did not receive any substantial challenges domestically. The opposition was only evident in the early 1990s, when the TRIPs Agreement was still being negotiated. Nevertheless, by nearly the end of its transition period, India had already adopted more rigorous rules than required by TRIPs.

5.4.3.1 Assessing India's Trademark Legislation and TRIPs Compatibility

As can be seen from both patents and copyrights, the existence India's first trademark legislation can be traced back to the British colonial rule, through the adoption of the Indian Merchandise Marks Act in 1889 (Garde, 2009, p.73). The first Indian trademark law after independence was the Indian Trade and Merchandise Marks Act of 1958, which was largely based on the English Trade Marks Act of 1938 (Baldia, 2003, p.435). The Indian Trade and Merchandise Act of 1958 (supplemented by the Trade Marks Rules 1959), was more or less already compatible with the international standards. In this regard, therefore, as can be seen in the case of copyrights, as part of its TRIPs obligations, the Indian government only had to make minor adjustments to include the protection for service marks and well-known marks (UNESCAP, 2001, p.13).

In order to fulfil its TRIPs obligations, the Indian government amended its existing trademark law in 1999. The newly adopted trademark act provided the protection of both service and well-known marks, which was absent from the previous act. The 1999 Trademark Act also extended the term of protection from 7 years to 10 years (see table 5.3). The new act also enhanced the punishment for a violation of the trademark rights, which could be charged by a fine of between Rs50,000 Indian rupees and Rs200,000,¹⁰⁸ and an imprisonment of no less than 6 months (UNESCAP, 2001, p.13). By doing so, India had fulfilled its TRIPs obligations on time, and adopted more rigorous rules than those required by TRIPs (see table 5.4).

Table 5.4 The Indian Trademark Acts and TRIPs Compatibility

Aspect	TRIPs Obligations	Prior to TRIPs 1958	By the end of Transition No. 47/1999
Scope	Goods	Protected	Protected
	Services	Not protected	Protected
	Well-known trademark	Not protected	Protected
Duration of protection	7 years	7 years	10 years
Enforcement	Requires civil and criminal enforcement but no minimum requirements	Included provisions for enforcement	Included provisions for enforcement
TRIPs compatibility	--	TRIPs-minus	TRIPs-plus

Note: Author's assessment on the Indian Trademark Act of 1958 and the Indian Trademark (Amendment) Act No. 47 of 1999. Since the Indian Trademark of 1958 is publicly unavailable, the assessment of this act is based on UNESCAP's assessment (see UNESCAP, 2001).

5.4.3.2 India's Trademark Legislation: Explaining Policy Change

As can be seen from copyrights, India's trademark policy reform, as a response to its TRIPs obligations, cannot be explained by only focusing on external pressures. This is particularly because, compared to its patent reform, India did not receive strong external pressures to improve its trademark regime, yet India reformed its trademark act on time, by the end of its transition period, and adopted more rigorous rules. Empirical findings demonstrate that as can be found in copyrights, domestic support for strong trademark protection in India was also noticeably high. Moreover, since the existing trademark legislation prior to the TRIPs already

¹⁰⁸ Approximately between US\$1,100 and US\$4,400 based on the Reserve Bank of India's current exchange rates.

provided sufficient protection for trademark in line with international standards, the trademark policy reform after TRIPs, could therefore, be done without any substantial change.

5.4.3.2.1 Trademark Policy Change prior to and during the TRIPs negotiations

Compared to the other two IP laws, the trademark law in India was the only IP law that survived until 1999 without single amendment since its first adoption after India's independence. As mentioned earlier, India's first trademark law after the independence was adopted in 1958, only a year after its copyright law, through the adoption of the Indian Trade and Merchandise Marks (Baldia, 2003, p.435). Since then, the earliest effort to reform trademark legislation only took place in 1993, when the government proposed a trademark bill to parliament. The *Lok Sabha* approved to pass the bill in 1995, and brought it to the *Rajya Sabha* to get a final approval. Nevertheless, as can be seen from the patent policy reform during this period, the trademark bill did not get approval from the *Rajya Sabha* because the ruling party did not have a majority there. As with patent bills, the trademark bill was also then brought to a Select Committee. When the bill was still under examination by the Select Committee, the *Lok Sabha* was dissolved on 16 May 1996, and, as a result, the ongoing amendment process also lapsed (UNESCAP, 2001, p.13).

During this amendment process, unlike in the case of patents, India did not receive any substantial external pressures to improve its trademark protection. In this context, the survival of the first Indian trademark act, without any reform since its adoption until the late 1990s would arguably lead to the conclusion that this is because of the absence of external pressures. Nevertheless, as previously mentioned, even though it was eventually not successful due to the objection from the opposition parties, despite the absence of external pressures, the Indian government proposed a bill to reform its trademark legislation. In this regard, external pressure alone is unable to provide a comprehensive understanding regarding the trademark policy reform in India prior to and during the TRIPs negotiations.

5.4.3.2.2 Trademark Policy Change during the Transition Period

The government's effort to enact the new trademark law was finally successful at the second attempt in 1999. The trademark bill was introduced in the *Rajya Sabha* on 1 December 1999, and within a very short period, the *Rajya Sabha* passed it. Shortly after the bill was brought to the *Lok Sabha*, the *Lok Sabha* passed the bill, and it finally received the president's consent on 30 December 1999 (UNESCAP, 2001, p.13). In the opening statement when proposing the bills to the *Lok Sabha* on 22 December 1999, the Indian Minister of Commerce and Industry stated that the proposed bill, in principle, was the same as the previous bills discussed in parliament in 1995 (*Lok Sabha*, 1999e, p.1). The difference was in only minor aspects, regarding the drafting language and a provision on the composition of the appellate body to accommodate the suggestion from the Ministry of Law (*Lok Sabha*, 1999e, p.1).

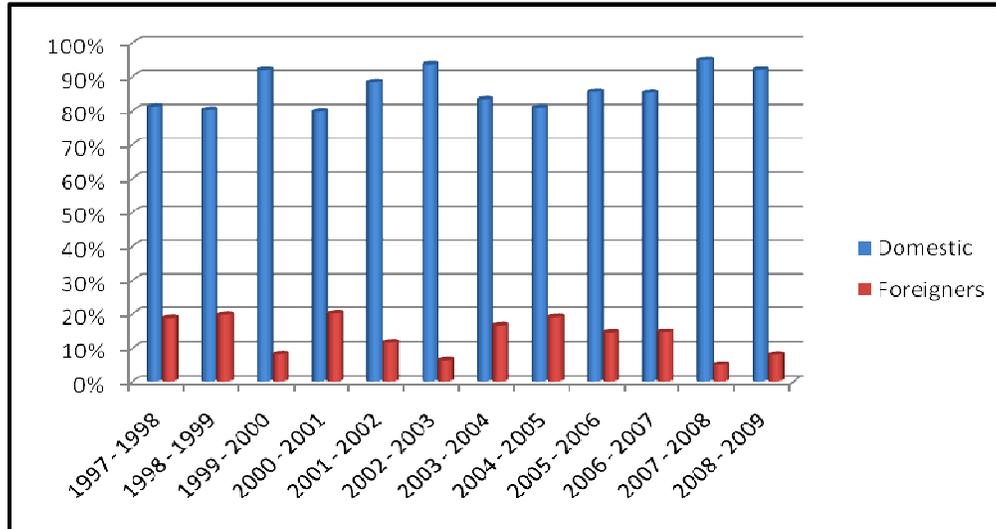
Given the fact that this was the same bill as the one that was proposed back in 1993, but the different response received from the members of parliament indicates that the change in the domestic political constellation played a significant role. During the parliament debate in 1999, the government in power was from the *Bharatiya Janata Party* (BJP), which was previously an opposition party, during the parliament debate in 1993–1996.¹⁰⁹ When the BJP came to power and became the ruling party in 1999, the government introduced the bill which was essentially the bill that they were opposed to back in 1993–1996. Even though some members of parliament pointed out the inconsistency taken by the BJP concerning trademark protection when they were in the opposition and once they were in power, yet, many members of parliament agreed that the bill was needed for the Indian people, since it was good for trade, industry, and would also be beneficial for the India's companies in future competition (*Lok Sabha*, 1999e, pp.1–3).

Unlike patents, India did not receive strong external pressure during the process of its trademark policy reform. This could have been because India's existing trademark act was already in conformity with the TRIPs obligations. In addition, as can be seen from the Indonesian case study, domestic applications for trademark protection in India were also

¹⁰⁹ See Appendix IX for a complete list of the political parties in *Lok Sabha*: the Tenth *Lok Sabha* from 20 June 1991 to 10 May 1996 (Table IX.1), the Twelfth *Lok Sabha* from 10 March 1998 to 26 April 1999 (Table IX.2), and the Thirteenth *Lok Sabha* from 10 October 1999–06 February 2004 (Table IX.3).

significantly high. As can be observed from figure 5.3, domestic applications for trademark protection in India accounted for a minimum of 79 percent, from 1997 to 2009.

Figure 5.3 Trademark Applications in India (1997–2009)



Sources: Annual Reports of the Indian Controller General of Patents, Designs, and Trade Marks 2001–2002 to 2008–2009.

5.4.3.2.3 Trademark Policy Change after the end of the Transition Period

In 23 August 2007, the Indian government proposed a new trademark bill to amend the Trademark Act of 1999, in order to make India's trademark law compatible with the Madrid Protocol. The new trademark bill provided protection for the trademark registration of international applications, which meant that trademark owners would have the protection of their trademark in all member countries, regardless of the place of the registration (*Lok Sabha*, 2009, pp.1–2). Without any substantial objection, the *Lok Sabha* agreed to pass the bill on 25 February 2009 (*Lok Sabha*, 2009), and the bill was brought to the *Rajya Sabha* for further approval. At the time of writing, the bill is still under negotiation at the *Rajya Sabha*. In addition to this, it should be noted that after the end of the transition period, the government of India also adopted implementation rules under the Trademark Rules in 2002. In September 2010, the government proposed a new draft to amend the Trademark Rules of 2002, but at the time of writing the discussion regarding the amendment of the rules is still in progress.

Despite the absence of external pressures, the Indian government adopted more stringent rules than required by TRIPs, by the end of its transition period. Given this fact, the trademark

policy reform in India, particularly challenges the external pressure explanation as argued by neo-realism. Neo-liberal institutionalism may provide a better explanation since trademark policy reform which was taken by the Indian government by the end of its transition period can be considered as part of the Indian government's effort to fulfil its TRIPs obligations as required. Neo-liberal institutionalism, however, is unable to explain the fact that the Indian government adopted more stringent rules, as there is no obligation under the TRIPs to do so. The empirical findings indicate that, as can be found in the case of the copyright policy reform, domestic support for strong trademark protection was significantly high. In this regard, despite the failure of the first attempt to reform the trademark legislation in the early 1990s, because of the objection from the opposition party, domestic resistance for the trademark policy reform, in essence, was incomparable with the case of patent policy reform. It can be concluded, therefore, that the difference in domestic resistance contributed to the different approaches taken by the government in responding to the different IP categories under its TRIPs obligations.

5.5 Analysing IP Policy Change in India: Competing Perspectives

Previous discussions indicated that, along with Brazil, India was in the vanguard in resisting the TRIPs Agreement during the Uruguay Round. However, by the end of its transition period, India had reformed its IP legislation and even adopted more rigorous rules for its copyright and trademark legislations, than required by TRIPs. Neo-realism and neo-liberal institutionalism provide only partial explanations of India's responses to its TRIPs obligations. It is true that, as with many other developing countries, India received external pressure, mainly from the US and the EU, to improve its IP standards. However, a careful assessment of India's responses to its TRIPs obligations in each IP area, both in terms of the timing of its adoption and the quality of the legislation adopted, reveals that India's response did not correlate neatly with the external pressures it received. India failed to meet the minimum TRIPs requirement for its patent protection when the external pressure was mounting, while India reformed both its copyright and trademark legislation when there was no substantial external pressure (see table 5.5).

Arguably, neo-liberal institutionalism may provide a better account in understanding India's IP policy change, since the WTO complaints influenced the Indian government's point of view

of its obligations under the TRIPs Agreement. This can be seen from a growing concern over India's loss of reputation and fear of retaliation among domestic political elites, especially after India was defeated in the dispute concerning its patent regime. In this regard, in line with neo-liberal institutionalism's argument, India's decision to reform its patent laws can also be understood as a response to the calculations of the costs and benefits of non-compliance that are associated with international institutions. Neo-liberal institutionalism, however, cannot provide a satisfactory explanation regarding India's decision to adopt more stringent rules for its copyright and trademark laws, since there is no obligation under TRIPs for a country to go beyond the minimum requirement. Furthermore, both neo-realism and neo-liberal institutionalism are unable to capture the differences in India's responses to its TRIPs obligations for different IP categories. Against this background, the Indian case study suggests that external pressure is neither necessary nor sufficient for policy change to take place.

Table 5.5 India's IP Policy Change and External Pressures

The timing of Policy Change	IPR Categories	External Pressures		Policy Change
		Forms	Degree	
Prior to and during the TRIPs negotiations	Patent	Trade sanctions in the form of the withdrawal of GSP benefits and USTR list with PFC and PWL status	Strong	Not substantial (adopted below the minimum TRIPs requirements)
	Copyright	USTR list with PFC and PWL status	Moderate	Not substantial (adopted below the minimum TRIPs requirements)
	Trademark	No pressure	None	Not substantial (adopted below the minimum TRIPs requirements)
During the transition period	Patent	WTO complaints and USTR list with PWL status	Strong	Not substantial (adopted below the minimum TRIPs requirements)
	Copyright	USTR list with PWL status	Moderate	Substantial (into compliance with TRIPs)
	Trademark	No pressure	None	No legislation adopted
By the end of the transition period	Patent	USTR list with PWL status	Moderate	Substantial (into compliance with TRIPs)
	Copyright	USTR list with PWL status	Moderate	Not substantial (adopted more rigorous rules than TRIPs)
	Trademark	No pressure	None	Not substantial (adopted more rigorous rules than TRIPs)

In order to have a more comprehensive understanding of the IP policy reform taken by the Indian government as a response to its TRIPs Agreement, this chapter, therefore, emphasises the importance of domestic politics of compliance analysis. Of the three types of IPR, patents were by far the most controversial, initially facing stiff opposition from India's pharmaceutical industry. Policy change was, therefore, minimal and grudging; the government made extensive use of the TRIPs Agreement's safeguard provisions, utilised most of the flexibilities available under the TRIPs, and left the most controversial provisions until the end of India's transition period. Moreover, even these reforms were possible only after the domestic pharmaceuticals manufacturers with research and development capacity shifted from being sceptical about IPR

protection to favouring strong IPR protection. With the shift in the preference among these domestic societal actors, the Indian government faced less hostile opposition, which then led to providing a more conducive circumstance in which patent policy reform could take place. By contrast, India's existing rules on copyright and trademark largely met its TRIPs obligations. As there were no domestic societal actors opposed to strengthening copyright or trademark legislation, the Indian government was able to adopt rules stricter than required by TRIPs (see table 5.6).

Table 5.6 India's Patent Policy Change and Domestic Politics Analysis

The timing of Policy Change	Preferences of Domestic Actors		Policy change
	Preferences	Actors	
Prior to and during the TRIPs negotiations	Pro-IP	Multinational pharmaceutical industries	Not substantial (adopted below the minimum TRIPs requirements)
	IP-indifferent	Ministry of Commerce and Industry	
	IP-sceptics	Small-medium pharmaceutical industries; NGOs	
During the transition period	Pro-IP	Multinational pharmaceutical industries	Not substantial (adopted below the minimum TRIPs requirements)
	IP-indifferent	Ministry of Commerce and Industry; ruling party in parliament	
	IP-sceptics	Small-medium pharmaceutical industries; NGOs; left wing parties	
By the end of the transition period	Pro-IP	Multinational pharmaceutical industries; large-medium national pharmaceutical industries; private research institutes	Substantial (into compliance with TRIPs)
	IP-indifferent	Ministry of Commerce and Industry; ruling party in parliament	
	IP-sceptics	Small-medium pharmaceutical industries; NGOs; left wing parties	

Table 5.7 India's Copyright Policy Change and Domestic Politics Analysis

The timing of Policy Change	Preferences of Domestic Actors		Policy change
	Preferences	Actors	
Prior to and during the TRIPs negotiations	Pro-IP	Films, services, entertainment, software, IT industries	Not substantial (adopted below the minimum TRIPs requirements)
	IP-indifferent	Not existing/not significant	
	IP-sceptics	Not existing/not significant	
During the transition period	Pro-IP	Films, services, entertainment, software, IT industries	Substantial (into compliance with TRIPs)
	IP-indifferent	Ministry of Commerce and Industry	
	IP-sceptics	Left wing parties	
By the end of the transition period	Pro-IP	Films, services, entertainment, software, IT industries	Not substantial (adopted more rigorous rules than TRIPs)
	IP-indifferent	Ministry of Commerce and Industry	
	IP-sceptics	Not existing/not significant	

Table 5.8 India's Trademark Policy Change and Domestic Politics Analysis

The timing of Policy Change	Preferences of Domestic Actors		Policy change
	Preferences	Actors	
Prior to and during the TRIPs negotiations	Pro-IP	Business and commerce associations	Not substantial (adopted below the minimum TRIPs requirements)
	IP-indifferent	Not existing/not significant	
	IP-sceptics	Opposition party in parliament	
During the transition period	Pro-IP	Business and commerce associations	No legislation adopted
	IP-indifferent	Ministry of Commerce and Industry	
	IP-sceptics	Opposition party in parliament	
By the end of the transition period	Pro-IP	Business and commerce associations	Not substantial (adopted more rigorous rules than TRIPs)
	IP-indifferent	Ministry of Commerce and Industry	
	IP-sceptics	Not existing/Not significant	

5.6 Conclusion

As with Indonesia, India represents an unlikely case for compliance with the TRIPs Agreement. Nonetheless, India reformed its existing IP legislation in order to fulfil its TRIPs obligations by the end of its transition period and even adopted more stringent rules for its copyright and trademark. As the preceding discussion illustrated, external pressure played only a limited role. In particular, bilateral great power coercion had little effect. The adverse WTO ruling, however, had greater impact, in particular by fostering concern within the Indian government about a potential loss of reputation and of retaliation. Since India took the necessary steps to comply with the DSB ruling, external pressure in the form of collective enforcement through the WTO DSB arguably played crucial role in influencing India's decision to reform its patent legislation.

External pressure—bilateral or collective—however, cannot explain the variance in the stringency of protection across the different categories of intellectual property rights. Rather, the stringency of protection maps more closely onto the strength of demands from societal actors. Opposition to patent protection was strongest, leading to only gradual change, until a shift in the preferences of domestic research-active pharmaceutical companies combined with government concerns about reputation and reciprocity to enable policy change. Since there was no opposition for policy reform, and at the same time, domestic constituents for strong copyright and trademark protection were essentially available, policy reform in these two categories could be taken relatively smoothly. Consequently, a domestic politics analysis provides a better account of the timing and quality of changes to India's IP legislation and to how those varied across IPR categories.

Chapter 6

Locating the Causes of Compliance in the Domestic Sphere and Resolving the Puzzle: A Conclusion

6.1 Introduction

Considering the conflicting norms embodied in the agreement and the coercive nature of its adoption, the TRIPs Agreement represents an inconvenient obligation for developing countries. The subsequent development after the TRIPs negotiations concluded, however, demonstrated unexpected responses from developing countries towards their TRIPs obligations. Almost all developing countries had taken the necessary steps to reform their existing IP legislation in response to the TRIPs Agreement. Furthermore, many had done so before they were required to, and many had adopted more stringent IP rules than outlined by TRIPs. Given the contentious nature of the agreement, the IP policy reform taken by most developing countries posed a puzzle that this thesis sought to explain. In resolving the puzzle, the preceding chapters extensively examined both the role of external pressures and domestic actors' preferences in finding the reasons behind the change in developing countries' IP legislation, as a response to their inconvenient obligation under TRIPs.

Much of the literature on developing countries and IPR protection emphasised coercion by a great power particularly the US, as the driving force behind the change in developing countries' IP legislation (Simons, 1999; McIlroy, 1998; Sell, 1998). Drawing empirically from the case studies of both Indonesia and India (discussed in Chapters 4 and 5), this thesis suggested, however, that external pressure is not irrelevant, but neither is it necessary nor sufficient to explain the policy change in developing countries' domestic IP legislation as a response to their TRIPs obligations. This can be seen from the fact that IP policy reform took place both with the presence and in the absence of these pressures. Empirical findings also indicated that in the absence of external pressures, IP policy reform took place when there was a shift in domestic actors' interests concerning IPR protection. Empirical evidence in two case studies showed that as major domestic actors' interests changed, their preferences regarding IPR protection also shifted, which in turn contributed greatly to the course of the IP policy reform process. By arguing this, this thesis suggested that the domestic politics of compliance analysis provides a causal mechanism, and thus offers a better account, in understanding IP policy change in developing countries.

The rest of this chapter will focus on both the theoretical and empirical contributions of this thesis, drawing from these findings. The next section deals with how the findings of this thesis engaged with wider theoretical debates on the leading International Relations (IR) theories, in explaining domestic policy change as a response to international obligations. The section, in essence, argues that, since both the major IR theories of neo-realism and neo-liberal institutionalism, which emphasised external pressures, were unable to provide a satisfactory explanation regarding developing countries' responses to their inconvenient obligations, this thesis confirmed the necessity to bring domestic politics back into the study of IR. The chapter then continues to present the empirical implications by highlighting the contribution of this thesis in the debate regarding whether the TRIPs Agreement is good or bad for developing countries. In addition to underlying the limitations of this study, the last part of the chapter concludes both the chapter and the thesis as a whole, by emphasising how the findings contribute to our understanding of developing countries in the current international trade regime.

6.2 Theoretical Debates: Explaining Policy Change

This section particularly deals with the question of what theoretical contributions can be drawn from the case studies of Indonesia and India, in explaining the change in developing countries' IP legislation as a response to their TRIPs obligations. As evident from the previous chapters, in explaining IP policy change in developing countries, this thesis tested two competing explanations, the role of external pressures (as argued by both neo-realism and neo-liberal institutionalism), and domestic actors' preferences regarding IPR protection (as proposed by domestic politics of compliance analysis). Within this context, this study engaged with a wider theoretical debate on how power, in the forms of great power coercion and international authority, affect domestic actors' preferences, and what role that they play in shaping policy change in domestic legislation.

6.2.1 Beyond Great Power Coercion: Insufficient Cause of Compliance?

As discussed to a large extent in Chapter 1, in understanding the correlation between international obligations and domestic policy change, neo-realism argues that great power coercion plays a significant role behind domestic policy change. In addition, by emphasising the relative power of states, neo-realism further argues that domestic policy change will vary directly with the states' power. In this context, neo-realism would therefore predict that weaker states would be more susceptible to the pressure from stronger states.

The discussion in the previous chapters indicated that major developed countries, particularly the US, extensively pressurised developing countries to reform their IP legislation through various forms. These include threats of trade sanction, withdrawal of Generalised System of Preferences (GSP) benefits, the publication of the USTR Special 301 Report on the US government's assessment regarding its trading partners' IP practices and regulations, as well as diplomatic lobbies and pressures through repeated visits by US top officials to specifically address IPR protection issues. In addition to pressures from major developed countries' governments, developing countries also experienced industrial pressures from multinational companies, mainly based in the US and in the EU.

As elaborated in Chapter 3, the results of the survey on the implementation of the TRIPs Agreement of 102 WTO developing country members on the timing and quality of their domestic IP laws illustrated, however, developing countries' responses to their TRIPs obligations did not correspond neatly with the external pressures they received. The results of the survey across patents, copyrights, and trademarks indicated that most developing countries that adopted IP legislation prior to the deadline were not on the USTR Special 301 Report during the transition period from 1995 to 2000. On the other hand, only a very limited number of developing countries that adopted IP legislation earlier than they had to were subject to US pressure during the same period. The empirical findings also revealed that the pattern of variation in the quality of IP legislation adopted also did not correspond to US pressure, as neo-realism would expect. Most countries that could be identified as being clearly subject to substantial pressure from the US adopted only minimum TRIPs requirements in their national legislation. On the other hand, most countries that were not subject to significant US pressure adopted more rigorous IPR protection in their national legislation. Based on these findings, it

can be argued, therefore, that great power coercion would not seem to be sufficient to cause policy change, and at the same time, it did not appear to be necessary for policy change to take place, either. Detailed case studies, in the case of both Indonesia and India, as presented in Chapters 4 and 5, also confirmed the findings regarding developing countries' IP policy change in general, and, therefore, also invalidated the neo-realists' argument of the role of great power coercion behind the policy change. This thesis argued that the main reason why neo-realism failed to provide a satisfactory explanation is due to the fact that, by focusing only on the systemic level, the argument is not equipped with the necessary analytical tools to go deeper into evaluating how the impact of these pressures affected, and were distributed in, the domestic arena.

The case study of Indonesia in Chapter 4 demonstrated that, despite the fact that, as with many other developing countries, Indonesia also experienced pressures from the US to improve its IP regime, the pressures with a more tangible and immediate impact, in the form of trade sanctions, were mostly noticeable on copyright protection. Yet, IP policy reforms taken by the Indonesian government did not correspond neatly with the pressures it received. Within this context, despite receiving extensive pressures, in the form of the threat of withdrawal of GSP benefits from the US unless they improved their copyright protection, Indonesia did not make substantial reform of its copyright legislation prior to the mid-1980s. On the other hand, despite receiving only a moderate level of pressure, in the form of industry and diplomatic pressures, Indonesia adopted more stringent rules for its trademark legislation, during the TRIPs negotiations. Similarly, in spite of only experiencing a moderate level of pressure to reform its patent regime, Indonesia also adopted more rigorous rules for its patent protection during its transition period. In this regard, it can be concluded that neo-realism is unable to provide a satisfactory explanation in understanding IP policy reform in Indonesia.

A closer observation on the IP policy reform in Indonesia also exposed that, in order to fully understand the implications of great power coercion on policy change, other important external factors, such as an economic crisis also needed to be taken into account. The empirical findings showed that as Indonesia experienced an economic crisis, the Indonesian government became more sensitive to external pressures. In this context, as a consequence of the oil crisis in the 1980s, Indonesia's position as an energy producer was declining, and this had made Indonesia's dependence on the US market for non-oil commodities increase

significantly. As a result, Indonesia was no longer sceptical about the US demands to improve the standards of its IPR protection. Similarly, in the wake of the 1997 financial crisis, as Indonesia's dependence on foreign markets and investment increased as part of Indonesia's effort to recover from the crisis, the urgency to accommodate external pressure by strengthening its IPR protection also intensified. In short, the crisis provided a necessary condition for external pressures to affect domestic actors' preference regarding IPR protection. Prior to the crisis, since external pressures arguably did not have an immediate impact on the interests of the major domestic actors, thus, they did not find it necessary to respond to these pressures rigorously.

Whilst in the case of India, examined in Chapter 5, despite receiving strong external pressures since the conclusion of the TRIPs negotiations, including threats of trade sanctions from the US if they did not reform their existing patent regime, due to strong domestic societal actors' resistance, however, a substantial policy reform did not take place until the end of India's transition period. In this regard, accommodating external pressures to reform its existing patent regime was politically undesirable, since the Indian government was fully aware of the fact that doing that would have a destructive effect on the interests of major domestic societal actors (particularly the Indian national pharmaceutical industry). The case study of India also demonstrated that, as the preference of the domestic pharmaceutical industry, as one of the key domestic societal actors, changed, a substantial policy reform could take place, even when there was no significant change in the degree of external pressures.

It can be concluded, therefore, that great power coercion, as offered by neo-realism, can only provide a partial explanation in understanding the change in developing countries' domestic IP legislation. It is true that great power coercion, in the form of either threats of trade sanctions or diplomatic pressures, could influence domestic actors' preferences regarding IPR protection. However, to fully understand of their role in shaping policy outcomes, one needs to understand the distributional impact of these pressures on domestic actors' interests. In the case study of Indonesia specifically, other external factors, such as an economic crisis, also provided a necessary condition for these pressures to have a more direct and crucial effect on major domestic actors' interests regarding IPR protection. In short, the empirical findings of this thesis suggest that the role of great power coercion was not the only cause of compliance

behind the change in developing countries' IP legislation, as widely echoed in the existing literatures.

6.2.2 Authoritative International Institutions: It Barked but not so Loud

Neo-liberal institutionalism emphasises the role of authoritative international institutions in explaining the correlation between international obligations and domestic policy change. From the neo-liberal institutionalist's point of view, the more institutionalised an international agreement, the more significant an impact it is expected to have. As discussed in Chapters 1 and 2, considering the TRIPs Agreement is a highly institutionalised and legalised form of international agreement under WTO, neo-liberal institutionalism would predict that developing countries would be more likely to reform their domestic IP legislation in order to comply with the TRIPs Agreement.

As discussed in Chapter 3, despite the fact that the WTO complaints, through its Dispute Settlement Mechanism (DSM), represent a high-watermark of institutionalised enforcement of the TRIPs Agreement, the assessment on the use of the dispute settlement for TRIPs issues and developing countries, exhibited only a few cases of the dispute settlement that involved developing countries as respondents. Nevertheless, Chapter 3 also demonstrated that, within these few cases, it can be observed that when a state was being specifically targeted in adverse ruling, it responded to the ruling by improving the quality of its IPR protection as demanded.

As explored in Chapter 5, the Indian government responded to the WTO ruling by reforming its patent regime in 1999. After being brought to the WTO dispute in 1996, there was a growing concern over India's loss of reputation and fear of retaliation, especially among domestic political elites. As can be observed from the amendment process of patent legislation in the late 1990s, many members of parliament from the ruling party argued that if India did not comply with the WTO ruling, then India was at risk of retaliation from major developed countries. In this regard, in line with the neo-liberal institutionalists' argument, the Indian government then used reputational loss and fear of retaliation associated with international institutions, to overcome domestic opposition to policy reform. However, the role of the international institutions in the Indonesian case study was less clear than in the Indian case study. Unlike India, which was brought to the WTO DSB exclusively on TRIPs-related

disputes, Indonesia was brought to the WTO DSB, which was not exclusively on a TRIPs-related dispute. Furthermore, neo-liberal institutionalism is also unable to explain early compliance and TRIPs-Plus approaches taken by the Indonesian government for its patent and trademark rules. This is particularly because neo-liberal institutionalism would suggest that policy reform should all be both on time and to minimum for all different IP categories. In this regard, in the Indonesian case study, the empirical evidence was insufficient to be used to support the neo-liberal institutionalists' argument regarding the role of authoritative international institutions on influencing IP policy change.

It can be concluded, therefore, given the fact that there were only a few cases of disputes involving developing countries on the WTO dispute concerning TRIPs-related issues, the neo-liberal institutionalist's expectation on the extensive use of the WTO DSB, representing the legalisation of international institutions, only portrayed a partial picture. Nevertheless, as can be seen from India's experience, the role of the authoritative international institution was evident on the targeted country, which took the necessary policy change as demanded by the WTO DSB ruling. In this regard, India's decision to comply with the WTO DSB ruling confirmed the neo-liberal institutionalist's argument, on the role of the calculations of costs and benefits of non-compliance associated with international institutions, both in terms of reputational loss and fear of retaliation. This, however, cannot be used to explain the general phenomena of the role of collective enforcement through the legalisation of international institutions in influencing developing countries' domestic policy change. In the end, the empirical evidence demonstrated that the WTO DSB really barked, even though not so loud.

6.2.3 Bringing Domestic Politics Back in: Where Other Causes of Compliance can be Found

Previous discussions exhibited the flaws of the leading IR theories of compliance, derived from neo-realism and neo-liberal institutionalism, in understanding the change in developing countries' domestic IP legislation as a response to their TRIPs obligations. In particular, these accounts cannot explain why reform occurred in the absence of external pressures, nor why it should go beyond the minimum required by the TRIPs Agreement. Thus external pressure alone cannot explain the development of developing countries' IP legislation. Rather, one must consider domestic politics, particularly the preferences of domestic actors regarding IP protection (the pro- and the anti-IP, including the IP-indifferent) and how these actors respond

to external pressure. This thesis, therefore, suggested that the domestic politics analysis can provide a complementary explanation to the external pressures account in revealing the change in developing countries' domestic IP legislation, by giving further details about the distribution of the different implications of these pressures among domestic actors.

For example, the case study of Indonesia showed that external pressures played a significant role only when they directly affected the interests of major domestic actors. Prior to the mid-1980s, the demands from foreign governments and their business communities to improve its IP regime were not accommodated when they did not immediately threaten the interests of major domestic actors. However, after Indonesia was hit by the oil crisis in the mid-1980s, external pressure began to have implications for its economic interests, and therefore, the Indonesian government took foreign demands more seriously. Similarly, the India case study revealed that the Indian government considered the political cost of accommodating external pressures to be higher than being sceptical towards them, leading to incremental and grudging policy change. Only when the domestic research-active pharmaceutical industry came to support stricter IP protection, did patent reform leap ahead.

The domestic politics of compliance analysis also allows us to uncover the differences in the approaches taken by governments in developing countries to different IPR categories. As can be seen particularly in the India case study, various approaches taken by the government to different IP categories closely corresponded to the variance in domestic support in each category. Patent policy reform was the most controversial IPR issue in India. Due to strong opposition from the pharmaceutical industry, the Indian government's effort to fulfil its TRIPs obligations for patent protection was, until the splitting of the pharmaceutical industry lobby, incremental and minimalist. By contrast, due to the presence of strong domestic constituents for copyright and trademark protection and the absence of significant domestic opposition, the Indian government reformed its existing copyright and trademark legislation relatively easily and even adopted more rigorous rules than required by TRIPs.

Even though the differences were less striking than in the case of India, the Indonesian government also approached the different IP categories differently. Despite the role of domestic societal actors being largely limited in Indonesia's policy making process, opposition from politically well-connected Indonesian conglomerate pharmaceutical manufacturers, to

some extent, contributed to the failure of the early government's effort to reform the existing patent legislation prior to and during the TRIPs negotiations. In the cases of copyrights and trademarks, for which opposition was mainly from small-medium producers of counterfeit products with no strong political connections, policy reform in these two IPR categories was relatively smooth. Within this context, by focusing on domestic actors' preferences, domestic politics account does a better job of explaining the difference in approaches taken by government in developing countries to different IPR categories than do the external pressure accounts. By treating a state as a unitary actor, external pressure accounts fail to explain the variation in developing countries' approaches to different IPR categories.

By analysing the preference of domestic actors regarding IPR protection it also revealed that IP policy reform could take place because there was a shift in domestic actors' preference regarding IPR protection. The shift of preference regarding IPR protection can be found both in the Indonesian and Indian case studies even though the two cases differ in the details. While in the case of Indonesia, the change in preference regarding IPR protection was predominantly evident among domestic political actors, in the Indian case study, it was apparent for the most part among domestic societal actors. As discussed in Chapter 4, most policy makers in Indonesia prior to and during the TRIPs negotiations tended to be sceptical about IPR protection. This can be understood largely because of the incompatibility of norms regarding IPR protection governed under the TRIPs Agreement with the existing domestic norms. IPR (particularly patent and copyright) protection was essentially an alien concept in Indonesia's national laws prior to the TRIPs Agreement, and even at odds with its norms and traditions as reflected on its '*adat*' customary laws. However, by the end of the transition period, the importance of strong IPR protection was commonly seen as a necessity among Indonesia's domestic political elites and more government institutions displayed either IP-indifferent or Pro-IP position. Why this shift occurred, however, is not clear, at least in the light of the research conducted for this thesis. In the Indian case, the crucial shift in preferences regarding IP (particularly patent) protection occurred among the Indian national pharmaceutical companies with, a research and development capacity. As their preference changed, the Indian government faced a less hostile opposition to patent policy reform. Furthermore, the change in the Indian national pharmaceuticals industry's preference was also accompanied by a fresh movement from other domestic societal actors, such as domestic research institutes, which took a more constructive position regarding patent policy reform. The change in these

domestic societal actors' preferences contributed to providing a more favourable context in which policy reform could take place. The primary reason for the change in preferences among some Indian pharmaceutical companies was that, after being able to develop under government's protection for several decades, they found themselves able to shift from reverse engineering to new drug discovery and seeking access to developed countries' markets, which required strong patent protection.

The shift in the preferences among domestic actors might provide fuel for a constructivist account of change in developing countries' domestic IP legislation. Arguably, the shift in the preferences of political elites regarding IPR protection could be understood as being due to them being socialised to international norms. This is because the shift in the preferences among domestic actors regarding IP protection can also be understood as the evident of the change in existing domestic norms and closer to the international ones. As argued by Ruggie (1998: 863-4), since norms and identity of the same state can change and so do its interests, there is a possibility that as their domestic norms changed developing countries would have the same preferences with international norms. However, there is reason to doubt that this is what was going on. While such an account might explain what occurred in Indonesia, the change in their preferences might also have been the result of policy learning and/or due to 'inducements' and other material gains. The Indian case is more clear cut, with little evidence of socialisation. In India the change in policy preferences of the research-active portion of the domestic pharmaceutical industry was consistent with changes in its competitiveness. Moreover, even if we accept that socialisation has occurred, as was discussed in Chapter 1, unless looking at domestic mechanisms, constructivists, especially state-centric version of constructivism common in IR alone, fail to provide further explanation regarding how socialisation occurs. In this context, state-centric version of constructivism is unable to provide further explanation regarding how these domestic norms change, through what mechanisms, and what conditions are needed to make the change can take place. In this regard, therefore, in order to have a more comprehensive understanding it is necessary to analyse mechanisms available at domestic politics. While explaining the reason behind the shift in the Indonesian government's preference is beyond the scope of this thesis, the shift itself indicates that domestic actors' preferences are a dynamic and critical factor. This thesis, therefore, argues that analysing domestic actors' preferences over time, for different IPR categories, is essential in order to explain IP policy change in developing countries.

While a domestic politics analysis may provide a good account of compliance, it is not a parsimonious approach. This is because in order to capture the actual state's response to its international obligations requires a thorough observation of the roles of different key domestic actors, their preferences, and how they interact. Even governments cannot be treated as unitary actors since they consist of different ministries that represent divergent interests according to the specific roles they hold. In short, in order to have a powerful argument, a study requires detailed observation of this multifaceted domestic arena. This may mean that, in line with Guzman (2000, p.1839), domestic politics analysis cannot provide a general model of compliance.

In conclusion, by arguing that the major IR theories failed to provide satisfactory explanations, this does not necessarily mean that great power coercion, authoritative international institutions, and international norms have no role in explaining change in developing countries' legislation. These three variables can be significant factors that affect domestic policy change. However, to understand when and how they affect policy outcomes, one must examine how they play out through domestic politics. In this regard, therefore, domestic politics of compliance analysis can complement major IR theories, in explaining the change in developing countries' domestic IP legislation as a response to their TRIPs obligations. Further, domestic politics analysis can help to explain the adoption of IP protection even when international pressure is absent.

6.3 The TRIPs Agreement and Developing Countries: What Lessons can be Learned

As the earlier discussions have fulfilled this thesis's main task of explaining change in developing countries' IP legislation, as a response to their inconvenient obligations under the TRIPs Agreement, this section focuses on how the main findings of this thesis engaged with the debate about whether the TRIPs Agreement is good or bad for developing countries, by arguing that the answer is not as straightforward as one might expect. As discussed in Chapter 1, the existing literature on the implications of the TRIPs Agreement for developing countries' economic development tends to see the agreement as either good or bad *for* developing countries. Little attention is given to the effects of the agreement on different domestic actors *within* developing countries. Careful observation of domestic actors in India and Indonesia

revealed the existence of both pro- and anti-IP policy actors for different types of IPR protection across time. In other words, there are both the winners and the losers from IPR protection *within* each country. These findings also implied that, in order to assess whether the TRIPs Agreement is good or bad for developing countries, one needs to look at the impact of the different types of IP categories on different domestic societal actors. By arguing this, this thesis, therefore, engaged with a wider debate on the importance of observing the distributional impacts at societal level of external pressures in explaining compliance, by identifying who benefits and who loses in the domestic arena in a given cooperative setting (Slaughter, 1995, p.508; Raustiala, 2000, p.411; Dai, 2005, p.363).

Since patent protection is considered to be one of the most controversial IPR issues in most developing countries, the debate on whether the TRIPs Agreement is good or bad for developing countries, therefore, is mainly centred on the costs and benefits of strong patent protection. This particularly concerns the access to affordable medicines in most developing country societies. The controversy relating to access to affordable medicines is particularly apparent in India. Due to strong resistance from India's pharmaceutical industry, as one of the most influential domestic societal actors, patent policy reform could not initially be adopted easily. Rather, policy reform could only take place when there was a shift in the preference of India's domestic pharmaceutical industry. The change in the domestic actors' preference regarding patent protection indicates the existence of a domestic constituency that would benefit from a strong patent regime. Thus, even with regard to this most controversial aspect of the TRIPs Agreement, there are actors *within* developing countries that benefit.

Moreover, the case studies of Indonesia and India both demonstrated that, unlike patent, not all forms of intellectual protection attract meaningful resistance. The strengthening of copyright and trademark protection was relatively easy in both countries as there were domestic constituencies in favour of strong protection for these two IP categories. Given the fact that different IPR categories under the TRIPs Agreement had different impacts on various domestic constituents, this thesis suggested that, in order to assess whether the TRIPs Agreement is good or bad for developing countries, one needs to look at the impact of different IP categories on different domestic societal actors. Given the variance not only *among* developing countries but also *within* individual developing countries, making

generalisations about whether the TRIPs Agreement is good or bad for developing countries is rather problematic.

6.4 Conclusion

Conducting research into explaining change in developing countries' domestic IP legislation had numerous challenges, which also inevitably illustrated the limitations of this study. The focus of this thesis was limited only in explaining why and how developing countries' domestic IP policy changed in response to their inconvenient international obligations. This thesis, however, did not strive to assess the effectiveness of these policies or to assess whether the change in domestic IP policy has significantly fulfilled its policy objectives as outlined by TRIPs. This thesis, nevertheless, underlines the importance of analysing the effectiveness of the policy taken by developing countries for future research agenda, in order to comprehend our understanding of the relationship between TRIPs and developing countries.

Another limitation of the study can be found from the fact that this study did not go further to analyse the reason behind the change in domestic actors' preferences. As discussed earlier, one of the main reasons behind the change in IP legislation in developing countries was because there was a shift in domestic actors' preferences, from sceptical to being either indifferent or more favourable regarding IPR protection. In the Indian case study, a straightforward explanation suggested that the shift in the preference of India's national pharmaceutical industry was more likely to have been motivated by the material benefits expected from a stronger patent protection. Finding the reasons behind the shift of preference among the domestic political actors in Indonesia, however, was not as definite as those in the Indian case study. As mentioned earlier, locating the answer as to whether the shift in preference among the Indonesian policy makers regarding IPR protection was as a result of socialisation, policy learning, or 'inducement' and other material gains, requires a deeper analysis—and this study, nevertheless, only highlights its importance.

By observing detailed case studies of Indonesia and India, this thesis, however, has fulfilled its primary task, of testing leading IR theories on compliance to explain the changes in developing countries' IP legislation as a response to their TRIPs obligations. The main findings suggested that external pressure (as proposed by both neo-realist and neo-liberal

institutionalists) is not irrelevant, but neither is it necessary nor sufficient to explain policy change in developing countries' IP legislation as a response to their TRIPs obligations. This thesis, therefore, argued the value of a domestic politics of compliance analysis to fill the gap left by the external pressures explanation, since it is able to provide a causal mechanism in understanding IP policy change in developing countries. In so doing, this thesis has contributed to the existing literature on developing countries' compliance with international trade commitments both in terms of empirical and theoretical.

In terms of practical contributions, based on the findings in both the Indonesia and India case studies, this thesis has reaffirmed the importance of comparative politics in IR study. The experience of Indonesia and India indicated that there were different internal preferences and institutions within the domestic sphere that influence the policy outcomes. Considering the complexity and the diversity of developing countries, analysing and comparing two or more developing countries would be useful, in order to have a more comprehensive understanding of change in domestic policy in developing countries as a response to their international trade commitments. In this context, this thesis then has confirmed the need to take comparative politics into considerations in the study of IR.

In addition to its empirical contribution, the theoretical contribution of this thesis is twofold. First, since major IR theories of compliance derived from neo-realism, neo-liberal institutionalism, and constructivism cannot provide a satisfactory explanation in understanding policy change in developing countries' IP legislation, this thesis reaffirmed the existing study on the necessity to 'bring domestic politics back in', which is prominent in a trade policy study for elucidating more specifically a country's compliance with its international obligations. In this context, this thesis suggested the need to observe domestic actors' preferences, and the interaction among them in shaping the IP policy reform process, in order to understand a country's decision as to whether or not it would comply with its international obligations. By emphasising these, this thesis, therefore, has contributed to fill the gap in the existing literature, which still gave little attention to a domestic politics of compliance analysis in explaining developing countries' responses to their TRIPs obligations.

Another theoretical contribution of this thesis is that the study of IP policy change in developing countries' compliance also has contributed to the conceptual debate concerning the

relations between ‘compliance’ and ‘implementation’ in compliance study. Even though it is widely accepted that the implementation of the agreement is neither a necessary nor a sufficient condition for compliance, based on developing countries’ experience in responding to their TRIPs obligations, this thesis indicated that, in measuring compliance specifically with the agreement, which can be considered as an ‘inconvenient obligation’, implementation of the agreement is essential. As discussed in the previous chapters, since IPR protection in the vast majority of developing countries was either initially absent or incompatible with the minimum standard outlined by TRIPs, the agreement required an extensive adjustment in developing countries’ national IP legislation. In this regard, in the case of developing countries’ compliance with the TRIPs Agreement, which can be seen as an inconvenient obligation, the implementation in the form of domestic IP policy reform can be regarded as a necessary condition for developing countries to comply with the TRIPs Agreement. In this context, therefore, unlike a country’s compliance with international agreements in general, in the case of fulfilling specifically an ‘inconvenient obligation’, compliance which requires domestic policy change also means implementing the agreement. By claiming this, this thesis has contributed to our understanding in the study of developing countries’ compliance with one of the most controversial trade agreements under the current international trade regime.

Appendices

Appendix I

The WTO Developing Country Members based on the World Bank's Income Classification (as of January 2011)

No	Upper Middle Income	Lower Middle Income	Low Income
1.	<u>Albania</u>	Angola	Bangladesh
2.	Argentina	<u>Armenia</u>	Benin
3.	Botswana	Belize	Burkina Faso
4.	Brazil	Bolivia	Burundi
5.	<u>Bulgaria</u>	Cameroon	Cambodia
6.	Chile	<u>Cape Verde</u>	Central African Republic
7.	Colombia	<u>China</u>	Chad
8.	Costa Rica	Cote D'Ivoire	Congo Democratic Republic
9.	Cuba	Congo Rep	Gambia
10.	Dominica	Djibouti	<i>Ghana</i>
11.	Dominican	<u>Ecuador</u>	Guinea
12.	Fiji	Egypt	Guinea Bissau
13.	Gabon	El Salvador	Haiti
14.	Grenada	<u>Georgia</u>	<i>Kenya</i>
15.	Jamaica	Guatemala	<u>Kyrgyz</u>
16.	<u>Lithuania</u>	Guyana	Madagascar
17.	<u>Macedonia</u>	Honduras	Malawi
18.	Malaysia	India	Mali
19.	Mauritius	Indonesia	Mauritania
20.	Mexico	<u>Jordan</u>	Mozambique
21.	Namibia	Lesotho	Myanmar
22.	<u>Panama</u>	Maldives	Nepal
23.	Peru	<u>Moldova</u>	Niger
24.	Romania	<u>Mongolia</u>	Rwanda
25.	South Africa	Morocco	Sierra Leone
26.	St. Kitts and Nevis	Nicaragua	Solomon Islands
27.	St. Lucia	Nigeria	Tanzania
28.	St. Vincent and Grenadines	Pakistan	Togo
29.	Suriname	Papua New Guinea	Uganda
30.	Turkey	Paraguay	Zambia
31.	Uruguay	Philippines	<i>Zimbabwe</i>
32.	Venezuela	Senegal	
33.		Sri Lanka	
34.		Swaziland	
35.		Thailand	
36.		<u>Tonga</u>	
37.		Tunisia	
38.		<u>Ukraine</u>	
39.		<u>Vietnam</u>	

Source: World Bank

Notes:

- Underlined countries: members that joined after the establishment of the WTO and are obliged to adopt the TRIPs Agreement by the time of accession. These countries are (with year of accession): Upper middle income economies: Albania (2000); Bulgaria (1996); Lithuania (2001); Macedonia (2003); Panama (1997). Lower middle income economies: Armenia (2003); Cape Verde (2008); China (2001); Ecuador (1996); Georgia (2000); Jordan (2000); Moldova (2001); Mongolia (1997); Tonga (2007); Ukraine (2008); Vietnam (2007). Low income economies: Kyrgyz (1998 and not recognised as a WTO LDC member).
- **Countries in bold**: the WTO LDC members that do not fall into the World Bank's low income economy categories. These countries are required to fulfil their TRIPs Agreement obligations by the end of additional transition period in 2013 for general obligations and 2016 for patents, test data protection, and exclusive marketing rights for pharmaceuticals (as amended under the Doha Round). These countries are Angola, Djibouti, Lesotho, and Senegal (See also Appendix II for a complete list of the WTO LDC members).
- *Countries in italic*: the World Bank's low income economies that are not recognised as the WTO LDC members and therefore should meet the deadline as developing countries in general. These countries are Ghana, Kenya, Kyrgyz, and Zimbabwe.

Appendix II

The WTO Least Developed Country (LDC) Members (as of 17 February 2011)

No	Countries
1.	Angola
2.	Bangladesh
3.	Benin
4.	Burkina Faso
5.	Burundi
6.	Cambodia
7.	Central African Republic
8.	Chad
9.	Congo, Democratic Republic
10.	Djibouti
11.	Gambia
12.	Guinea
13.	Guinea Bissau
14.	Haiti
15.	Lesotho
16.	Madagascar
17.	Malawi
18.	Mali
19.	Mauritania
20.	Mozambique
21.	Myanmar
22.	Nepal
23.	Niger
24.	Rwanda
25.	Senegal
26.	Sierra Leone
27.	Solomon Islands
28.	Tanzania
29.	Togo
30.	Uganda
31.	Zambia

Source: WTO

Appendix III

The Timing of Major IP Legislation Adoption in WTO Developing Country Members and US Pressure

World Bank classification	Country	Year of The First Law Adoption			Year of The Last Amendment			US Pressure (1995–2010)		
		Patent	Copyright	Trademark	Patent	Copyright	Trademark	PWL	PFC	S306
Upper-Middle-Income Economies	<u>Albania</u>	1994 (ot)	1995 (ot)	1994 (ot)	2008 (l)	2001 (l)	2008 (l)	-	-	-
	Argentina	1995 (e)	1997 (e)	1995 (e)	2004 (e)	2009 (l)	2008 (l)	1996–2010	-	-
	Botswana	1996 (e)	2000 (ot)	1996 (e)	1997 (e)	2000 (ot)	1997 (e)	-	-	-
	Brazil	1996 (e)	1998 (e)	1996 (e)	2001 (e)	1998 (e)	2001 (l)	1995, 2002–6	-	-
	<u>Bulgaria</u>	1993 (ot)	1993 (ot)	1999 (l)	2007 (l)	2009 (l)	2007 (l)	1998	-	-
	Chile	2005 (ot)	1993 (e)	2005 (l)	2007 (l)	2003 (l)	2007 (l)	2007–10	-	-
	Colombia	1994 (e)	1993 (e)	1994 (e)	2000 (e)	2010 (l)	2000 (ot)	2002	-	-
	Costa Rica	2000 (e)	1994 (e)	2000 (ot)	2000 (e)	2000 (ot)	2000 (ot)	2001	-	-
	Cuba	1995 (e)	1994 (e)	1999 (ot)	1996 (e)	1994 (e)	1999 (ot)	-	-	-
	Dominica	1999 (e)	2003 (l)	1999 (ot)	1999 (e)	2003 (l)	1999 (ot)	-	-	-
	Dominican	2000 (e)	2000 (ot)	2000 (ot)	2000 (e)	2000 (ot)	2000 (l)	1998–2002	-	-
	Fiji	2003 (l)	1999 (ot)	1978 (ny)	2003 (l)	1999 (ot)	1978 (ny)	-	-	-
	Gabon	1999 (e)	1999 (ot)	1999 (ot)	1999 (e)	2001 (l)	1999 (ot)	-	-	-
	Grenada	2002 (e)	1989 (ny)	2002 (l)	2002 (e)	1989 (ny)	2002 (l)	-	-	-
	Jamaica	2001 (e)	1993 (e)	1999 (ot)	2001 (e)	1999 (ot)	1999 (ot)	-	-	-
	<u>Lithuania</u>	1994 (ot)	1999 (ot)	2000 (ot)	2007 (l)	2010 (l)	2006 (l)	-	-	-
	<u>Macedonia</u>	1993 (ot)	1996 (ot)	2006 (l)	2009 (l)	2002 (ot)	2009 (l)	-	-	-
	Malaysia	1993 (e)	1996 (e)	1994 (e)	2006 (l)	2006 (l)	2002 (l)	2000–1	-	-
	Mauritius	1998 (e)	1997 (e)	1993 (e)	2004 (e)	1997 (e)	2004 (l)	-	-	-
	Mexico	1999 (e)	1996 (e)	1999 (ot)	2005 (ot)	2005 (l)	2005 (l)	-	-	-
	Namibia	1942 (ny)	1994 (e)	1989 (ny)	1942 (ny)	1994 (e)	1989 (ny)	-	-	-
	<u>Panama</u>	1996 (ot)	1994 (ot)	1996 (ot)	2009 (l)	1996 (ot)	2009 (l)	-	-	-
	Peru	1996 (e)	1996 (e)	1996 (e)	2008 (l)	2008 (l)	2008 (l)	1999, 2000	-	-
	Romania	1998 (e)	1996 (e)	1998 (e)	1998 (e)	2006 (l)	1998 (e)	-	-	-
	South Africa	1996 (e)	1996 (e)	1993 (e)	2005 (ot)	2002 (l)	2002 (l)	-	-	-
	St Kitts & Nevis	1956 (ny)	1919 (ny)	1958 (ny)	1956 (ny)	1919 (ny)	1958 (ny)	-	-	-

	St. Lucia	2001 (e)	1995 (e)	2001 (l)	2001 (e)	2000 (ot)	2001 (l)	-	-	-
	St. Vincent & Grenadines	2004 (ot)	2003 (l)	2003 (l)	2004 (ot)	2003 (l)	2004 (l)	-	-	-
	Suriname	1969(ny)	1981 (ny)	1984 (ny)	1969(ny)	1981 (ny)	1984 (ny)	-	-	-
	Turkey	1995 (e)	1995 (e)	1995 (e)	2004 (e)	2001 (l)	1995 (e)	1995–2000, 2004–7	-	-
	Uruguay	1999 (e)	2003 (l)	1998 (e)	1999 (l)	2003 (l)	2005 (l)	2001–2	-	-
	Venezuela	1955 (ny)	1993 (e)	1955 (ny)	1955 (ny)	1993 (e)	1955 (ny)	2005–10	-	-
Lower Middle Income	Angola	2003 (e)	2006 (e)	2003 (e)	2003 (e)	2006 (e)	2003 (e)	-	-	-
	<u>Armenia</u>	1993 (ot)	1996 (ot)	1997 (ot)	2008 (l)	2010 (l)	2010 (l)	-	-	-
	Belize	2000 (e)	2000 (ot)	2000 (ot)	2001 (e)	2001 (l)	2001 (l)	-	-	-
	Bolivia	1998 (e)	1993 (e)	1998 (e)	2007 (l)	2005 (l)	2005 (l)	-	-	-
	Cameroon	1999 (e)	2000 (ot)	1999 (ot)	1999 (e)	2000 (ot)	1999 (ot)	-	-	-
	<u>Cape Verde</u>	2006 (ot)	1993 (ot)	- (o)	2007 (ot)	2007 (ot)	- (o)	-	-	-
	<u>China</u>	2000 (ot)	2001 (ot)	1993 (ot)	2008 (l)	2010 (l)	2001 (ot)	2005–10	1996	1997– 2004
	Côte D'Ivoire	1999 (e)	1996 (e)	1999 (ot)	1999 (e)	2004 (l)	1999 (ot)	-	-	-
	Congo Rep	1999 (e)	1999 (ot)	1999 (ot)	2003 (e)	1999 (ot)	1999 (ot)	-	-	-
	Djibouti	2009 (e)	- (o)	- (o)	2009 (e)	- (o)	- (o)	-	-	-
	<u>Ecuador</u>	1998 (l)	1998 (l)	1998 (l)	2006 (l)	2006 (l)	2006 (l)	1997–8	-	-
	Egypt	2002 (e)	2002 (l)	2002 (l)	2002 (e)	2002 (l)	2006 (l)	1997–2002, 2004–7	-	-
	El Salvador	1993 (e)	1993 (e)	1993 (e)	2005 (ot)	2005 (l)	2005 (l)	-	-	-
	Georgia	1999 (ot)	1999 (ot)	1999 (ot)	2010 (l)	2010 (l)	2010 (l)	-	-	-
	Guatemala	2000 (e)	1998 (e)	2000 (ot)	2000 (e)	2000 (ot)	2000 (ot)	1999, 2000	-	-
	Guyana	1972 (ny)	1966 (ny)	1972 (ny)	1972 (ny)	1966 (ny)	1972 (ny)	-	-	-
	Honduras	1999 (e)	2000 (ot)	1999 (ot)	1999 (e)	2000 (ot)	1999 (ot)	-	-	-
	India	1999 (e)	1994 (e)	1999 (ot)	2005(ot)	1999 (ot)	1999 (ot)	1995–2010	-	-
	Indonesia	1997 (e)	1997 (e)	1997 (e)	2001 (e)	2002 (l)	2001 (l)	1996–9, 2001 -6, 2009–10	-	-
	<u>Jordan</u>	1999 (ot)	1994 (ot)	1999 (ot)	2001 (l)	2005 (l)	1999 (ot)	-	-	-
Lesotho	1993 (e)	1989 (o)	1997 (e)	1995 (e)	1989 (o)	1997 (e)	-	-	-	
Maldives	- (ny)	- (ny)	- (ny)	- (ny)	- (ny)	- (ny)	-	-	-	
<u>Moldova</u>	1995 (ot)	1994 (ot)	1994 (ot)	2003 (l)	2002 (l)	2001 (ot)	-	-	-	

	<u>Mongolia</u>	1993 (ot)	1993 (ot)	1997 (ot)	1999 (l)	1999 (l)	2003 (l)	-	-	-
	Morocco	1997 (e)	2000 (ot)	1997 (e)	2006 (l)	2006 (l)	2006 (l)	-	-	-
	Nicaragua	1998 (e)	1999 (ot)	2001 (l)	2007 (l)	2006 (l)	2006 (l)	-	-	-
	Nigeria	1990 (ny)	1997 (e)	1990 (ny)	1990 (ny)	1999 (ot)	1990 (ny)	-	-	-
	Pakistan	1997 (e)	2000 (ot)	2001 (l)	2002 (l)	2002 (l)	2004 (l)	2004–5, 2008–10	-	-
	Papua New Guinea	2000 (e)	2000 (ot)	2000 (ot)	2000 (e)	2000 (ot)	2000 (ot)	-	-	-
	Paraguay	2000 (e)	1998 (e)	1998 (e)	2000 (e)	1999 (ot)	1998 (e)	1997	1998	1999– 2010
	Philippines	1993 (e)	1993 (e)	1993 (e)	2008 (l)	2000 (ot)	2000 (ot)	2001–5, 2008	-	-
	Senegal	1999 (e)	1999 (ot)	1999 (ot)	1999 (e)	2008 (l)	1999 (ot)	-	-	-
	Sri Lanka	1997 (e)	1997 (e)	1997 (e)	2003 (e)	2003 (l)	2003 (l)	-	-	-
	Swaziland	1997 (e)	1933 (ny)	1994 (e)	1997 (e)	1933 (ny)	1994 (e)	-	-	-
	Thailand	1999 (e)	1994 (e)	1997 (e)	1999 (e)	1997 (e)	2000 (ot)	2007–10	-	-
	<u>Tonga</u>	1994 (ot)	2002 (ot)	1994 (ot)	2002 (ot)	2002 (ot)	2002 (ot)	-	-	-
	Tunisia	2000 (e)	1994 (e)	2001 (l)	2001 (e)	2009 (l)	2007 (l)	-	-	-
	<u>Ukraine</u>	1993 (ot)	1993 (ot)	1993 (ot)	2009 (l)	2003 (ot)	2008 (ot)	1999–2000, 2006–7	2001–5	-
	<u>Vietnam</u>	2000 (ot)	2000 (ot)	2000 (ot)	2009 (l)	2009 (l)	2009 (l)	-	-	-
Low Income	Bangladesh	1911(o)	2000 (e)	2003 (e)	1911(o)	2006 (e)	2009 (e)	-	-	-
	Benin	1977 (o)	2006 (e)	1977 (o)	1977 (o)	2006 (e)	1977 (o)	-	-	-
	Burkina Faso	1977 (o)	1993 (e)	1977 (o)	1977 (o)	2001 (e)	1977 (o)	-	-	-
	Burundi	1968 (o)	1978 (o)	1968 (o)	1968 (o)	1978 (o)	1968 (o)	-	-	-
	Cambodia	1996 (e)	2003 (e)	2000 (e)	2003 (e)	2003 (e)	2000 (e)	-	-	-
	Central African Rep	1999 (e)	1985 (o)	1999 (e)	2010 (e)	1985 (o)	2010 (e)	-	-	-
	Chad	1999 (e)	2003 (e)	1999 (e)	1999 (e)	2003 (e)	1999 (e)	-	-	-
	Congo Dem Rep	2004 (e)	1986 (o)	2004 (e)	2004 (e)	1986 (o)	2004 (e)	-	-	-
	Gambia	1989 (o)	- (o)	1989 (o)	1989 (o)	- (o)	1989 (o)	-	-	-
	<i>Ghana</i>	1992 (ny)	2005 (l)	1988 (ny)	1992 (ny)	2005 (l)	1988 (ny)	-	-	-
	Guinea	1999 (e)	1980 (o)	1999 (e)	1999 (e)	1980 (o)	1999 (e)	-	-	-
	Guinea Bissau	1997 (e)	- (o)	1997 (e)	1997 (e)	- (o)	1997 (e)	-	-	-

Haiti	1924 (o)	2005 (e)	1960 (o)	1924 (o)	2005 (e)	1960 (o)	-	-	-
<i>Kenya</i>	1993 (e)	1995 (e)	1994 (e)	2001 (e)	1995 (e)	2002 (l)	-	-	-
<u>Kyrgyz</u>	1997 (ot)	1997 (ot)	1997 (ot)	2005 (l)	2005 (l)	2008 (l)	-	-	-
Madagascar	1995 (e)	1994 (e)	1989 (o)	1995 (e)	1994 (e)	1989 (o)	-	-	-
Malawi	1985 (o)	1989 (o)	1987 (o)	1985 (o)	1989 (o)	1987 (o)	-	-	-
Mali	1995 (e)	1994 (e)	1999 (e)	1999 (e)	2008 (e)	1999 (e)	-	-	-
Mauritania	1999 (e)	2002 (e)	1999 (e)	1999 (e)	2002 (e)	2000 (e)	-	-	-
Mozambique	1993 (e)	2001 (e)	1993 (e)	2006 (e)	2004 (e)	2006 (e)	-	-	-
Myanmar	1994 (e)	1996 (e)	1962 (o)	1996 (e)	1996 (e)	1962 (o)	-	-	-
Nepal	2001 (e)	2002 (e)	2001 (e)	2006 (e)	2002 (e)	2006 (e)	-	-	-
Niger	1999 (e)	1993 (e)	1999 (e)	1999 (e)	1993 (e)	1999 (e)	-	-	-
Rwanda	1967 (o)	2009 (e)	1967 (o)	1967 (o)	2009 (e)	1967 (o)	-	-	-
Sierra Leone	1979 (o)	- (o)	1979 (o)	1979 (o)	- (o)	1979 (o)	-	-	-
Solomon Islands	- (o)	- (o)	- (o)	- (o)	- (o)	- (o)	-	-	-
Tanzania	1994 (e)	1999 (e)	2000 (e)	1994 (e)	2000 (e)	2000 (e)	-	-	-
Togo	1999 (e)	1991 (o)	1999 (e)	1999 (e)	1991 (o)	1999 (e)	-	-	-
Uganda	1993 (e)	2004 (e)	1999 (e)	2004 (e)	2006 (e)	2010 (e)	-	-	-
Zambia	1990 (o)	1994 (e)	1994 (e)	1990 (o)	1994 (e)	1994 (e)	-	-	-
<i>Zimbabwe</i>	1994 (e)	2000 (ot)	1994 (e)	2001 (e)	2000 (ot)	2001 (l)	-	-	-

Sources: Intellectual Property Justice on the USTR Section 301 Annual Reports (2001–2007); the USTR Special 301 Reports 2001–2010; the USTR National Trade Estimate Reports 1996–1999 and 2001–2002; Deere (2008, pp.341–42); the WTO TRIPs Council Country’s Official Notification [as of 15 January 2011]; the WIPO’s Country Profiles [as of 15 January 2011].

Notes:

- The earlier version of this table (data of US pressure from 1995 to 2008) appears in Winanti and Young (2009, pp.76–78).
- This table is a summary of the results of the author's survey on the timing of the adoption of 102 WTO developing country members' legislation across patents, copyrights, and trademarks, in order to identify the first legislation adopted and the latest amendment as of 15 January 2011. A complete database can be provided upon request.
- The deadline for implementing patent legislation for upper middle and lower middle countries is 2005, given the longer transition period (until 2005) for products not previously patented.
- Notes on abbreviations: (e): early; (ot): on time; (l): late; (ny): not yet; (o): other (see table 3.1 in Chapter 3 for the explanation of the timing of IP policy adoption categories); (PFC): Priority Foreign Country; (S306): Section 306; (PWL): Priority Watch List (see table 3.4 in Chapter 3 for the explanation of the USTR Special 301 Report categories).

Appendix IV
The WTO TRIPs Disputes 1995–2011 Involving Developing Country
Members as Respondents

Request for consultations	Respondent	Complainant	Issue	Status
30 April 1996	Pakistan	United States	Patent Protection for Pharmaceutical and Agricultural Chemical Products	Mutually agreed solution (7 March 1997)
2 July 1996	India	United States	Patent Protection for Pharmaceutical and Agricultural Chemical Products	Panel report circulated (5 September 1997); Appellate Body Report circulated (19 December 1997); Implementation notified by respondent (28 April 1999)
8 October 1996	Indonesia	United States	Certain Measures Affecting the Automobile Industry (in combination with the TRIMs Agreement)	Panel report circulated (2 July 1998); Implementation notified by respondent (26 July 1999)
28 April 1997	India	European Union	Patent Protection for Pharmaceutical and Agricultural Chemical Products	Panel report circulated (24 August 1998); Implementation notified by respondent (28 April 1999)
6 May 1999	Argentina	United States	Patent Protection for Pharmaceuticals and Test Data Protection for Agricultural Chemicals	Mutually agreed solution (20 June 2002)
30 May 2000	Argentina	United States	Certain Measures on the Protection of Patent and Test Data	Mutually agreed solution (20 June 2002)
30 May 2000	Brazil	United States	Measures Affecting Patent Protection	Mutually agreed solution (19 July 2001)
10 April 2007	China	United States	Measures Affecting the Protection and Enforcement of Intellectual property rights	Panel report circulated (26 January 2009); Implementation notified by respondent (19 March 2010)
3 March 2008	China	European Union	Measures Affecting Financial Information Services and Foreign Financial Information Suppliers (in combination with the GATS Agreement)	Mutually agreed solution (4 December 2008)

Source: Data is compiled by author from the WTO Dispute Settlement based on the disputes by agreement [as of 31 January 2011].

Appendix V
Patent Applications by Resident in Selected Developing Countries in 2000

Country	Number of Applicants	Percentage
Brazil	3,080	33.0%
India	2,179	23.3%
Romania	1,003	10.7%
Thailand	561	6.0%
Egypt	534	5.7%
Mexico	431	4.6%
Turkey	277	3.0%
Chile	241	2.6%
Malaysia	206	2.2%
Indonesia	156	1.7%
Philippines	154	1.6%
Morocco	104	1.1%
Colombia	75	0.8%
Sri Lanka	71	0.8%
Venezuela	56	0.6%
Tunisia	47	0.5%
Pakistan	46	0.5%
Uruguay	44	0.5%
Peru	40	0.4%
Nicaragua	14	0.1%
Guatemala	13	0.1%
Jamaica	11	0.1%
Honduras	4	0.0%
Total	9,347	

Note: Data is compiled by author from WIPO statistics database on patent applications by patent office (1883-2007) by resident and non-resident (WIPO, n. d. (f)). It should be noted that not all 102 WTO developing country members' data is available from WIPO Statistics Database in 2000.

Appendix VI – IP Applications in Indonesia

Table VI.1. Patent Applications in Indonesia

Year	Patent Applications								Total
	Patent				Simple Patent				
	Domestic		Foreigners		Domestic		Foreigners		
1991 – 2000	750	2.56%	28,500	97.44%	782	63.71%	465	37.29%	30,497
2001	212	5.40%	3,714	94.60%	197	89.14%	24	10.86%	4,147
2002	234	6.09%	3,609	93.91%	157	76.59%	48	23.41%	4,048
2003	201	6.09%	3,099	93.91%	163	84.90%	29	15.10%	3,492
2004	227	6.19%	3,441	93.81%	177	84.69%	32	15.31%	3,877
2005	235	5.46%	4,069	94.54%	163	83.59%	32	16.41%	4,499
2006	288	6.24%	4,324	93.76%	242	90.30%	26	9.70%	4,880
2007	284	5.53%	4,850	94.47%	209	86.01%	34	13.99%	5,377
2008	386	7.52%	4,747	92.48%	214	86.29%	34	13.71%	5,381
2009	415	9.19%	4,103	90.81%	247	86.67%	38	13.33%	5,527
2010	507	10.07%	4,530	89.93%	253	41.14%	362	58.86%	5,652
Total	3,739		68,986		2,804		1,124		76,653

Source: The Indonesian Directorate General of Intellectual Property Rights [as of 15 January 2011].

Note: The 1989 Patent Act defines simple patent as a product or device, which cannot be qualified as invention, but it has the novelty and possess practical use values because of its shape, configuration, construction, or component. The duration of protection for simple patent under the 2001 Patent Act is 10 years.

Table VI.2 Copyright Applications in Indonesia

Copyright Applications					
Year	Domestic		Foreigners		Total
1991 – 2000	26,375	95.85%	1141	4.15%	27,516
2001 (as of Oct)	1,117	97.13%	33	2.87%	1,150
2002	1,877	98.89%	21	1.11%	1,898
2003	2,036	99.27%	15	0.73%	2,051
2004	2,998	98.04%	60	1.96%	3,058
2005	4,269	99.53%	20	0.47%	4,289
2006	5,857	98.85%	68	1.15%	5,925
2007	6,411	99.89%	7	0.11%	6,418
2008	4,733	99.64%	17	0.36%	4,750
2009	5,049	99.21%	40	0.79%	5,089
2010	4,758	99.41%	28	0.59%	4,786
Total	65,480		1,450		66,930

Source: The Indonesian Directorate General of Intellectual Property Rights [as of 15 January 2011].

Table VI.3 Trademark Applications in Indonesia

Year	Trademark Applications				Total
	Domestic		Foreigners		
2001	26,128	67.61%	12,520	32.39%	38,648
2002	20,423	68.07%	9,581	31.93%	30,004
2003	28,317	77.92%	8,023	22.08%	36,340
2004	35,626	72.25%	13,685	27.75%	49,311
2005	30,734	75.30%	10,082	24.70%	40,816
2006	36,644	69.60%	16,005	30.40%	52,649
2007	32,181	74.39%	11,078	25.61%	43,259
2008	33,555	70.48%	14,051	29.52%	47,606
2009	37,759	88.27%	5,018	11.73%	42,777
2010	43,269	90.53%	4,525	9.47%	47,794
Total	324,636		104,568		429,204

Source: The Indonesian Directorate General of Intellectual Property Rights [as of 15 January 2011].

Appendix VII

Documents submitted by the Indonesian Government on the Negotiating Groups during the Uruguay Round 1986–1994

Subject/Negotiating Group	Documents submitted
Textiles and Clothing	<ol style="list-style-type: none"> 1. MTN.GNG/NG4/W/5 (10 July 1987) and MTN.GNG/NG4/W/5/Corr.1 (7 July 1987) 2. MTN.GNG/NG4/W/7 (20 November 1987) 3. MTN.GNG/NG4/W/9 (7 December 1987) 4. MTN.GNG/NG4/W/11 (27 April 1988) 5. MTN.GNG/NG4/W/15 (17 June 1988) on behalf of members of the International Textiles and Clothing Bureau (ITCB) 6. MTN.GNG/NG4/W/17 (19 July 1988) on behalf of ASEAN 7. MTN.GNG/NG4/W/18 (1 August 1988) on behalf of members of the ITCB 8. MTN.GNG/NG4/W/19 (4 August 1988) 9. MTN.GNG/NG4/W/20 (28 September 1988) on behalf of members of the ITCB 10. MTN.GNG/NG4/W/22 (10 November 1988) on behalf of members of the ITCB 11. MTN.GNG/NG4/W/23 (8 June 1989) and MTN.GNG/NG4/W/23/Corr.1 (13 June 1989) 12. MTN.GNG/NG4/W/31 (13 December 1989) 13. MTN.GNG/NG4/W/32 (14 December 1989) 14. MTN.GNG/NG4/W/44 (13 March 1990) on behalf of members of the ITCB 15. MTN.GNG/NG4/W/49 (5 June 1990) and MTN.GNG/NG4/W/49/Corr.1 (12 June 1990) 16. MTN.GNG/NG4/W/52 (12 June 1990) 17. MTN.GNG/NG4/W/53 (14 June 1990) on behalf of members of the ITCB
Agriculture	<ol style="list-style-type: none"> 1. MTN.GNG/NG5/W/69 (13 July 1988) as part of the Cairns Group 2. MTN.GNG/NG5/W/128 (27 November 1989) as part of the Cairns Group
Tropical Products	<ol style="list-style-type: none"> 1. MTN.GNG/ W/4 (19 November 1986) on behalf of ASEAN 2. MTN.GNG/NG6/LT/49 (29 May 1989)
Services	<ol style="list-style-type: none"> 1. MTN.GNS/W/81 (2 November 1989)

Source: WTO

Appendix VIII – IP Applications and Value of Software Exports in India

Table VIII.1. Patent Applications in India

Years	Patent Applications				Total
	Domestic		Foreigners		
1992 - 1993	1,128	33.50%	2,239	66.50%	3,367
1993 - 1994	1,266	32.72%	2,603	67.28%	3,869
1994 - 1995	1,741	32.66%	3,589	67.34%	5,330
1995 - 1996	1,606	22.83%	5,430	77.17%	7,036
1996 - 1997	1,661	19.40%	6,901	80.60%	8,562
1997 - 1998	1,926	18.97%	8,229	81.03%	10,155
1998 - 1999	2,247	25.09%	6,707	74.91%	8,954
1999 - 2000	2,206	48.43%	2,349	51.57%	4,555
2000 - 2001	2,179	50.22%	2,160	49.78%	4,339
2001 - 2002	2,371	55.91%	1,870	44.09%	4,241
2002 - 2003	2,693	23.49%	8,772	76.51%	11,465
2003 - 2004	3,218	25.51%	9,395	74.49%	12,613
2004 - 2005	3,630	20.78%	13,836	79.22%	17,466
2005 - 2006	4,521	18.45%	19,984	81.55%	24,505
2006 - 2007	5,317	17.87%	24,430	82.13%	29,747
2007 - 2008	6,040	17.15%	29,178	82.85%	35,218
2008 - 2009	6,161	16.74%	30,651	83.26%	36,812

Sources: Annual Reports of the Indian Controller General of Patents, Designs, and Trade Marks 2001–2002 to 2008–2009.

Table VIII.2. The Value of Indian Software Exports

Year	Value
2003 – 2004	US\$12.9 billion
2004 – 2005	US\$17.7 billion
2005 – 2006	US\$23.6 billion
2006 – 2007	US\$31.3 billion
2007 – 2008	US\$40.4 billion
2008 – 2009	US\$47.1 billion
2009 – 2010 (estimated)	US\$49.7 billion

Sources: Annual Reports of the Indian Ministry of Communications and Information Technology 2004–2005 to 2009–2010.

Table VIII.3 Trademark Applications in India

Years	Trademark Applications				Total
	Domestic		Foreigners		
1997 - 1998	37,918	81.19%	8,784	18.81%	46,702
1998 - 1999	41,562	80.24%	10,234	19.76%	51,796
1999 - 2000	60,985	91.88%	5,393	8.12%	66,378
2000 - 2001	67,262	79.81%	17,013	20.19%	84,275
2001 - 2002	79,746	88.37%	10,490	11.63%	90,236
2002 - 2003	88,190	93.70%	5,930	6.30%	94,120
2003 - 2004	76,801	83.25%	15,450	16.75%	92,251
2004 - 2005	63,906	80.90%	15,090	19.10%	78,996
2005 - 2006	73,308	85.57%	12,361	14.43%	85,669
2006 - 2007	88,210	85.29%	15,209	14.71%	103,419
2007 - 2008	117,014	94.74%	6,500	5.26%	123,514
2008 - 2009	119,371	91.70%	10,801	8.30%	130,172

Sources: Annual Reports of the Indian Controller General of Patents, Designs, and Trade Marks 2001–2002 to 2008–2009.

Appendix IX Lok Sabha Party List during IP Policy Reform

Table IX.1 Tenth Lok Sabha Party List (20 June 1991–10 May 1996)

No.	Name of Party	Member
1	Congress (I)(Congress (I))	252
2	<i>Bharatiya Janata Party</i> (BJP)	121
3	<i>Janata Dal</i> (JD)	63
4	Communist Party of India (Marxist) (CPI(M))	36
5	Communist Party of India (CPI)	14
6	All India <i>Anna Dravida Munnetra Kazhagam</i> (AIADMK)	12
7	<i>Jharkhand Mukti Morcha</i> (JMM)	7
8	<i>Telugu Desam Party</i> (TDP)	7
9	T.D.(V)(TD(V))	6
10	Revolutionary Socialist Party (RSP)	5
11	<i>Janata Party</i> (Janata Party)	4
12	<i>Shiv Sena</i> (SS)	4
13	<i>Bahujan Samaj Party</i> (BSP)	3
14	Forward Bloc (Marxist)(FB(M))	3
15	Nominated (NM)	3
16	Muslim League (ML)	2
17	All India Forward Bloc (AIFB)	1
18	All India <i>Majlis-E-Ittehadul Muslimeen</i> (AIMIM)	1
19	<i>Asom Gana Parishad</i> (AGP)	1
20	Communist Party of India (Marxist-Lennist Liberation)(CPI(ML)(L))	1
21	Congress (S) (Congress(S))	1
22	Congress (Congress)	1
23	<i>Haryana Vikas Party</i> (HVP)	1
24	Independent (Ind.)	1
25	Kerala Congress (KEC)	1
26	Manipur People's Party (MPP)	1
27	N.P.C. (NPC)	1
28	<i>Samata Party</i> (SAP)	1
29	<i>Sikkim Sangram Parishad</i> (SSP)	1

Source: *Lok Sabha*

Table IX.2 Twelfth Lok Sabha Party List (10 March 1998–26 April 1999)

No.	Name of Party	Member
1	<i>Bharatiya Janata Party</i> (BJP)	183
2	Indian National Congress (INC)	142
3	Communist Party of India (Marxist)(CPI(M))	32
4	<i>Samajwadi Party</i> (SP)	20
5	All India <i>Anna Dravida Munnetra Kazhagam</i> (AIADMK)	18
6	<i>Rashtriya Janata Dal</i> (RJD)	17
7	<i>Samata Party</i> (SAP)	12
8	<i>Telugu Desam Party</i> (TDP)	12
9	<i>Biju Janata Dal</i> (BJD)	9
10	Communist Party of India (CPI)	9
11	<i>Shiromani Akali Dal</i> (SAD)	8
12	<i>Dravida Munnetra Kazhagam</i> (DMK)	6
13	Independent (Ind.)	6
14	<i>Janata Dal</i> (JD)	6
15	<i>Shiv Sena</i> (SS)	6
16	West Bengal Trinamul Congress (WBTC)	6
17	<i>Bahujan Samaj Party</i> (BSP)	5
18	Revolutionary Socialist Party (RSP)	5
19	<i>Haryana Lok Dal</i> (Rashtriya) (HLD(R))	4
20	<i>Pattali Makkal Katchi</i> (PMK)	4
21	Republican Party of India (RPI)	4
22	<i>Lok Shakti</i> (LS)	3
23	<i>Marumalarchi Dravida Munnetra Kazhagam</i> (MDMK)	3
24	Tamil Manila Congress (Moopanar) (TMC(M))	3
25	All India Forward Bloc (AIFB)	2
26	Arunachal Congress (AC)	2
27	Muslim League Kerala State Committee (MLKSC)	2
28	National Conference (NC)	2
29	Nominated (NM)	2
30	All India <i>Majlis-E-Ittehadul Muslimeen</i> (AIMIM)	1
31	All India <i>Rashtriya Janata Party</i> (AIRJP)	1
32	All India Trinamool Congress (AITC)	1
33	Autonomous State Demand Committee (ASDC)	1
34	Haryana Vikas Party (HVP)	1
35	Jammu and Kashmir National Conference (J&KNC)	1
36	<i>Janata Party</i> (Janata Party)	1
37	Kerala Congress (M) (KC(M))	1
38	Manipur State Congress Party (MSCP)	1
39	Peasants And Workers' Party of India (PAWPI)	1
40	<i>Samajwadi Janata Party</i> (Rashtriya) (SJP(R))	1
41	Sikkim Democratic Front (SDF)	1
42	United Minorities Front, Assam (UMFA)	1

Source: *Lok Sabha*

Table IX.3 Thirteenth Lok Sabha Party List (10 October 1999–06 February 2004)

No.	Name of Party	Member
1	<i>Bharatiya Janata Party</i> (BJP)	189
2	Indian National Congress (INC)	118
3	Communist Party of India (Marxist) (CPI(M))	35
4	<i>Telugu Desam Party</i> (TDP)	30
5	<i>Samajwadi Party</i> (SP)	29
6	<i>Bahujan Samaj Party</i> (BSP)	15
7	<i>Shiv Sena</i> (SS)	15
8	<i>Dravida Munnetra Kazhagam</i> (DMK)	12
9	<i>Samata Party</i> (Samata Party)	12
10	All India Anna Dravida Munnetra Kazhagam (AIADMK)	11
11	<i>Biju Janata Dal</i> (BJD)	11
12	All India Trinamool Congress (AITC)	9
13	Independent (Ind.)	7
14	Nationalist Congress Party (NCP)	7
15	<i>Janata Dal</i> (United) (JD(U))	6
16	Communist Party of India (CPI)	5
17	Indian National Lok Dal (INLD)	5
18	Jammu and Kashmir National Conference (J&KNC)	5
19	<i>Pattali Makkal Katchi</i> (PMK)	5
20	<i>Marumalarchi Dravida Munnetra Kazhagam</i> (MDMK)	4
21	<i>Rashtriya Janata Dal</i> (RJD)	4
22	<i>Rashtriya Janata Dal</i> (Democratic)(RJD (D))	3
23	Revolutionary Socialist Party (RSP)	3
24	<i>Akhil Bharatiya Lok Tantrik Congress</i> (ABLTC)	2
25	All India Forward Bloc (AIFB)	2
26	<i>Janata Dal</i> (JP) (JD (JP))	2
27	<i>Janata Dal</i> (Secular) (JD (S))	2
28	<i>Lok Jan Shakti Party</i> (LJSP)	2
29	Muslim League Kerala State Committee (MLKSC)	2
30	<i>Shiromani Akali Dal</i> (SAD)	2
31	All India <i>Majlis-E-Ittehadul Muslimeen</i> (AIMIM)	1
32	<i>Bharipa Bahujan Mahasangha</i> (BBM)	1
33	Communist Party of India (Marxist-Lennist Liberation) (CPI(ML)(L))	1
34	<i>Himachal Vikas Congress</i> (HVC)	1
35	Indian Federal Democratic Party (IFDP)	1
36	<i>Jharkhand Mukti Morcha</i> (JMM)	1
37	Kerala Congress (KEC)	1
38	<i>Lok Dal</i> (Secular)(LD(S))	1
39	Peasants And Workers` Party of India (PAWPI)	1
40	<i>Rashtriya Lok Dal</i> (RLD)	1
41	<i>Samajwadi Janata Party</i> (Rashtriya) (SJP(R))	1
42	<i>Shiromani Akali Dal</i> (Simranjit Singh Mann) (SAD(M))	1
43	Sikkim Democratic Front (SDF)	1

Source: *Lok Sabha*

Table IX.4 Fourteenth Lok Sabha Party List (17 May 2004–18 May 2009)

No.	Name of Party	Member
1	Indian National Congress (INC)	159
2	<i>Bharatiya Janata Party</i> (BJP)	147
3	Communist Party of India (Marxist) (CPI(M))	44
4	<i>Samajwadi Party</i> (SP)	40
5	<i>Rashtriya Janata Dal</i> (RJD)	25
6	<i>Bahujan Samaj Party</i> (BSP)	24
7	<i>Dravida Munnetra Kazhagam</i> (DMK)	16
8	<i>Shiv Sena</i> (SS)	14
9	Nationalist Congress Party (NCP)	12
10	<i>Biju Janata Dal</i> (BJD)	11
11	Communist Party of India (CPI)	11
12	<i>Janata Dal</i> (United) (JD(U))	10
13	<i>Shiromani Akali Dal</i> (SAD)	8
14	<i>Telangana Rashtra Samithi</i> (TRS)	7
15	Independent (Ind.)	6
16	<i>Jharkhand Mukti Morcha</i> (JMM)	6
17	<i>Pattali Makkal Katchi</i> (PMK)	6
18	<i>Telugu Desam Party</i> (TDP)	6
19	All India Forward Bloc (AIFB)	4
20	<i>Lok Jan Shakti Party</i> (LJSP)	4
21	<i>Marumalarchi Dravida Munnetra Kazhagam</i> (MDMK)	4
22	<i>Janata Dal</i> (Secular)(JD(S))	3
23	<i>Rashtriya Lok Dal</i> (RLD)	3
24	Revolutionary Socialist Party (RSP)	3
25	<i>Asom Gana Parishad</i> (AGP)	2
26	Jammu and Kashmir National Conference (J&KNC)	2
27	Kerala Congress (KEC)	2
28	-()	1
29	<i>All India Majlis-E-Ittehadul Muslimeen</i> (AIMIM)	1
30	All India Trinamool Congress (AITC)	1
31	<i>Bharatiya Navshakti Party</i> (BNP)	1
32	Jammu and Kashmir Peoples Democratic Party (J&KPDP)	1
33	Mizo National Front (MNF)	1
34	Muslim League Kerala State Committee (MLKSC)	1
35	Nagaland Peoples Front (NPF)	1
36	National Loktantrik Party (NLP)	1
37	Republican Party of India (A) (RPI (A))	1
38	<i>Samajwadi Janata Party</i> (Rashtriya)(SJP (R))	1
39	Sikkim Democratic Front (SDF)	1

Source: *Lok Sabha*

Appendix X – Interview List

1. Former Indonesian diplomat (Jakarta)
2. Indonesian NGO representative (Jakarta)
3. The Indonesian Ministry of Research and Technology – 2 government officials (Jakarta)
4. The Indonesian Institute of Sciences – 4 researchers (Jakarta)
5. Government official of the Indonesian Ministry of Foreign Affairs (Jakarta)
6. WTO Intellectual Property Division – 3 Counsellors (Geneva)
7. Permanent mission of Indonesia to the WTO – 2 representatives (Geneva)
8. Permanent mission of India to the WTO representative (Geneva)
9. Geneva-based journalist dealing with IP issues (Geneva)
10. Geneva-based research institutes dealing with IP issues and developing countries – 2 representatives (Geneva)
11. Geneva-based international organisation representative (Geneva)
12. Permanent mission of the United States to the WTO representative (Geneva)
13. Former Indian government official of the Ministry of Industry and Commerce (Geneva)

Total interviews: 21

List of References

- Abbot, F. M. (2000) TRIPs in Seattle: The Not-So-Surprising Failure and the Future of the TRIPs Agenda. *Berkeley Journal of International Law* (18), pp.165–79.
- Adler, E. (2002) Constructivism and International Relations. In: Carlsnaes, W., Risse, T. and Simmons, B. A. eds. *Handbook of International Relations*. London, Sage Publications, Ltd., pp.95–118.
- Albania, et al. (2008). Draft Modalities for TRIPs Related Issues Communication from Albania, Brazil, China, Colombia, Croatia, Ecuador, the European Communities, Georgia, Iceland, India, Indonesia, the Kyrgyz Republic, Liechtenstein, the Former Yugoslav Republic of Macedonia, Moldova, Pakistan, Peru, Sri Lanka, Switzerland, Thailand, Turkey, the ACP Group and the African Group. WTO Document TN/C/W/52, 19 July, TN/C/W/52/Add.1, 24 July, TN/C/W/52/Add.2, 25 July, TN/C/W/52/Add.3, 29 July.
- Antons, C. (1991) Intellectual Property Law in ASEAN Countries: A Survey. *European Intellectual Property Review*, 13 (3), pp.78–84.
- Antons, C. (2000) *Intellectual Property Law in Indonesia*. The Hague, Kluwer Law International.
- Antons, C. (2003a) Legal Culture and History of Law in Asia. In: Heath, C. ed. *Intellectual Property Law in Asia*. The Hague, Kluwer Law International, pp.13–35.
- Antons, C. (2003b) Indonesia. In: Heath, C. ed. *Intellectual Property Law in Asia*. The Hague, Kluwer Law International, pp.391–428.
- Antons, C. (2004a) Legal Culture and Its Impact on Regional Harmonisation. In: Antons, C., Blakeney, M., and Heath, C. eds. *Intellectual Property Harmonisation within ASEAN and APEC*. The Hague, Kluwer Law International, pp.29–36.
- Antons, C. (2004b) Harmonisation and Selective Adaptation as Intellectual Property Policies in Asia. In: Antons, C., Blakeney, M., and Heath, C. eds. *Intellectual Property Harmonisation within ASEAN and APEC*. The Hague, Kluwer Law International, pp.109–21.
- Antons, C. (2006) Intellectual Property Law in Southeast Asia: Recent Legislative and Institutional Developments. *Journal of Information, Law and Technology* [Internet], (1) Special Issue. Available from: http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2006_1/antons/antons.pdf [Accessed 4 May 2009].
- Antons, C. (2008a) The Recognition and Protection of Well-known Trade Marks in Indonesia. *Journal of Intellectual Property Law and Practice*, 3 (3), pp.185–93.
- Antons, C. (2008b) Copyright Law Reform and the Information Society in Indonesia. In: Fitzgerald, B., et al., eds. *Copyright Law, Digital Content and the Internet in the Asia-Pacific* [Internet]. Sydney, Sydney University Press, pp.235–55. Available from:

<http://ses.library.usyd.edu.au/bitstream/2123/21358/1/copyrightAsiaPacific_Ch12.pdf> [Accessed 29 April 2009].

- Antons, C. (2009) Indonesia. In: Goldstein, P. and Straus, J. eds. *Intellectual Property in Asia Law, Economics, History and Politics*. Heidelberg, Springer, pp.87–128.
- Antons, C., M. Blakeney, and C. Heath, eds. (2004) *Intellectual Property Harmonisation within ASEAN and APEC*. The Hague, Kluwer Law International.
- Argentina, et al. (1990) Communication from Argentina, Brazil, Chile, China, Colombia, Cuba, Egypt, India, Nigeria, Peru, Tanzania, and Uruguay. GATT Document MTN.GNG/NG11/W/71, 14 May.
- Arup, C. (2004) TRIPs Forum: A Matter of Interpretation. [Internet Monograph]. Available from: <http://eprints.vu.edu.au/113/1/conf_tripsforum2004_arup.pdf> [Accessed 23 February 2011].
- ASEAN. (1986) Statement by H.E. Mr. Poedji Koentarlo Ambassador, Permanent Representative of Indonesia. GATT Document SR.42/ST/6, 16 December, SR.42/ST/6/Add.1, 22 December.
- ASEAN. (1987) ASEAN Statement by Prof. Dr. Suhadi Mangkusuwondo Director-General of Research and Development Department of Trade of Indonesia. GATT Document SR.43/ST/23, 23 December.
- ASEAN. (1989) Statement by H.E. Mr. Poerwanto - Ambassador, Deputy Permanent Representative of Indonesia. GATT Document SR.48/ST/8, 18 December.
- ASEAN. (1990) Statement by H.E. Dr. Arifin M. Siregar, Minister of Trade of Indonesia. GATT Document MTN.TNC/MIN(90)/ST/1, 3 December.
- Aswicahyono, H., Bird, K., and Hill, H. (2008) Making Economic Policy in Weak, Democratic, Post-Crisis States: An Indonesian Case Study. CCAS Working Paper [Internet]. No. 15 August. Available from: <<http://ccas.doshisha.ac.jp/japanese/publications/WP15hill.pdf>> [Accessed 19 July 2010].
- Australia, et al. (1990) Transitional Arrangements in a TRIPs Agreement Communication from a Number of Participants Australia, Hong Kong, New Zealand, and the Nordic Countries. GATT Document MTN.GNG/NG11/W/69, 30 March.
- Axelrod, R. and Keohane, R. O. (1985) Achieving Cooperation under Anarchy: Strategies and Institutions. *World Politics*, 38 (1), pp.226–54.
- Baldia, S. (2003) India. In: Heath, C. ed. *Intellectual Property Law in Asia*. The Hague, Kluwer Law International, pp.431–69.
- Bass, N. A. (2002/2003) Implications of the TRIPs Agreement for Developing Countries: Pharmaceutical Patent Law in Brazil and South Africa in the 21st Century. *George Washington International Law Review*, 34, pp.191-222.

- Bayard, T. O. and Elliott, K. A. (1994). *Reciprocity and Retaliation in U.S. Trade Policy*. Washington D.C, Institute for International Economics.
- Berne Convention for the Protection of Literary and Artistic Works 9 September 1886 as amended 28 September 1979 [Internet]. Geneva, WIPO. Available from: <http://www.wipo.int/export/sites/www/treaties/en/ip/berne/pdf/trtdocs_wo001.pdf> [Accessed 25 February 2011].
- Bird, K., Hill, H. and Cuthbertson, S. (2008) Making Trade Policy in a New Democracy after a Deep Crisis: Indonesia. CCAS Working Paper [Internet]. No. 14 May. Available from: <<http://ccas.doshisha.ac.jp/eng/Epublications/eWP14hill.pdf>> [Accessed 19 July 2010].
- Blakeney, M. (1996) The Impact of the TRIPs Agreement in the Asia Pacific Region. *European Intellectual Property Review*, 18 (10), pp.544–54.
- Blakeney, M. (2004) TRIPs after Doha Ministerial Declaration. In: Antons, C., Blakeney, M., and Heath, C. eds. *Intellectual Property Harmonisation within ASEAN and APEC*. The Hague, Kluwer Law International, pp.11–28.
- Blakeney, M. (2006) A Critical Analysis of the TRIPS Agreement. In: Pugatch, M. P. ed. *The Intellectual Property Debate Perspectives from Law, Economics and Political Economy*. Cheltenham, Edward Elgar, pp.17–32.
- Bolivia, et al. (2005) The Relationship between the TRIPs Agreement and the Convention on Biological Diversity (CBD) and the Protection of Traditional Knowledge – Technical Observations on the United States Submission IP/C/W449 by Bolivia, Brazil, Colombia, Cuba, India, and Pakistan. WTO Document IP/C/W/459, 18 November.
- Botoy, I. E. (2004) From the Paris Convention to the TRIPs Agreement a One-Hundred-and-Twelve-Year Transitional Period for the Industrialised Countries. *Journal of World Intellectual Property*, 7 (1), pp.115–30.
- Braga, C. A. P. (1996) Trade-related Intellectual Property Issues: the Uruguay Round Agreement and Its Economic Implications. In: Martin, W. and Winters, L. A. eds. *The Uruguay Round and the Developing Countries*. Cambridge, Cambridge University Press, pp.341–79.
- Braga, C. A. P. and Fink, C. (1998) Reforming Intellectual Property Regimes: Challenges for Developing Countries. *Journal of International Economic Law*, 1 (4), pp.537–54.
- Brazil. (1988) Submission from Brazil. GATT Document MTN.GNG/NG11/W/30, 31 October.
- Burnell, P. and Randall, V. eds. (2005) *Politics in the Developing World*. Oxford, Oxford University Press.
- Butt, S. (2008) Intellectual Property in Indonesia: A Problematic Legal Transplant. In: Lindsey, T. ed. *Indonesia Law and Society*. 2nd ed. Sydney, the Federation Press, pp.620–35.

- Cairns Group. (1989) Comprehensive Proposal for the Long-Term Reform of Agricultural Trade - Submission by the Cairns Group Compromising Argentina, Australia, Brazil, Canada, Chile, Colombia, Hungary, Indonesia, Malaysia, New Zealand, Philippines, Thailand and Uruguay. GATT Document MTN.GNG/NG5/W/128, 27 November.
- Capling, A. (2004) Trading Ideas: the Politics of Intellectual Property. In: Hocking, B. and McGuire, S. eds. *Trade Politics*. 2nd ed. London, Routledge, pp.179–93.
- Carlsnaes, W., Risse, T. and Simmons, B. A. eds. (2002) *Handbook of International Relations*. London, Sage Publications, Ltd.
- Cattaneo, O. (2000) The Interpretation of the TRIPS Agreement Considerations for the WTO Panels and Appellate Body. *The Journal of World Intellectual Property*, 3 (5), pp.627–81.
- CEAS. (2000) Study on the Relationship between the Agreement on TRIPS and Biodiversity Related Issues Final Report [Internet]. Centre for European Agricultural Studies Consultants (Wye), Ltd. Available from: <http://trade.ec.europa.eu/doclib/docs/2003/september/tradoc_111143.pdf> [Accessed 23 February 2011].
- CENTAD. (2007a) Interactive Session on Mashelkar Committee Report on Patent Laws [Internet]. New Delhi, Centre for Trade and Development. Available from: <http://centad.org/events_17.asp> [Accessed 28 September 2010].
- CENTAD. (2007b) Patents Committee Recommendations Generate Debate [Internet]. New Delhi, Centre for Trade and Development. Available from: <http://centad.org/tradenews_215.asp> [Accessed 28 September 2010].
- Chang, H. J. (2001) Intellectual Property Rights and Economic Development: Historical Lessons and Emerging Issues. *Journal of Human Development*, 2, pp.287–309.
- Chaudhuri, S. (2002) TRIPs Agreement and Amendment of Patents Act in India. *Economic and Political Weekly*, 37 (32), August 10, pp.3354–60.
- Chaudhuri, S. (2005) TRIPs and Changes in Pharmaceutical Patents Regime in India. *Indian Institute of Management Calcutta Working Paper* [Internet], No. 535. Available from: <https://www.who.int/hiv/amds/IDA_India-Patent-amendments-Sudip.pdf> [Accessed 30 September 2010].
- Chayes, A., Chayes, A. H., and Mitchell, R. B. (1998) Managing Compliance: A Comparative Perspective. In Weiss, E. B. and Jacobson, H. K. eds. *Engaging Countries Strengthening Compliance with International Environmental Accords*. Massachusetts, the MIT Press, pp.39–62.
- Checkel, J. T. (1997) International Norms and Domestic Politics: Bridging the Rationalist-Constructivist Divide. *European Journal of International Relations*, 3 (4), pp.473–95.
- Checkel, J. T. (1998) The Constructivist Turn in International Relations Theory. *World Politics*, 50 (2), pp.324–48.

- Checkel, J. T. (1999) Norms, Institutions, and National Identity in Contemporary Europe. *International Studies Quarterly*, 43, pp.83–114.
- Checkel, J. T. (2001) Why Comply? Constructivism, Social Norms and the Study of International Institutions. *International Organization*, 55 (3), pp.553-88.
- Chowdhury, A. R. (2008) The Future of Copyrights in India. *Journal of Intellectual Property Law and Practice* 3 (2), pp.102–14.
- Cortell, A. P. and Davis, J. W. Jr. (1996) How do International Institutions Matter? The Domestic Impact of International Rules and Norms. *International Studies Quarterly* 40, pp.451–78.
- Cortell, A. P. and Davis, J. W. Jr. (2000) Understanding the Domestic Impact of International Norms: A Research Agenda. *International Studies Review*, 2 (1), pp.65–87.
- Cortell, A. P. and Davis, J. W. Jr. (2005) When Norms Clash: International Norms, Domestic Practices, and Japan's Internalisation of GATT/WTO. *Review of International Studies*, 31, pp.3–25.
- CPI (M). (2004) Left Parties on Amendments to the Indian Patent Act [Internet], 20 December. New Delhi, Communist Party of India (Marxist) CPI (M). Available from: <http://www.cpim.org/upa/2004_patent.pdf> [Accessed 28 September 2010].
- Cullet, P. (2002a) The Patents Amendment Act and Access to Medicines. *The Hindu* [Internet], 27 May. Available from <<http://www.hindu.com/thehindu/biz/2002/05/27/stories/2002052700040200.htm>> [Accessed 24 June 2009].
- Cullet, P. (2002b) Amended Patents Act and Access to Medicines after Doha. *Economic and Political Weekly XXXVII* (24), 15 June, p.2278.
- Cutler, A. C. Haufler, V. and Porter T. eds. (1999) *Private Authority and International Affairs*, Albany, New York: State University of New York Press (SUNY).
- Dai, X. (2005) Why Comply? The Domestic Constituency Mechanism. *International Organization*, 59 (2), Spring, pp.363-398.
- Dai, X. (2007) *International Institutions and National Policies*. Cambridge, Cambridge University Press.
- Das, D. K. (2005) Intellectual Property Rights and the Doha Round. *The Journal of the World Intellectual Property*, 8 (1), November, pp.33–52.
- De Vaus, D. (2001) *Research Design in Social Research*. London, Sage Publications Ltd.
- Deere, C. (2006) The Implementation Game: Developing Countries and the Politics of TRIPs (1995–2006). Ph.D. thesis, University of Oxford.

- Deere, C. (2008) *The Implementation Game: The TRIPs Agreement and the Global Politics of Intellectual Property Reform in Developing Countries*. Oxford, Oxford University Press.
- Djaic, D. (2000) Why does the Enforcement of Indonesia's Intellectual Property Laws Continue to be a Problem? *European Intellectual Property Review*, 22 (10), pp.454–69.
- Drahos, P. (2002a) Developing Countries and International Intellectual Property Standard-Setting. *The Journal of World Intellectual Property*, 5 (5), September, pp.765–89.
- Drahos, P. (2002b) Negotiating Intellectual Property Rights: Between Coercion and Dialogue. In: Drahos, P. and Mayne, R. eds. *Global Intellectual Property Rights: Knowledge, Access and Development*. London, Palgrave Macmillan, pp.161–82.
- Drahos, P. (2005) Intellectual Property Rights in the Knowledge Economy. In: Rooney, D., Hearn, G., and Ninan, A. eds. *Handbook on the Knowledge Economy*. Cheltenham, Edward Elgar Publishing, pp.139–51.
- Drahos, P. and Braithwaite, J. (2002) *Information Feudalism Who Owns the Knowledge Economy?* London, Earthscan.
- Drahos, P. and Mayne, R. eds. (2002) *Global Intellectual Property Rights: Knowledge, Access and Development*. London, Palgrave Macmillan.
- Dutfield, G. (2006a) 'To copy is to steal': TRIPs, (Un)free Trade Agreements and the New Intellectual Property Fundamentalism. *The Journal of Information Law and Technology* [Internet] (1). Available from: <http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2006_1/dutfield> [Accessed 10 April 2008].
- Dutfield, G. (2006b) Protecting Traditional Knowledge: Pathways to the Future. *Issue Paper No. 16*. Geneva, International Centre for Trade and Sustainable Development (ICTSD).
- Emmert, F. (1990) Intellectual Property in the Uruguay Round Negotiating Strategies of the Western Industrialized Countries. *Michigan Journal of International Law* 11, Summer, pp.1317–99.
- Eren-Vural, I. (2007) Domestic Contours of Global Regulation: Understanding the Policy Change on Pharmaceutical Patents in India and Turkey. *Review of International Political Economy*, 14 (1), pp.105–42.
- European Union. (1987) Guidelines Proposed by the European Community for the Negotiations on Trade-related Aspects of Intellectual Property Rights. GATT Document MTN.GNG/NG11/W/16, 20 November.
- European Union. (1988) Guidelines and Objectives Proposed by the European Community for the Negotiations on Trade Related Aspects of Substantive Standards of Intellectual Property Rights. GATT Document MTN.GNG/NG11/W/26, 7 July.

- Fearon, J. and Wendt A. (2002) Rationalism V. Constructivism: A Skeptical View. In: Carlsnaes, W., Risse, T., and Simmons, B. A. eds. *Handbook of International Relations*. London, Sage Publications, Ltd, pp.52–72.
- Finger, M. J. and Schuler, P. (2000) Implementation of Uruguay Commitments: the Development Challenge. *The World Economy*, 23 (4), April, pp.511–25.
- Finnemore, M. (1996) *National Interests in International Society*. Ithaca, Cornell University Press.
- Finnemore, M. and Sikkink, K. (1998) International Norm Dynamics and Political Change. *International Organization*, 52 (4), Autumn, pp.887–917.
- Freeman, R. (2006) Learning in Public Policy. In: Moran, M., Rein, M. and Goodin, R. E. eds. *The Oxford Handbook of Public Policy*. Oxford, Oxford University Press, pp.367–88.
- Funston, J. ed. (2001) *Government and Politics in Southeast Asia*. Singapore, Institute of Southeast Asian Studies.
- Ganguli, P. (1999) Towards TRIPs Compliance in India: the Patents Amendment Act 1999 and Implications. *World Patent Information* 21, pp.279–87.
- Garde, T. (2009) India. In: Goldstein, P. and Straus, J. eds. *Intellectual Property in Asia Law, Economics, History and Politics*. Heidelberg, Springer, pp.55–86.
- GATRA. (2002) Indonesia as Cassette and CD Pirates [in Indonesian]. *GATRA* [Internet], 7 February. Available from <http://www.gatra.com/2002-02-07/versi_cetak.php?id=15192> [Accessed 11 August 2010].
- Gervais, D. (2003) *The TRIPs Agreement Drafting History and Analysis*. 2nd ed. London, Sweet and Maxwell.
- Gielen, C. (1988) New Copyright Law of Indonesia – Implications for Foreign Investment. *European Intellectual Property Review*, 10 (4), pp.101–7.
- Gilpin, R. (2001) *Global Political Economy Understanding the International Economic Order*. New Jersey, Princeton University Press.
- Goldstein, J. et al. (2000) Introduction: Legalization and World Politics. *International Organization*, 54 (3), pp.385–99.
- Goldstein, P. and Straus J. eds. (2009) *Intellectual Property in Asia Law, Economics, History and Politics*. Heidelberg: Springer.
- Golikeri, P. (2009) Mashelkar Report Draws Health Groups’ Ire Again. *Daily News and Analysis* [Internet], 17 August. Available from: <http://www.dnaindia.com/money/report_mashelkar-report-draws-health-groups-ire-again_1282911> [Accessed 28 September 2010].
- Gopakumar K. M. and Unni, V. K. (2003) Perspectives on Copyrights the ‘Kharisma’ Controversy. *Economic and Political Weekly* 38 (28), July 12–18, pp.2935–36.

- Gopakumar, K. M. (n. d.) Mashelkar Committee Report: A Critique [Internet]. New Delhi, Centre for Trade and Development. Available from:
<http://www.centad.org/focus_33.asp> [Accessed 28 September 2010].
- Gourevitch, P. (2002) Domestic Politics and International Relations. In: Carlsnaes, W., Risse, T. and Simmons, B. A. eds. *Handbook of International Relations*. London, Sage Publications, Ltd., pp.309–28.
- Grieco, J. M. (1988) Anarchy and the Limits of Cooperation: A Realist Critique of the Newest Liberal Institutionalism. *International Organization*, 42 (3), Summer, pp.485–507.
- Grier, J. H. (2005) Section 301 of the 1974 Trade Act [Internet]. Washington DC, US Department of Commerce. Available from:
<<http://www.osec.doc.gov/ogc/occic/301.htm>> [Accessed 8 November 2008].
- Groombridge, M. A. (1999) The TRIPs Trade-Off Reconciling Competing Interests in the Millennium Round. *The Journal of World Intellectual Property*, 2 (6), pp.991-1013.
- Guisinger, S. (1991) Foreign Direct Investment Flows in East and Southeast Asia. *ASEAN Economic Bulletin*, 8 (1), July, pp.29–46.
- Gunadi, S. (2003) Building a Community with Intellectual Property Rights' Awareness [in Indonesian]. *Kompas* [Internet], 11 August. Available from:
<<http://www.haki.lipi.go.id>> [Accessed 24 April 2009].
- Gupta, R. (2004) TRIPs Compliance: Dealing with the Consequences of Drug Patents in India. *Houston Journal of International Law*, 26 (3), pp.599–648.
- Gutowski, R. J. (1999) The Marriage of Intellectual Property and International Trade in the TRIPs Agreement: Strange Bedfellows or a Match Made in Heaven. *Buffalo Law Review*, 47, pp.713–62.
- Guzman, A. T. (2002) A Compliance-Based Theory of International Law. *California Law Review*, 90, pp.1823–87.
- Guzman, A. T. (2008) *How International Law Works A Rational Choice Theory*. Oxford, Oxford University Press.
- Guzman, A.T. (2006) The Limits of International Law: Reputation and International Law. *The Georgia Journal of International and Comparative Law*, Winter 34, pp.379–90.
- Hadiz, R. V. and Robison, R. (2005) Neo-liberal Reforms and Illiberal Consolidations: The Indonesian Paradox. *Journal of Development Studies*, 41 (2), February, pp.220–41.
- Hardgrave, R. L. Jr. and Kochanek, S. A. (1993) *India Government and Politics in a Developing Nation*. 5th ed. Forth Worth, Harcourt Brace College Publishers.
- Hardgrave, R. L. Jr. and Kochanek, S. A. (2008). *India Government and Politics in a Developing Nation*. 7th ed. Boston, Thomson Wadsworth.

- Haryanto, I. (n. d.) The Monopoly of Knowledge [in Indonesian]. *Media Kerja Budaya* [Internet]. Available from <<http://www.haki.lipi.go.id>> [Accessed 25 April 2009].
- Heath, C. (2003) Intellectual Property Rights in Asia. In: Heath, C. ed. *Intellectual Property Law in Asia*. The Hague, Kluwer Law International, pp.3–9.
- Heath, C. ed. (2003) *Intellectual Property Law in Asia*. The Hague, Kluwer Law International.
- Helfer, L. R. (2004) Regime Shifting: The TRIPs Agreement and New Dynamics of International Intellectual Property Lawmaking. *The Yale Journal of International Law*, 29 (1), pp.1–84.
- Henderson, E. (1997) TRIPs and the Third World: the Example of Pharmaceutical Patents in India. *European Intellectual Property Review*, 19 (11), pp.651–63.
- Higgot, R. A., Underhill, G. R. D., and Bieler, A. eds. (2000) *Non-State Actors and Authority in the Global System*. London, Routledge.
- Hindley, B. (2006) The TRIPs Agreement: The Damage to the WTO. In: Pugatch, M. P. ed. *The Intellectual Property Debate Perspectives from Law, Economics and Political Economy*. Cheltenham, Edward Elgar, pp.33–43.
- Hocking, B. and McGuire, S. eds. (2004) *Trade Politics*. 2nd ed. London, Routledge.
- Hoekman, B. M. and Kostecki, M. M. (2001) *The Political Economy of the World Trading System*. 2nd ed. Oxford, Oxford University Press.
- Hurd, I. (1999) Legitimacy and Authority in International Politics. *International Organization*, 53 (2), Spring, pp.379–408.
- ICAR. (n. d.) Indian Council of Agricultural Research [Internet]. New Delhi, ICAR. Available from: <<http://www.icar.org.in/>> [Accessed 19 September 2010].
- ICTSD. (2009) Fight over Generic Drug Seizure Takes Centre Stage at TRIPs Council Meeting. *Intellectual Property Programme* [Internet], 13 (9), 11 March. Geneva, International Centre for Trade and Sustainable Development. Available from: <<http://ictsd.org/i/news/bridgesweekly/42823/>> [Accessed 11 December 2009].
- ICTSD. (2010) CBD Reaches Agreement on Access and Benefit Sharing, But Some Questions Its Effectiveness. *Bridges Weekly Trade News Digest* [Internet], 14 (38), 3 November. Geneva, International Centre for Trade and Sustainable Development. Available from: <<http://ictsd.org/i/news/bridgesweekly/92903/>> [Accessed 23 February 2011].
- IDMA. (n. d.) Indian Drug Manufacturers' Association [Internet]. Mumbai, IDMA. Available from: <<http://www.idma-assn.org>> [Accessed 25 June 2009].
- IIPA. (2001a) International Intellectual Property Alliance 2001 Special 301 Report India [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2001/2001SPEC301INDIA.pdf>> [Accessed 19 September 2010].

- IIPA. (2001b) International Intellectual Property Alliance 2001 Special 301 Report Indonesia [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2001/2001SPEC301INDONESIA.pdf>> [Accessed 6 February 2011]
- IIPA. (2002a) International Intellectual Property Alliance 2002 Special 301 Report India [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2002/2002SPEC301INDIA.pdf>> [Accessed 19 September 2010].
- IIPA. (2002b) International Intellectual Property Alliance 2002 Special 301 Report Indonesia [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2002/2002SPEC301INDONESIA.pdf>> [Accessed 6 February 2011].
- IIPA. (2003a) International Intellectual Property Alliance 2003 Special 301 Report India [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2003/2003SPEC301INDIA.pdf>> [Accessed 19 September 2010].
- IIPA. (2003b) International Intellectual Property Alliance 2003 Special 301 Report Indonesia [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2003/2003SPEC301INDONESIA.pdf>> [Accessed 6 February 2011].
- IIPA. (2004a) International Intellectual Property Alliance 2004 Special 301 Report India [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2004/2004SPEC301INDIA.pdf>> [Accessed 19 September 2010].
- IIPA. (2004b) International Intellectual Property Alliance 2004 Special 301 Report Indonesia [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2004/2004SPEC301INDONESIA.pdf>> [Accessed 6 February 2011].
- IIPA. (2005a) International Intellectual Property Alliance 2005 Special 301 Report India [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2005/2005SPEC301INDIA.pdf>> [Accessed 19 September 2010].
- IIPA. (2005b) International Intellectual Property Alliance 2005 Special 301 Report Indonesia [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2004/2004SPEC301INDONESIA.pdf>> [Accessed 6 February 2011].
- IIPA. (2006a) International Intellectual Property Alliance 2006 Special 301 Report India [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2006/2006SPEC301INDIA.pdf>> [Accessed 19 September 2010].
- IIPA. (2006b) International Intellectual Property Alliance 2006 Special 301 Report Indonesia [Internet]. Washington DC, International Intellectual Property Alliance.

Available from: <<http://www.iipa.com/rbc/2006/2006SPEC301INDONESIA.pdf>> [Accessed 6 February 2011].

IIPA. (2007a) International Intellectual Property Alliance 2007 Special 301 Report India [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2007/2007SPEC301INDIA.pdf>> [Accessed 19 September 2010].

IIPA. (2007b) International Intellectual Property Alliance 2007 Special 301 Report Indonesia [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2007/2007SPEC301INDONESIA.pdf>> [Accessed 6 February 2011].

IIPA. (2008a) International Intellectual Property Alliance 2008 Special 301 Report India [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2008/2008SPEC301INDIA.pdf>> [Accessed 19 September 2010].

IIPA. (2008b) International Intellectual Property Alliance 2008 Special 301 Report Indonesia [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2008/2008SPEC301INDONESIA.pdf>> [Accessed 6 February 2011].

IIPA. (2009a) India–International Intellectual Property Alliance (IIPA) 2009 Special 301 Report on Copyright Protection and Enforcement [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2009/2009SPEC301INDIA.pdf>> [Accessed 19 September 2010].

IIPA. (2009b) Indonesia–International Intellectual Property Alliance (IIPA) 2009 Special 301 Report on Copyright Protection and Enforcement [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2009/2009SPEC301INDONESIA.pdf>> [Accessed 6 February 2011].

IIPA. (2010a) India–International Intellectual Property Alliance (IIPA) 2010 Special 301 Report on Copyright Protection and Enforcement [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2010/2010SPEC301INDIA.pdf>> [Accessed 19 September 2010].

IIPA. (2010b) Indonesia–International Intellectual Property Alliance (IIPA) 2010 Special 301 Report on Copyright Protection and Enforcement [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/rbc/2010/2010SPEC301INDONESIA.pdf>> [Accessed 6 February 2011].

IIPA. (n. d.) Description of the IIPA [Internet]. Washington DC, International Intellectual Property Alliance. Available from: <<http://www.iipa.com/aboutiipa.html>> [Accessed 21 February 2011].

- Imran, A. (2003) Promoting Creativity in Consumptive Culture through Intellectual Property Rights [in Indonesian]. *Pikiran Rakyat* [Internet], 21 August. Available from <<http://www.haki.lipi.go.id>> [Accessed 24 April 2009].
- India. (1989) Standards and Principles Concerning the Availability Scope and Use of Trade-Related Intellectual Property Rights Communication from India. GATT document MTN.GNG/NG11/W/37, 10 July.
- Indian Controller General of Patents, Designs, and Trade Marks. (2002) Annual Report of the Controller General of Patent, Designs, and Trade Marks 2001–2002 [Internet]. Mumbai, Indian Controller General of Patent, Designs, and Trade Marks. Available from: <<http://ipindia.nic.in/>> [Accessed 23 February 2011].
- Indian Controller General of Patents, Designs, and Trade Marks. (2003) Annual Report of the Controller General of Patent, Designs, and Trade Marks 2002–2003 [Internet]. Mumbai, Indian Controller General of Patent, Designs, and Trade Marks. Available from: <http://ipindia.gov.in/cgpdmt/annual_report_2002_2003.pdf> [Accessed 28 April 2010].
- Indian Controller General of Patents, Designs, and Trade Marks. (2004) Annual Report of the Controller General of Patent, Designs, and Trade Marks 2003–2004 [Internet]. Mumbai, Indian Controller General of Patent, Designs, and Trade Marks. Available from: <http://ipindia.gov.in/cgpdmt/annual_report_2003_2004.pdf> [Accessed 28 April 2010].
- Indian Controller General of Patents, Designs, and Trade Marks. (2005) Annual Report of the Controller General of Patent, Designs, and Trade Marks 2004–2005 [Internet]. Mumbai, Indian Controller General of Patent, Designs, and Trade Marks. Available from: <<http://ipindia.nic.in/>> [Accessed 23 February 2011].
- Indian Controller General of Patents, Designs, and Trade Marks. (2006) Annual Report of the Controller General of Patent, Designs, and Trade Marks 2005–2006 [Internet]. Mumbai, Indian Controller General of Patent, Designs, and Trade Marks. Available from: <http://ipindia.gov.in/cgpdmt/AnnualReport_2005_2006.pdf> [Accessed 28 April 2010].
- Indian Controller General of Patents, Designs, and Trade Marks. (2007) Annual Report of the Controller General of Patent, Designs, and Trade Marks 2006–2007 [Internet]. Mumbai, Indian Controller General of Patent, Designs, and Trade Marks. Available from: <http://ipindia.gov.in/cgpdmt/AnnualReport_English_2006-2007.pdf> [Accessed 28 April 2010].
- Indian Controller General of Patents, Designs, and Trade Marks. (2008) Annual Report of the Controller General of Patent, Designs, and Trade Marks 2007–2008 [Internet]. Mumbai, Indian Controller General of Patent, Designs, and Trade Marks. Available from: <http://ipindia.gov.in/cgpdmt/AnnualReport_English_2007-2008.pdf> [Accessed 28 April 2010].
- Indian Copyright Act No.14 of 1957. New Delhi, Indian Copyright Office. Available from: <<http://copyright.gov.in/>> [Accessed 19 September 2010].

- Indian Copyright (Amendment) Act No. 38 of 1994. New Delhi, Indian Copyright Office. Available from: <<http://copyright.gov.in/>> [Accessed 19 September 2010].
- Indian Copyright (Amendment) Act No. 49 of 1999. New Delhi, Indian Copyright Office. Available from: <<http://copyright.gov.in/>> [Accessed 19 September 2010].
- Indian Copyright Office. (1999) Study on Copyright Piracy in India [Internet]. New Delhi, Indian Ministry of Human Resource Development. Available from: <<http://copyright.gov.in/Documents/STUDY%20ON%20COPYRIGHT%20PIRACY%20IN%20INDIA.pdf>> [Accessed 23 February 2011].
- Indian Copyright Office. (n. d. (a)) Indian Copyright Office [Internet]. New Delhi, Indian Ministry of Human Resource Development. Available from: <<http://copyright.gov.in/>> [Accessed 28 April 2010]
- Indian Copyright Office. (n. d. (b)) A Hand Book of Copyright Law [Internet]. New Delhi, Indian Ministry of Human Resource Development. Available from: <<http://copyright.gov.in/Documents/handbook.html>> [Accessed 23 February 2011].
- Indian Department of Information Technology. (n. d. (a)) Annual Report 2004–2005 [Internet]. New Delhi, Indian Ministry of Communications and Information Technology. Available from: <<http://www.mit.gov.in/document-publications>> [Accessed 25 January 2011].
- Indian Department of Information Technology. (n. d. (b)) Annual Report 2005–2006 [Internet]. New Delhi, Indian Ministry of Communications and Information Technology. Available from: <<http://www.mit.gov.in/document-publications>> [Accessed 25 January 2011].
- Indian Department of Information Technology. (n. d. (c)) Annual Report 2006–2007 [Internet]. New Delhi, Indian Ministry of Communications and Information Technology. Available from: <<http://www.mit.gov.in/document-publications>> [Accessed 25 January 2011].
- Indian Department of Information Technology. (n. d. (d)) Annual Report 2007–2008 [Internet]. New Delhi, Indian Ministry of Communications and Information Technology. Available from: <<http://www.mit.gov.in/document-publications>> [Accessed 25 January 2011].
- Indian Department of Information Technology. (n. d. (e)) Annual Report 2008–2009 [Internet]. New Delhi, Indian Ministry of Communications and Information Technology. Available from: <<http://www.mit.gov.in/document-publications>> [Accessed 25 January 2011].
- Indian Department of Information Technology. (n. d. (f)) Annual Report 2009–2010 [Internet]. New Delhi, Indian Ministry of Communications and Information Technology. Available from: <<http://www.mit.gov.in/document-publications>> [Accessed 25 January 2011].
- Indian Patents Act No. 39 of 1970 [Internet]. Mumbai, Indian Controller General of Patents, Designs, and Trade Marks. Available from: <<http://ipindia.nic.in/ipr/patent/patent.htm>> [Accessed 02 September 2010].

- Indian Patents (First Amendment) Act No. 17 of 1999 [Internet]. Mumbai, Indian Controller General of Patents, Designs, and Trade Marks. Available from: <<http://ipindia.nic.in/ipr/patent/patent.htm>> [Accessed 02 September 2010].
- Indian Patents (Second Amendment) Act No. 38 of 2002 [Internet]. Mumbai, Indian Controller General of Patents, Designs, and Trade Marks. Available from: <<http://ipindia.nic.in/ipr/patent/patent.htm>> [Accessed 02 September 2010].
- Indian Patents (Third Amendment) Act No. 15 of 2005 [Internet]. Mumbai, Indian Controller General of Patents, Designs, and Trade Marks. Available from: <<http://ipindia.nic.in/ipr/patent/patent.htm>> [Accessed 02 September 2010].
- Indian Trade and Merchandise Act of 1958 [Internet]. Mumbai, Indian Controller General of Patents, Designs, and Trade Marks. Available from: <http://ipindia.nic.in/tmr_new/default.htm> [Accessed 19 September 2010].
- Indian Trademark (Amendment) Act No. 47 of 1999 [Internet]. Mumbai, Indian Controller General of Patents, Designs, and Trade Marks. Available from: <http://ipindia.nic.in/tmr_new/default.htm> [Accessed 19 September 2010].
- Indonesia. (1986a) Indonesia: Statement by H.E. Mr. Rachmat Saleh, Head of the Delegation, at the Meeting of the GATT Contracting Parties at Ministerial Level, 15-19 September 1986, Punta del Este, Uruguay. GATT Document MIN(86)/ST/67, 19 September.
- Indonesia. (1986b) Communication from Indonesia Tropical Products–Trade Negotiating Plan. GATT Document MTN.GNG/W/4, 19 November.
- Indonesia. (1987a) The Evolution of the State of the Textiles and Clothing Industries in United States and European Economic Community 1973–1986. GATT Document MTN.GNG/NG4/W/5, 10 July and MTN.GNG/NG4/W/5/Corr.1, 7 August.
- Indonesia. (1987b) The Evolution of the State of the Textiles and Clothing Industries in Canada, the Nordic Countries and Austria 1973–1986. GATT Document MTN.GNG/NG4/W/7, 20 November.
- Indonesia. (1987c) The Evolution of the State of the Textiles and Clothing Industries in Japan and Switzerland 1973–1986. GATT Document MTN.GNG/NG4/W/9, 7 December.
- Indonesia. (1988a) Communication from Indonesia. GATT Document MTN.GNG/NG4/W/11, 27 April.
- Indonesia. (1988b) Statement Made by the Delegation of Indonesia, on Behalf of a Number of Developing Countries, Members of the International Textiles and Clothing Bureau at the Meeting of the Negotiating Group on Textiles and Clothing on 13 June, 1988. GATT Document MTN.GNG/NG4/W/15, 17 June.
- Indonesia. (1988c) Statement Made by the Delegation of Indonesia, on Behalf of ASEAN Countries, at the Meeting of the Negotiating Group on Textiles and Clothing on 13 June 1988. GATT Document MTN.GNG/NG4/W/17, 19 June.

- Indonesia. (1988d) Statement Made by the Delegation of Indonesia, on Behalf of a Number of Developing Countries, Members of the International Textiles and Clothing Bureau at the Meeting of the Negotiating Group on Textiles and Clothing on 21 July, 1988. GATT Document MTN.GNG/NG4/W/18, 1 August.
- Indonesia. (1988e) Statement Made by the Delegation of Indonesia, on Behalf of a Number of Developing Countries, Members of the International Textiles and Clothing Bureau at the Meeting of the Negotiating Group on Textiles and Clothing on 19 September 1988. GATT Document MTN.GNG/NG4/W/20, 28 September.
- Indonesia. (1988f) Statement Made by the Delegation of Indonesia, on Behalf of a Number of Developing Countries, Members of the International Textiles and Clothing Bureau at the Meeting of the Negotiating Group on Textiles and Clothing on 2 November 1988. GATT Document MTN.GNG/NG4/W/22, 10 November.
- Indonesia. (1988g) Indonesia–Statement by H.E. Mr. Darry Salim–Ambassador, Special Representative to the Textiles Surveillance Body. GATT Document SR.44/ST/27, 25 November.
- Indonesia. (1988h) Indonesia–Statement by Dr. Arifin M. Siregar Minister of Trade. GATT Document MTN.TNC/MIN(88)/ST/22, 6 December.
- Indonesia. (1989a) Tropical Products–Contribution by Indonesia. GATT Document MTN.GNG/NG6/LT/49, 29 May.
- Indonesia. (1989b) Communication from Indonesia. GATT Document MTN.GNG/NG4/W/23, 8 June and MTN.GNG/NG4/W/23/Corr.1, 13 June.
- Indonesia. (1989c) Some Essential Elements Which Should Enter as a Part of Any Framework Agreement in Services to Accommodate the Development Needs of Developing Countries. GATT Document MTN.GNS/W/81, 2 November.
- Indonesia. (1989d) Communication from Indonesia. GATT Document MTN.GNG/NG4/W/31, 13 December.
- Indonesia. (1989e) Communication from Indonesia. GATT Document MTN.GNG/NG4/W/32, 14 December.
- Indonesia. (1990a) Communication from Indonesia. GATT Document MTN.GNG/NG4/W/49, 5 June 1990 and MTN.GNG/NG4/W/49/Corr.1, 12 June.
- Indonesia. (1990b) Communication from Indonesia. GATT Document MTN.GNG/NG4/W/52, 12 June.
- Indonesia. (1990c) Recognition of Liberalization Measures–Communication from Indonesia. GATT Document MTN.GNG/NG2/W/84, 30 October.
- Indonesia. (1990d) Statement by H.E. Dr. Arifin M. Siregar, Minister of Trade of Indonesia. GATT Document MTN.TNC/MIN(90)/ST/49, 4 December.
- Indonesia. (1990e) Statement Made by the Delegation of Indonesia, on Behalf of a Number of Developing Countries, Members of the International Textiles and Clothing

Bureau at the Meeting of the Negotiating Group on Textiles and Clothing on 5 March 1990. GATT Document MTN.GNG/NG4/W/44, 13 March.

Indonesia. (1990f) Statement Made by the Delegation of Indonesia, on Behalf of a Number of Developing Countries, Members of the ITCB, at the Meeting of the Negotiating Group on Textiles and Clothing on 12 June 1990. GATT Document MTN.GNG/NG4/W/53, 14 June.

Indonesia. (1991a) Autonomous Liberalization Measures–Indonesia. GATT Document MTN.GNG/MA/W/11, 12 November.

Indonesia. (1991b) Communication from Indonesia–Initial Commitments of Indonesia in the Field of Services. GATT Document MTN.TNC/W/64, 4 February.

Indonesia. (1993) Communication from Indonesia–Draft Schedule of Indonesia concerning Specific Commitments in the Uruguay Round Negotiations on Trade in Services (Revision). GATT Document MTN.TNC/W/64/Rev.1, 10 December.

Indonesia. (1994a) Statement by Mr. Bachrum Harahap–Assistant Co-ordinating Minister for Industry and Trade. GATT Document MTN.TNC/40/ST/5, 19 January.

Indonesia. (1994b) Statement by H.E. Mr. S.B. Joedono–Minister of Trade. GATT Document MTN.TNC/MIN(94)/ST/17, 12 April.

Indonesian Copyright Act No. 6 of 1982 [in Indonesian] [Internet]. Jakarta, Indonesian Directorate General of Intellectual Property Rights. Available from: <http://www.dgip.go.id/ebscript/publicportal.cgi?.ucid=374&ctid=14&type=0> [Accessed 10 April 2010].

Indonesian Copyright Act No. 7 of 1987 [in Indonesian] [Internet]. Jakarta, Indonesian Directorate General of Intellectual Property Rights. Available from: <http://www.dgip.go.id/ebscript/publicportal.cgi?.ucid=374&ctid=14&type=0> [Accessed 10 April 2010].

Indonesian Copyright Act No. 12 of 1997 [in Indonesian] [Internet]. Jakarta, Indonesian Directorate General of Intellectual Property Rights. Available from: <http://www.dgip.go.id/ebscript/publicportal.cgi?.ucid=374&ctid=14&type=0> [Accessed 10 April 2010].

Indonesian Copyright Act No. 19 of 2002 [Internet]. Jakarta, Indonesian Directorate General of Intellectual Property Rights. Available from: <http://www.dgip.go.id/ebscript/publicportal.cgi?.ucid=374&ctid=14&type=0> [Accessed 10 April 2010].

Indonesian DGIPR (n. d. (a)) Statistics on Patents [in Indonesian] [Internet]. Jakarta, Indonesian Directorate General of Intellectual Property Rights. Available from: <http://www.dgip.go.id/ebscript/publicportal.cgi?.ucid=376&ctid=2&type=0&id=110> [Accessed 15 January 2011].

Indonesian DGIPR (n. d. (b)) Statistics on Copyrights [in Indonesian] [Internet]. Jakarta, Indonesian Directorate General of Intellectual Property Rights. Available from:

<<http://www.dgip.go.id/ebscript/publicportal.cgi?.ucid=376&ctid=2&type=0&id=110>> [Accessed 15 January 2011].

Indonesian DGIPR (n. d. (c)). Statistics on Trademarks [in Indonesian] [Internet]. Jakarta, Indonesian Directorate General of Intellectual Property Rights. Available from: <<http://www.dgip.go.id/ebscript/publicportal.cgi?.ucid=376&ctid=3&type=0&id=123>> [Accessed 15 January 2011].

Indonesian General Election of Members of the House of Representatives, the House of Regional Representatives, and the Regional House of Representatives Act No. 12/2003 [in Indonesian].

Indonesian General Election of Members of the House of Representatives, the House of Regional Representatives, and the Regional House of Representatives Act No. 10/2008 [in Indonesian].

Indonesian Patents Act No. 6 of 1989 [in Indonesian] [Internet]. Jakarta, Indonesian Directorate General of Intellectual Property Rights. Available from: <<http://www.dgip.go.id/ebscript/publicportal.cgi?.ucid=374&ctid=14&type=0>> [Accessed 10 April 2010].

Indonesian Patents Act No. 13 of 1997 [in Indonesian] [Internet]. Jakarta, Indonesian Directorate General of Intellectual Property Rights. Available from: <<http://www.dgip.go.id/ebscript/publicportal.cgi?.ucid=374&ctid=14&type=0>> [Accessed 10 April 2010].

Indonesian Patents Act No. 14 of 2001 [Internet]. Jakarta, Indonesian Directorate General of Intellectual Property Rights. Available from: <<http://www.dgip.go.id/ebscript/publicportal.cgi?.ucid=374&ctid=14&type=0>> [Accessed 10 April 2010].

Indonesian Trademarks Act No. 19 of 1992 [in Indonesian] [Internet]. Jakarta, Indonesian Directorate General of Intellectual Property Rights. Available from: <<http://www.dgip.go.id/ebscript/publicportal.cgi?.ucid=374&ctid=14&type=0>> [Accessed 10 April 2010].

Indonesian Trademarks Act No. 14 of 1997 [in Indonesian] [Internet]. Jakarta, Indonesian Directorate General of Intellectual Property Rights. Available from: <<http://www.dgip.go.id/ebscript/publicportal.cgi?.ucid=374&ctid=14&type=0>> [Accessed 10 April 2010].

Indonesian Trademarks Act No. 15 of 2001 [Internet]. Jakarta, Indonesian Directorate General of Intellectual Property Rights. Available from: <<http://www.dgip.go.id/ebscript/publicportal.cgi?.ucid=374&ctid=14&type=0>> [Accessed 10 April 2010].

Intellectual Property Justice. (n. d.) USTR Section 301 Annual Reports (2001-2007) [Internet]. San Francisco, Intellectual Property Justice. Available from: <http://ipjustice.org/USTR/Section_301_Table_2001-2007.htm> [Accessed on 14 January 2008].

- International Pharmaceutical Manufacturers Group. (n. d.). Organizational Profile [Internet]. Jakarta, International Pharmaceutical Manufacturers Group. Available from <<http://www.ipmg-online.com/index.php?modul=profil&cat=PWho>> [Accessed 23 February 2011].
- Jakarta Post. (2000a) Indonesia still Haven for Copyright Piracy. *Jakarta Post*, 30 January.
- Jakarta Post. (2000b) NGO Seminar Urges Campaign Against 'Unfair' Bio-piracy'. *Jakarta Post*, 20 March.
- Jakarta Post. (2001) House Approves Trademark Bills. *Jakarta Post*, 3 July.
- Japan. (1987) Suggestion by Japan for Achieving the Negotiating Objective. WTO document MTN.GNG/NG11/W/17, 23 November.
- Jawara, F. dan Kwa, A. (2003) *Behind the Scenes at the WTO: the Real World of International Trade Negotiations*. London, Zed Books.
- Jayasuriya, K. ed. (1999). *Law, Capitalism and Power in Asia the Rule of Law and Legal Institutions*. London, Routledge.
- Jhamtani, H. and Hanim, L. (2002) *Globalisation and Monopoly of Knowledge an Analysis of TRIPs and Biological Diversity in Indonesia* [in Indonesian]. Jakarta, INFID-KONPHALINDO, IGJ.
- Johnson, J. M. (2002) In-Depth Interviewing. In: Gubrium, J. F. and Holstein, J. A. eds. *Handbook of Interview Research Context and Method*. California, Sage Publications Inc, pp.103–19.
- Kartadjoemena, H.S. (2005). Indonesia. In Macrory, P. F. J., Appleton, A. E., and Plummer, M. G. eds. *The World Trade Organization: Legal, Economic, and Political Analysis*. New York, Springer, pp.139–69.
- Katrak, H. and Strange, R. eds. (2004) *The WTO and Developing Countries*. London, Palgrave Macmillan.
- Keayla, B.K. (2005) Amended Patents Act 1970: A Critique. *Combat Law* [Internet], 4 (2). Available from: <<http://www.indiatogether.org/combatlaw/vol4/issue2/patent.htm>> [Accessed 24 June 2009].
- Keayla, B.K. (2007) Heart and Soul Missing in the Indian Patents Act. *Express Pharma Online* [Internet], August 1 – 15. Available from: <<http://www.expresspharmaonline.com/20070815/management04.shtml>> [Accessed 24 June 2009].
- Keck, M. E. and Sikkink, K. (1998) *Activists beyond Border*. Ithaca, Cornell University Press.
- Keohane, R. O. (1986) Reciprocity in International Relations. *International Organization*, 40 (1), Winter, pp.1–27.

- Keohane, R. O. (1988) International Institutions: Two Approaches. *International Studies Quarterly*, 32 (4), December, pp.379–96.
- Keohane, R. O. (1992) Compliance with International Commitments: Politics within Framework of Law. *American Society of International Law Proceedings* 86, pp.176–80.
- Keohane, R. O and Martin, L. (1995) The Promise of Institutionalist Theory. *International Security*, 20 (1), Summer, pp.39–51.
- Kerr, W. A. (2003) The Efficacy of TRIPS: Incentives, Capacity and Threats. *The Estey Centre Journal of International Law and Trade Policy*, 4 (1), pp.1–14.
- Kesselman, M., Krieger, J. and Joseph, W. A. eds. (2000) *Introduction to Comparative Politics*. 2nd ed. Boston, Houghton Mifflin.
- Kesselman, M., Krieger, J. and Joseph, W. A. eds. (2009) *Introduction to Comparative Politics*. 5th ed. Boston, Wadsworth Cengage Learning.
- Kingsbury, B. (1998) The Concept of Compliance as a Function of Competing Conceptions of International Law. *Michigan Journal of International Law*, 19, pp.345-72.
- Koh, H. H. (1997) Why Do Nations Obey International Law. *The Yale Law Journal*, 106 (8), pp.2599–659.
- Kohli, A. (2000) India. In: Kesselman, M., Krieger, J. and Joseph, W. A. eds. *Introduction to Comparative Politics*. 2nd ed. Boston, Houghton Mifflin, pp.241– 86.
- Kohli, A. and Basu, A. (2009) India. In: Kesselman, M., Krieger, J. and Joseph, W. A. eds. *Introduction to Comparative Politics*. 5th ed. Boston, Wadsworth Cengage Learning, pp.153–99.
- Kollman, K. (2011) Same-Sex Unions Legislation and Policy Paradigms: Something Borrowed, Yet Something New. In Skogstad, G. and Schmidt, V. eds. *Policy Paradigms, Transnationalism and Domestic Politics*. Toronto, University of Toronto Press, (forthcoming).
- Koshy, S. (1995) The Effect of TRIPs on Indian Patent Law: A Pharmaceutical Industry Perspective. *Boston University Journal of Science and Technology Law*, 1, May.
- Kusumadara, A. (2000a) Analysis of the Failure of the Implementation of Intellectual Property Laws in Indonesia. PhD. thesis, University of Sydney.
- Kusumadara, A. (2000b) The Conflict between Intellectual Property Laws and *Adat* in Indonesia [in Indonesian]. *Jurnal Arena Hukum* [Internet], 12, November. Available from: <<http://karyatulishukumfiles.wordpress.com/2008/08/lengkap.pdf>> [Accessed 29 April 2009].
- Kusumadara, A. (n. d.) Problems of Enforcing Intellectual Property Laws in Indonesia [Internet]. Available from:

<<http://www.ialsnet.org/meetings/business/KusumadaraAfifah-Indonesia.pdf>>
[Accessed 29 April 2009].

- Lawton, T. C., Lindeque, J. K. and McGuire, S. M. (2009) Multilateralism and the Multinational Enterprise. *Business and Politics*, 11 (3), pp.1–26.
- Lawyers Collective, (n. d.) Mashelkar Committee [Internet]. New Delhi, Lawyers Collective. Available from: <<http://www.lawyerscollective.org/amtc/maselkar>> [Accessed 28 September 2010].
- Lindsey, T. ed. (2008) *Indonesia Law and Society*. 2nd ed. Sydney, The Federation Press.
- Lindsey, T. et al. eds. (2006) *Intellectual Property Rights an Introduction* [in Indonesian]. Bandung, Asian Law Group Pty Ltd and PT. Alumni.
- Lippoldt, D. (2006) Can Stronger Intellectual Property Rights Boost Trade, Foreign Direct Investment, and Licensing in Developing Countries? In: Pugatch, M. P. ed. *The Intellectual Property Debate Perspectives from Law, Economics and Political Economy*. Cheltenham, Edward Elgar, pp.44–61.
- Lok Sabha*. (1999a) Combined Discussion Regarding Disapproval of the Patents (Amendment) Ordinance, 1999 and Passing of the Patent (Amendment) Bill, 1999 (Not Concluded) [Internet], 9 March. New Delhi, *Lok Sabha*. Available from: <<http://164.100.47.132/LssNew/psearch/Result12.aspx?dbsl=1676>> [Accessed 13 April 2010].
- Lok Sabha*. (1999b) Combined Discussion on the Disapproval of Patents (Amendment) Ordinance, 1999 and Motion for Consideration of the Patent (Amendment) Bill, 1998 Moved by Shri Sikander Bakht on 9 March (continued – concluded) [Internet], 10 March. New Delhi, *Lok Sabha*. Available from: <<http://164.100.47.132/LssNew/psearch/Result12.aspx?dbsl=1756>> [Accessed 13 April 2010].
- Lok Sabha*. (1999c) Regarding the Recommendation of the Law Commission on Patents (Amendment) Bill 1998 [Internet], 12 March. New Delhi, *Lok Sabha*. Available from: <<http://164.100.47.132/LssNew/psearch/Result12.aspx?dbsl=1763>> [Accessed 13 April 2010].
- Lok Sabha*. (1999d) Discussion on the Copyrights (Amendment) Bill 1999 (Bill Passed) [Internet], 22 December. Available from: <<http://164.100.47.132/LssNew/psearch/Result12.aspx?dbsl=6869>> [Accessed 13 April 2010].
- Lok Sabha*. (1999e) Discussion on the Trade Marks Bill 1999 [Internet], 22 December. New Delhi, *Lok Sabha*. Available from: <<http://164.100.47.132/LssNew/psearch/Result12.aspx?dbsl=6872>> [Accessed 13 April 2010].
- Lok Sabha*. (2002) Discussion on the Patents (Amendment) Bill, 2002 (Bill passed) [Internet], 14 May. New Delhi, *Lok Sabha*. Available from: <<http://164.100.47.132/LssNew/psearch/Result12.aspx?dbsl=4156>> [Accessed 13 April 2010].

- Lok Sabha*. (2005) Combined Discussion on the Statutory Resolution Regarding Disapproval of Patents (Amendment) Ordinance, 2004 (No. 7 of 2004) and the Patents (Amendment) Bill, 2005 (Resolution Negative and Bill Passed) [Internet], 22 March. New Delhi, *Lok Sabha*. Available from: <<http://164.100.47.132/LssNew/psearch/Result14.aspx?dbsl=1866>> [Accessed 13 April 2010].
- Lok Sabha*. (2009) Discussion on the Trade Marks (Amendment) Bill 2007 [Internet], 25 February. New Delhi, *Lok Sabha*. Available from: <<http://164.100.47.132/LssNew/psearch/Result14.aspx?dbsl=11289>> [Accessed 13 April 2010].
- Lok Sabha*. (n. d. (a)) Tenth *Lok Sabha* Party List [Internet]. New Delhi, *Lok Sabha*. Available from: <<http://164.100.47.132/LssNew/Members/partylist1to12.aspx>> [Accessed 27 January 2011]
- Lok Sabha*. (n. d. (b)) Twelfth *Lok Sabha* Party List [Internet]. New Delhi, *Lok Sabha*. Available from: <<http://164.100.47.132/LssNew/Members/partylist1to12.aspx>> [Accessed 27 January 2011].
- Lok Sabha*. (n. d. (c)) Thirteenth *Lok Sabha* Party List. New Delhi, *Lok Sabha*. Available from: <<http://164.100.47.132/LssNew/Members/partyar.aspx?lsno=13>> [Accessed 21 February 2011].
- Lok Sabha*. (n. d. (d)) Fourteenth *Lok Sabha* Party List. New Delhi, *Lok Sabha*. Available from: <<http://164.100.47.132/LssNew/Members/partyar.aspx?lsno=14>> [Accessed 21 February 2011].
- Lybbert, T. J. (2002) On Assessing the Cost of TRIPS Implementation. *World Trade Review*, 1 (3), pp.309–21.
- Lynn, J. (2009) EU, Developing States Clash over Generic Drug Swoop. *The Indian Reuters* [Internet], 4 March. Available from: <<http://in.reuters.com/article/companyNews/idINL365588420090303?sp=true>> [Accessed 11 December 2009].
- MacLeod, D. (1992) US Trade Pressure and the Developing Intellectual Property Law of Thailand, Malaysia and Indonesia. *University of British Columbia Law Review* 26 (2), pp.343–74.
- Macrory, P. F.J., Appleton, A. E., and Plummer, M. G. eds. (2005) *The World Trade Organization: Legal, Economic, and Political Analysis*. New York, Springer.
- Magdalena, M. (2005) The Raid of Internet Café, It is the time to Switch to Open Source [in Indonesian]. *Suara Pembaruan* [Internet], 28 April. Available from: <<http://www.haki.lipi.go.id>> [Accessed 24 April 2009].
- Mahapatra, R. (2004) Facing WTO Deadline, India Struggles with Patents Reform. *Financial Times* [Internet], 26 December. Available from: <<http://www.law.com/jsp/law/LawArticleFriendly.jsp?id=900005541708>> [Accessed 24 June 2009].

- Mara, K. and New, W. (2009) Concerns Continue over Generic Drug Seizures as Legality Debates Begin. *IP Watch* [Internet], 5 March. Available from: <<http://www.ip-watch.org/weblog/2009/12/02/wto-ends-ministerial-with-no-agreements-modest-treatment-of-ip/>> [Accessed 11 December 2009].
- Marron D. B. and Steel, D. G. (2000) Which Countries Protect Intellectual Property? The Case of Software Piracy. *Economic Inquiry*, 38 (2), pp.159–74.
- Martin, L. L. (2008) Book Review: Xinyuan Dai, International Institutions and National Policies. *Review of International Organizations* 3, pp.201–6.
- Martin, W. and Winters, L. A. eds. (1996) *The Uruguay Round and the Developing Countries*. Cambridge, Cambridge University Press.
- Mashelkar, R.A. (2006) Report of the Technical Expert Group on Patent Law Issues [Internet]. Mumbai, Indian Controller General of Patents, Designs, and Trade Marks. Available from: <www.ipindia.nic.in/ipr/patent/mashelkar_committee_report.doc> [Accessed 28 September 2010].
- Maskus, K. E. (1998) The Role of Intellectual Property Rights in Encouraging Foreign Direct Investment and Technology Transfer. *Duke Journal of Comparative and International Law*, Fall (9), pp.109–61.
- Maskus, K. E. (2000a) *Intellectual Property Rights in the Global Economy*. Washington DC, Institute for International Economics.
- Maskus, K. E. (2000b) Intellectual Property Rights and Economic Development. *Case Western Reserve Journal of International Law*, 32, pp.471–506.
- Maskus, K. E. (2000c) Intellectual Property Rights and Foreign Direct Investment. *Policy Discussion Paper* No. 002. Adelaide, Centre for International Economic Studies, University of Adelaide.
- Maskus, K. E. (2001) Parallel Imports in Pharmaceuticals: Implications for Competition and Prices in Developing Countries. *Final Report to World Intellectual Property Organisation* [Internet]. Geneva, WIPO. Available from: <http://www.wipo.int/about-ip/en/studies/pdf/ssa_maskus_pi.pdf> [Accessed 23 April 2010].
- Mathur, S. K. (2006) Indian Information Technology Industry: Past, Present, and Future and a Tool for National Development. *Journal of Theoretical and Applied Information Technology* [Internet], 2 (2), August. Available from: <<http://perso.univ-rennes1.fr/eric.darmon/floss/papers/MATHUR.pdf>> [Accessed 20 August 2010].
- Mathur, S. K. (2007) TRIPs: Issues, Impact, and the Way Forward for Developing Countries Including India. *American Law and Economics Association 17th Annual Meetings* [Internet] Working Paper 7. Available from: <http://www.ifw-kiel.de/ifw_portal/konfer/esf-ifw/newtech_0507/mathur.pdf> [Accessed 20 August 2010].

- Matsushita, M., Schoenbaum, T. J., and Mavroidis, P. C. (2006) *The World Trade Organization, Law, Practice, and Policy*. 2nd ed. Oxford, Oxford University Press.
- Matthews, D. (2002) *Globalising Intellectual Property Rights: the TRIPs Agreement*. London, Routledge.
- Matthews, D. (2006) *NGOs, Intellectual Property Rights and Multilateral Institutions*. Report of the IP-NGOs Research Project – ESRC [Internet]. London, Queen Mary Intellectual Property Research Institute. Available from: <http://www.ipngos.org/Report/IP-NGOs%20final%20report%20December%202006.pdf> [Accessed 19 September 2010].
- May, C. (2000) *A Global Political Economy of Intellectual Property Rights the New Enclosures?* London, Routledge.
- May, C. (2004) Capacity Building and the (Re) Production of Intellectual Property Rights. *The World Quarterly*, 25 (5), pp.821–37.
- May, C. (2005) Intellectual Property Rights. In: Kelly, D. and Grant, W. eds. *The Politics of International Trade in the Twenty-first Century Actors, Issues and Regional Dynamics*. New York, Palgrave MacMillan, pp.164–82.
- May, C. (2007) The Hypocrisy of Forgetfulness: The Contemporary Significance of Early Innovations in Intellectual Property. *Review of International Political Economy*, 14 (1), pp.1–25.
- Mayne, R. (2004) The TRIPs Agreement and Access to Medicines: An NGO Perspective. In: Katrak, H. and Strange, R. eds. *The WTO and Developing Countries*. London: Palgrave Macmillan, pp.146–64.
- McIlroy, J. (1998) American Enforcement of Intellectual Property Rights a Canadian Perspective. *The Journal of World Intellectual Property*, 1 (3), May, pp.445–64.
- Mearsheimer, J. J., (1994–1995) The False Promise of International Institutions. *International Security*, 19 (3), Winter, pp.5-49.
- Milner, H. V. (1997) *Interests, Institutions, and Information Domestic Politics and International Relations*. New Jersey, Princeton University Press.
- Moravcsik, A. (1997) Taking Preferences Seriously: A Liberal Theory of International Politics. *International Organization*, 51 (4), Autumn, pp.513– 53.
- Morris, Z.S. (2009) The Truth about Interviewing Elites. *Politics*, 29 (3), pp.209– 17.
- Mukherjee, S. (2006) The New Indian Patents Law: A Challenge for India. *International Journal of Intellectual Property Management*, 1 (1/2), pp.131–49.
- Musungu, S. F. and Oh, C. (2006) *The Use of Flexibilities in TRIPs by Developing Countries: Can They Promote Access to Medicines?* Geneva, South Centre.

- Narlikar, A. (2008) India and the World Trade Organization. In: Smith, S., Dunne, T. and Hadfield, A. eds. *Foreign Policy Theories Actors Cases*. Oxford, Oxford University Press, pp.269–84.
- New, W. (2009) WTO Ends Ministerial with no Agreements, Modest Treatment of IP. *IP Watch* [Internet], 2 December. Available from: <<http://www.ip-watch.org/weblog/2009/12/02/wto-ends-ministerial-with-no-agreements-modest-treatment-of-ip/>> [Accessed 11 December 2009].
- Ngenda, A. (2005) The Nature of International Intellectual Property System: Universal Norms and Values or Western Chauvinism. *Information and Communications Technology Law*, 14 (1), pp.59–79.
- OPPI. (n. d.) OPPI Position on IPR and India Patent Act, 2005 [Internet]. Mumbai, Organisation of Pharmaceutical Producers of India (OPPI). Available from: <<http://www.indiaoppi.com/OPPIPositiononIPR.pdf>> [Accessed 23 February 2011].
- Otten, A. (1998) Implementation of the TRIPs Agreement and Prospects for its Further Development. *Journal of International Economic Law*, 1 (4), pp.523–36.
- Paris Convention for the Protection of Industrial Property 20 March 1883 as amended 28 September 1979 [Internet]. Geneva, WIPO. Available from: <http://www.wipo.int/export/sites/www/treaties/en/ip/paris/pdf/trtdocs_wo020.pdf> (Accessed 25 February 2011).
- Park. C. and Prabhala, A. (2007) Health: Flaws and Plagiarism in the Mashelkar Report on IPR [Internet], 12 February. Available from: <<http://www.twinside.org.sg/title2/health.info/twninfohealth075.htm>> [Accessed 28 September 2010].
- Pauwelyn, J. (2010) The Dog that Barked but didn't Bite: 15 Years of Intellectual Property Disputes at the WTO. *Journal of International Dispute Settlement*, 1 (2), pp.389–429.
- PhRMA. (2000) Submission of the Pharmaceutical Research and Manufacturers of America (PhRMA) for the National Trade Estimate Report on Foreign Trade Barriers (NTE) [Internet]. Washington DC, PhRMA. Available from: <<http://www.cptech.org/ip/health/phrma/nte-00/nte-00.pdf>> [Accessed 04 November 2009].
- PhRMA. (n. d. (a)) India [Internet]. Washington DC, PhRMA. Available from: <<http://www.cptech.org/ip/health/phrma/nte-98/india.html>> [Accessed 04 November 2009].
- PhRMA. (n. d. (b)) Indonesia [Internet]. Washington DC, PhRMA. Available from: <<http://www.cptech.org/ip/health/phrma/nte-98/indonesia.html>> [Accessed 04 November 2009].
- PhRMA. (n. d. (c)) India [Internet]. Washington DC, PhRMA Available from: <<http://www.cptech.org/ip/health/phrma/nte-99/india.html>> [Accessed 04 November 2009].

PhRMA. (n. d. (d)) Indonesia [Internet]. Washington DC, PhRMA. Available from: <<http://www.cptech.org/ip/health/phrma/nte-99/indonesia.html>> [Accessed 04 November 2009].

PhRMA. (n. d. (e)) India [Internet]. Washington DC, PhRMA. Available from: <<http://www.cptech.org/ip/health/phrma/301-99/india.html>> [Accessed 04 November 2009].

PhRMA. (n. d. (f)) Indonesia [Internet]. Washington DC, PhRMA. Available from: <<http://www.cptech.org/ip/health/phrma/301-99/indonesia.html>> [Accessed 04 November 2009].

PhRMA. (n. d. (g)) India [Internet]. Washington DC, PhRMA. Available from: <<http://www.cptech.org/ip/health/phrma/301-99/india.html>> [Accessed 04 November 2009].

PhRMA. (n. d. (h)) Indonesia [Internet]. Washington DC, PhRMA. Available from: <<http://www.cptech.org/ip/health/phrma/301-99/indonesia.html>> [Accessed 04 November 2009].

PhRMA. (n. d. (i)) India [Internet]. Washington DC, PhRMA. Available from: <<http://www.cptech.org/ip/health/phrma/301-00/india.html>> [Accessed 04 November 2009].

PhRMA. (n. d. (j)) Indonesia [Internet]. Washington DC, PhRMA. Available from: <<http://www.cptech.org/ip/health/phrma/301-00/indonesia.html>> [Accessed 04 November 2009].

PhRMA. (n. d. (k)) PhRMA Special 301 Submission [Internet]. Washington DC, PhRMA. Available from: <<http://www.cptech.org/ip/health/phrma/301-01/301-01.pdf>> [Accessed 04 November 2009].

PhRMA. (n. d. (l)). PhRMA “Special 301” Submission [Internet]. Washington DC, PhRMA. Available from: <<http://www.cptech.org/ip/health/phrma/301-03/2003-PhRMA-301.pdf>> [Accessed 04 November 2009].

Press Information Bureau Government of India. (2009) Press Release Amendment to Copyright Act 1957 [Internet], 24 December. New Delhi, Indian Ministry of Human Resource Development. Available from: <<http://pib.nic.in/release/release.asp?relid=56444&kwd=>> [Accessed 28 April 2010].

Rajya Sabha. (2001) The Patents (Second Amendment) Bill, 1999 – Report of the Joint Committee [Internet]. New Delhi, *Rajya Sabha*. Available from: <<http://164.100.47.5/webcom/MoreInfo/PatentReport.pdf>> [Accessed 27 September 2010].

Rajya Sabha. (2002a) The Patents (Second Amendment) Bill, 1999 [Internet], 9 May. New Delhi, *Rajya Sabha*. Available from: <http://rsdebate.nic.in/bitstream/123456789/87047/1/PD_195_09052002_32_p251_p255_31.pdf> [Accessed 22 April 2010].

- Rajya Sabha*. (2002b) Message from the Lok Sabha the Patents (Amendment) Bill, 2002 [Internet], 15 May. New Delhi, *Rajya Sabha*. Available from: <http://rsdebate.nic.in/bitstream/123456789/87276/1/PD_195_15052002_36_p199_p199_8.pdf> [Accessed 25 April 2010].
- Rajya Sabha*. (2005a) Changes in the Patents Law [Internet], 16 March. New Delhi, *Rajya Sabha*. Available from: <http://rsdebate.nic.in/bitstream/123456789/44153/1/PQ_204_16032005_U1562_p58_p59.pdf> [Accessed 25 April 2010].
- Rajya Sabha*. (2005b) Message from *Lok Sabha* the Patents (Amendment) Bill, 2005 [Internet], 22 March. New Delhi, *Rajya Sabha*. Available from: <http://rsdebate.nic.in/bitstream/123456789/47522/1/PD_204_22032005_18_p366_p366_31.pdf> [Accessed 25 April 2005].
- Rajya Sabha*. (2005c) The Patents (Amendment) Bill, 2005 [Internet], 24 March. New Delhi, *Rajya Sabha*. Available from: <http://rsdebate.nic.in/bitstream/123456789/47582/1/PD_204_24032005_20_p249_p249_52.pdf> [Accessed 25 April 2010].
- Ramanna, A. (n. d.) Interest Groups and Patents Reform in India. *Indira Gandhi Institute of Development Research (IGIDR) Working Paper* [Internet], 06. Available from: <<http://www.eSocialSciences.com/data/articles/Document12652009350.2327539.pdf>> [Accessed 24 June 2009].
- Raustiala, K. (2000) Compliance and Effectiveness in International Regulatory Cooperation. *Case Western Reserve Journal of International Law*, 32, pp.387-440.
- Raustiala, K. and Slaughter, A. (2002) International Law, International Relations and Compliance. In: Carlsnaes, W., Risse, T. and Simmons, B. A. eds. *Handbook of International Relations*. London, Sage Publications, Ltd., pp.538-58.
- Reichman, J. H. (1998) Securing Compliance with the TRIPs Agreement after US v India. *Journal of International Economic Law*, 1 (4), pp.585 – 601.
- Richards, D. G. (2004) *Intellectual Property Rights and Global Capitalism the Political Economy of the TRIPS Agreement*. London, M. E. Sharpe.
- Richards, D. G. (2005) Trade-related Intellectual Property Rights. *Review of International Political Economy* 12 (3), August, pp.535–51.
- Risse, T. and Sikkink, K. (1999) The Socialization of International Human Rights Norms into Domestic Practices: Introduction. In: Risse, T., Ropp, S. C., and Sikkink, K. eds. *The Power of Human Rights: International Norms and Domestic Change*. Cambridge, Cambridge University Press, pp.1-38.
- Risse, T., Ropp, S. C., and Sikkink, K. eds. (1999) *The Power of Human Rights: International Norms and Domestic Change*. Cambridge, Cambridge University Press.
- Risse, T., Cowles, M. G., and Caporaso, J. (2001) Europeanization and Domestic Change: Introduction. In: Cowles, M. G., Caporaso, J., and Risse, T. eds. *Transforming*

Europe: Europeanization and Domestic Change. Ithaca, NY, Cornell University Press, pp.1-20.

- Robison, R. (2005) Indonesia. In: Burnell, P. and Randall, V. eds. *Politics in the Developing World*. Oxford, Oxford University Press, pp.255–63.
- Rooney, D., Hearn, G., and Ninan, A. eds. (2005) *Handbook on the Knowledge Economy*. Cheltenham, Edward Elgar Publishing.
- Rosser, A. (1999) The Political Economy of Institutional Reform in Indonesia: the Case of Intellectual Property Law. In: Jayasuriya, K. ed. *Law, Capitalism and Power in Asia the Rule of Law and Legal Institutions*. London, Routledge, pp.95–117.
- Rosser, A. (2002) *The Politics of Economic Liberalisation in Indonesia: State Market and Power*. Surrey, Curzon Press.
- Ruggie, J. G. (1998) What Makes the World Hang Together? Neo-utilitarianism and the Social Constructivist Challenge. *International Organization*, 52 (4), Autumn, pp.855–85.
- Sell, S. K. (1998) *Power and Ideas North-South Politics of Intellectual Property and Antitrust*. New York, State University of New York Press.
- Sell, S. K. (1999) Multinational Corporations as Agents of Change: The Globalization of Intellectual Property Rights. In: Cutler, A. C. Haufler, V., and Porter, T. eds. *Private Authority and International Affairs*. New York, State University of New York Press (SUNY), pp.169–98.
- Sell, S. K. (2000a) Structures, Agents, and Institutions: Private Corporate Power and the Globalization of Intellectual Property Rights. In: Higgot, R. A., Underhill, G. R. D., and Bieler A. eds. *Non-State Actors and Authority in the Global System*. London, Routledge, pp.91–106.
- Sell, S. K. (2000b) Big Business and the New Trade Agreements: The Future of the WTO? In: Stubbs, R. and Underhill, G. R. D. eds. *Political Economy and the Changing Global Order*. 2nd ed. Oxford, Oxford University Press, pp.174–83.
- Setiogi, S. P. (2004) Government has Finalized Regulation on Optical Discs. *Jakarta Post*, 6 February.
- Shanker, D. (2003) Legitimacy and the TRIPS Agreement. *The Journal of World Intellectual Property*, 6 (1), January, pp.155–89.
- Sharma, R. and Hiddleston, S. (2007) Mashelkar Committee on Patent law Withdraws Report; Seeks More Time. *The Hindu* [Internet], 22 February. Available from: <<http://www.hinduonnet.com/2007/02/22/stories/2007022206751200.htm>> [Accessed 28 September 2010].
- Shiva, V. (2001). *Protect or Plunder? Understanding Intellectual Property Rights*. London, Zed Books.

- Simmons, B. A. (1998) Compliance with International Agreements. *Annual Review of Political Science*, 7 (1), pp.75-93.
- Simmons, B. A. (2010) Treaty Compliance and Violation. *Annual Review of Political Science*, 13 (1), pp.273-96.
- Simons, J. J. (1999) Cooperation and Coercion: The Protection of Intellectual Property in Developing Countries. *Bond Law Review*, 11 (1), pp.59-97.
- Skogstad, G. and Schmidt V. eds. (2011) *Policy Paradigms, Transnationalism and Domestic Politics*. Toronto, University of Toronto Press, (forthcoming).
- Slaughter, A. (1995) International Law in a World of Liberal States. *European Journal of International Law*, 4, pp.503 – 538.
- Smith, A. L. (2001) Indonesia Transforming the Leviathan. In: Funston, J. ed. *Government and Politics in Southeast Asia*. Singapore, Institute of Southeast Asian Studies, pp.74 – 119.
- Smith, S., Dunne, T. and Hadfield, A. eds. (2008) *Foreign Policy Theories Actors Cases*. Oxford, Oxford University Press.
- Soesastro, H. and Soejachmoen, M. P. (2007) Towards an Effective Trade Policy Challenges for Indonesia. The EU-Indonesia Trade Support Programme Research Paper [Internet]. Jakarta, EU-Indonesia Trade Support Programme. Available from:
http://www.delidn.ec.europa.eu/en/relations/relations_1_trade10_wtoeffectivepolicy0702.pdf [Accessed 19 July 2010].
- South Centre. (1997) The TRIPs Agreement a Guide for the South: The Uruguay Round Agreement on TRIPs. Geneva, South Centre, November.
- SRISTI. (n. d.) Society for Research and Initiatives for Sustainable Technologies and Institutions [Internet]. Gujarat: SRISTI. Available from:
http://www.sristi.org/cms/en/about_us [Accessed 19 September 2010].
- Steinberg, R. H. (2002) In the Shadow of Law or Power? Consensus-Based Bargaining and Outcomes in the GATT/WTO. *International Organization*, 56 (2), Spring, pp.339-75.
- Stubbs, R. and Underhill, G. R. D. eds. (2000). *Political Economy and the Changing Global Order*. 2nd ed. Oxford, Oxford University Press.
- Sun, H. (2004) The Road to Doha and Beyond: Some Reflections on the TRIPS Agreement and Public Health. *European Journal of International Law*, 15 (1), pp.123-50.
- Suwanto, F. M. (1993) Indonesia's New Patents Law: A Move in the Right Direction', *Santa Clara Computer and High Technology Law Journal*, 9, pp.265 – 286.
- Switzerland. (1990) Draft Amendment to the General Agreement on Tariffs and Trade on the Protection of Trade-Related Intellectual Property Rights Communication from Switzerland. GATT Document MTN.GNG/NG11/W/73, 14 May.

- Tellez, V. M. (n. d.) Patents Reform in India: the Campaign to Protect Public Health [Internet]. London, Available from: <<http://www.ipngos.org/NGO%20Briefings/Patent%20Act%20amendment.pdf>> [Accessed 24 June 2009].
- Text of the TRIPS Agreement (Annex 1C of the Marrakesh Agreement) [Internet]. Geneva, WTO. Available from: <http://www.wto.org/english/docs_e/legal_e/27-trips.pdf> [Accessed 7 March 2009].
- Thakur, R. (1995) *The Government and Politics of India*. London, Macmillan Press, Ltd.
- Thomas, P. (2001) Copyrights and Emerging Knowledge Economy in India. *Economic and Political Weekly*, 36 (24), June 16 – 22, pp.2147–56.
- UK CIPR. (2002) Integrating Intellectual Property Rights and Development Policy [Internet], September. London, Commission on Intellectual Property Rights. Available from: <http://www.iprcommission.org/papers/pdfs/final_report/CIPRfullfinal.pdf> [Accessed on 16 April 2008].
- UNCTAD. (2002) Training Tools on the TRIPS Agreement: The Developing Countries' Perspective. Geneva, UNCTAD, January.
- UNESCAP. (2001) Institutional Capacity-Building to Deal with the Implications of TRIPs for Industrial and Technological Development: Case Study of India. New York: UNESCAP.
- United States. (1987a) Statement by United States at Meeting of 25 March 1987. GATT Document MTN.GNG/NG11/W/2, 3 April.
- United States. (1987b) Suggestion by the United States for Achieving the Negotiating Objective. GATT Document MTN.GNG/NG11/W/14, 20 October.
- Unnikrishnan, C.H. (2009) India to take on EU over Drug Seizures (Internet), 7 December. Available from: <<http://www.livemint.com/2009/12/07001107/India-to-take-on-EU-over-drug.html?d=1>> [Accessed 11 December 2009].
- Uphoff, E. (1991) *Intellectual Property and US Relations with Indonesia, Malaysia, Singapore, and Thailand*. New York, Cornell University.
- USTR. (1996a) 1996 National Trade Estimate–India. Washington, D.C., USTR.
- USTR. (1996b) 1996 National Trade Estimate–Indonesia. Washington, D.C., USTR.
- USTR. (1997a) 1997 National Trade Estimate–India. Washington, D.C., USTR.
- USTR. (1997b). 1997 National Trade Estimate–Indonesia. Washington, D.C., USTR.
- USTR. (1998) 1998 National Trade Estimate. Washington, D.C., USTR.
- USTR. (2001a) 2001 Special 301 Report. Washington, D.C., USTR.

- USTR. (2001b) 2001 National Trade Estimate–India. Washington, D.C., USTR.
- USTR. (2001c) 2001 National Trade Estimate–Indonesia. Washington, D.C., USTR.
- USTR. (2002) 2002 Special 301 Report. Washington, D.C., USTR.
- USTR. (2003) 2003 Special 301 Report. Washington, D.C., USTR.
- USTR. (2004) 2004 Special 301 Report. Washington, D.C., USTR.
- USTR. (2005) 2005 Special 301 Report. Washington, D.C., USTR.
- USTR. (2006) 2006 Special 301 Report. Washington, D.C., USTR.
- USTR. (2007a) 2007 Special 301 Report. Washington, D.C., USTR.
- USTR. (2007b) 2007 National Trade Estimate Report on Foreign Trade Barriers. Washington, D.C., USTR.
- USTR. (2008a) 2008 Special 301 Report. Washington, D.C., USTR.
- USTR. (2008b) 2008 National Trade Estimate Report on Foreign Trade Barriers. Washington, D.C., USTR.
- USTR. (2009a) 2009 Special 301 Report. Washington, D.C., USTR.
- USTR. (2009b) 2009 National Trade Estimate Report on Foreign Trade Barriers. Washington, D.C., USTR.
- USTR. (2010a). 2010 Special 301 Report. Washington, D.C., USTR.
- USTR. (2010b) 2010 National Trade Estimate Report on Foreign Trade Barriers. Washington, D.C., USTR.
- Vandoren, P. (1999) The Implementation of the TRIPS Agreement. *The Journal of World Intellectual Property*, 2 (1), pp.25–34.
- VanGrasstek, C. and Sauve, P. (2006) The Consistency of WTO Rules: Can the Single Undertaking be Squared with Variable Geometry? *Journal of International Economic Law*, 9 (4), pp.837–64.
- Vanzetti, D., McGuire, G., Prabowo. (2005) Trade Policy at the Crossroads–The Indonesian Story. *Policy Issues in International Trade and Commodities Study Series* [Internet], No. 28. Available from:
<http://www.unctad.org/en/docs/itcdtab29_en.pdf> [Accessed 19 July 2010].
- Vogel, C. (2006) The Impact and the Implications of TRIPs in a Knowledge-based Global Economy: A Developing Country’s Perspective. *Asia – Pacific Trade and Investment Review*, 2 (1), pp.47–70.

- Wade, R. (2003) What Strategies are Viable for Developing Countries Today? The World Trade Organization and the Shrinking of Development Space. *Review of International Political Economy* 10 (4), November, pp.621–44.
- Wang, Y. J. (2005) Further Protection of Intellectual Property Rights in the WTO Linking Transfer of Technology with Foreign Direct Investment. *The Journal of World Intellectual Property*, 8 (6), November, pp.797–806.
- Washington Treaty on Intellectual Property in Respect of Integrated Circuits 26 May 1989 [Internet]. Geneva, WIPO. Available from: http://www.wipo.int/export/sites/www/treaties/en/ip/washington/pdf/trtdocs_wo011.pdf (Accessed 25 February 2011).
- Watal, J. (2001) *Intellectual Property Rights in the WTO and Developing Countries*. The Hague, Kluwer Law International.
- Weiss, E. B. and Jacobson, H. K. eds. *Engaging Countries Strengthening Compliance with International Environmental Accords*. Massachusetts, the MIT Press.
- Winanti, P. S. and Young, A. R. (2009) Complying with Unwelcome Rules? Developing Countries and the TRIPs Agreement. *The Indian Journal of International Economic Law*, 2, pp.52-79.
- WIPO. (1994) Provisions of Existing International Conventions Providing Protection for Intellectual Property Communication from the WIPO Secretariat. GATT Document MTN.GNG/NG11/W/21, 12 February.
- WIPO. (n. d. (a)) What is Intellectual Property? [Internet]. Geneva, WIPO. Available from: <http://www.wipo.int/about-ip/en/> [Accessed 16 April 2009].
- WIPO. (n. d. (b)) Understanding Copyright and Related Rights. *WIPO Publication* [Internet] No. 909(E). Geneva, WIPO. Available from: http://www.wipo.int/freepublications/en/intproperty/909/wipo_pub_909.html#intprop > [Accessed 30 October 2010].
- WIPO. (n. d. (c)) WIPO Administered Treaties [Internet]. Geneva, WIPO. Available from: <http://www.wipo.int/treaties/en/> [Accessed 6 March 2009].
- WIPO. (n. d. (d)) WIPO's Country Profiles [Internet]. Geneva, WIPO. Available from: <http://www.wipo.int/about-ip/en/ipworldwide/country.htm> [Accessed 10 to 27 October 2008].
- WIPO. (n. d. (e)) Intellectual Property and Traditional Knowledge. *WIPO Publication* [Internet], No. 920(E). Geneva, WIPO. Available from: http://www.wipo.int/freepublications/en/tk/920/wipo_pub_920.pdf [Accessed 4 November 2009].
- WIPO. (n. d. (f)) Patent Applications by Patent Office (1883-2007) by Resident and Non-Resident [Internet]. Geneva, WIPO. Available from: <http://www.wipo.int/ipstats/en/statistics/patent/> [Accessed 27 March 2009].

- WIPO. (n. d. (g)) Understanding Industrial Property. *WIPO Publication* [Internet] No. 895(E). Geneva, WIPO. Available from: <http://www.wipo.int/export/sites/www/freepublications/en/intproperty/895/wipo_public_895.pdf> [Accessed 30 October 2010].
- Witular, R. A. (2002) RI, US Plan Bilateral Free Trade Pact. *Jakarta Post*, 22 November.
- World Bank. (n. d.) World Bank List of Economies [Internet]. Washington DC: World Bank. Available from: <<http://siteresources.worldbank.org/DATASTATISTICS/Resources/CLASS.XLS>> [Accessed 21 February 2011]
- WTO. (1996) Report (1996) of the Council for TRIPs. WTO Document IP/C/8, 6 November.
- WTO. (1997a) Pakistan–Patent Protection for Pharmaceutical and Agricultural Chemical Product Notification of Mutually Agreed Solution. WTO Document WT/DS36/4, 7 March.
- WTO. (1997b) India–Patent Protection for Pharmaceutical and Agricultural Chemical Products Report of Panel. WTO Document WT/DS50/R, 5 September.
- WTO. (1997c) Annual Report (1997) of the Council for TRIPs. WTO Document IP/C/12, 28 November.
- WTO. (1997d) India–Patent Protection for Pharmaceutical and Agricultural Chemical Products Report of Appellate Body. WTO Document WT/DS50/AB/R, 19 December.
- WTO. (1998a) Indonesia–Certain Measures Affecting the Automobile Industry Report of the Panel. WTO Documents WT/DS54/R, WT/DS55/R, WT/DS59/R, WT/DS64/R, 2 July.
- WTO. (1998b) India–Patent Protection for Pharmaceutical and Agricultural Chemical Product Report of the Panel. WTO Document WT/DS79/R, 24 August.
- WTO. (1998c) Annual Report (1998) of the Council for TRIPs. WTO Document IP/C/15, 4 December.
- WTO. (1999a) Annual Report (1999) of the Council for TRIPs. WTO Document IP/C/19, 22 October.
- WTO. (1999b) United States–Sections 301-310 of the Trade Act of 1974 Report of the Panel. WTO document WT/DS152/R, 22 December.
- WTO. (2000a) Notification of Laws and Regulations under Article 63.2 of the Agreement Indonesia. WTO Document IP/N/1/IDN/2/rev.1, 25 April.
- WTO. (2000b) Annual Report (2000) of the Council for TRIPs. WTO Document IP/C/22, 6 December.

- WTO. (2001a) Annual Report (2001) of the Council for TRIPs. WTO Document IP/C/23, 5 October.
- WTO. (2001b) Ministerial Declaration. WTO Document WT/MIN(01)/DEC/1, 20 November.
- WTO. (2001c) Declaration on the TRIPs Agreement and Public Health. WTO Document WT/MIN(01)/DEC/2, 20 November.
- WTO. (2002) Annual Report (2002) of the Council for TRIPs. WTO Document IP/C/27, 6 December.
- WTO. (2003a) Implementation of Paragraph 6 of the Doha Declaration on the TRIPs Agreement and Public Health Decision of 30 August 2003. WTO Document WT/L/540, 2 September.
- WTO. (2003b) Preparations for the Fifth Session of the Ministerial Conference Draft Cancun Ministerial Text Second Revision. WTO Document JOB(03)150/Rev/.2, 13 September.
- WTO. (2003c) Annual Report (2003) of the Council for TRIPs. WTO Document IP/C/30, 1 December.
- WTO. (2004) Annual Report (2004) of the Council for TRIPs. WTO Document IP/C/32, 8 December.
- WTO. (2005a) Issues Related to the Extension of the Protection of Geographical Indications Provided for in Article 23 of the TRIPs Agreement to Products other than Wines and Spirits Compilation of Issues Raised and Views Expressed Note by the Secretariat. WTO Document WT/GC/W/546 and TN/C/W/25, 18 May.
- WTO. (2005b) Annual Report (2005) of the Council for TRIPs. WTO Document IP/C/38, 21 November.
- WTO. (2005c) Doha Work Programme Ministerial Declaration. WTO Document WT/MIN(05)DEC, 22 December.
- WTO. (2006) Annual Report (2006) of the Council for TRIPs. WTO Document IP/C/44, 4 December.
- WTO. (2007) Annual Report (2007) of the Council for TRIPs. WTO Document IP/C/48, 7 December.
- WTO. (2008a) *Understanding the WTO*. 4th edition. Geneva, WTO.
- WTO. (2008b) Issues Related to the Extension of the Protection of Geographical Indications Provided for in Article 23 of the TRIPs Agreement to Products other than Wines and Spirits and those Related to the Relationship between the TRIPs Agreement and the Convention on Biological Diversity Report by the Director-General. WTO Document WT/GC/W/591 and TN/C/W/50, 9 June.

- WTO. (2008c) Annual Report (2008) of the Council for TRIPs. WTO Document IP/C/51, 4 December.
- WTO. (2009a) China–Measures Affecting the Protection and Enforcement of Intellectual Property Rights Report of the Panel. WTO Document WT/DS362/R, 26 January.
- WTO. (2009b) Annual Report (2009) of the Council for TRIPs. WTO Document IP/C/52, 5 November.
- WTO. (n. d. (a)) What are Intellectual Property Rights? [Internet]. Geneva, WTO. Available from: <http://www.wto.org/english/tratop_e/trips_e/intel1_e.htm> [Accessed 21 April 2009].
- WTO. (n. d. (b)) TRIPs: A More Detailed Overview of the TRIPs Agreement [Internet]. Geneva, WTO. Available from: <http://www.wto.org/english/tratop_e/trips_e/intel2_e.htm> [Accessed 6 March 2009].
- WTO. (n. d. (c)) Compulsory Licensing of Pharmaceuticals and TRIPs [Internet]. Geneva, WTO. Available from: <http://www.wto.org/english/tratop_e/trips_e/public_health_faq_e.htm> [Accessed 23 April 2010].
- WTO. (n. d. (d)) TRIPs: Geographical Indications Background and the Current Situation [Internet]. Geneva, WTO. Available from: <http://www.wto.org/english/tratop_e/trips_e/gi_background_e.htm#protection> [Accessed 25 January 2011].
- WTO. (n. d. (e)) TRIPs: Notifications under the TRIPs Agreement [Internet]. Geneva, WTO. Available from: <http://www.wto.org/english/tratop_e/trips_e/intel7_e.htm> [Accessed 10 to 27 October 2008].
- WTO. (n. d. (f)) Textiles [Internet]. Geneva, WTO. Available from: <http://www.wto.org/english/tratop_e/texti_e/texti_e.htm> [Accessed 2 February 2011].
- WTO. (n. d. (g)) Geographical Indications Talks Produce First Single Draft [Internet]. Geneva, WTO. Available from: <http://www.wto.org/english/news_e/news11_e/trip_ss_13jan11_e.htm> [Accessed 25 January 2011].
- WTO. (n. d. (h)) Dispute Settlement: Dispute DS362, China–Measures Affecting the Protection and Enforcement of Intellectual Property Rights [Internet]. Geneva, WTO. Available from: <http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds362_e.htm> [Accessed 17 January 2011].
- WTO. (n. d. (i)) Least–Developed Countries [Internet]. Geneva, WTO. Available from: <http://www.wto.org/english/thewto_e/whatis_e/tif_e/org7_e.htm> [Accessed 17 February 2011].

- WTO. (n. d. (j)) Dispute Settlement: the Disputes, Disputes by Agreement [Internet]. Geneva, WTO. Available from: http://www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.htm?id=A26#selected_agreement [Accessed 31 January 2011].
- WTO. (n. d. (k)) Dispute Settlement: the Disputes, Chronological List of Disputes Cases [Internet]. Geneva, WTO. Available from: http://www.wto.org/english/tratop_e/dispu_e/dispu_status_e.htm [Accessed 10 March 2011].
- WTO. (n. d. (l)) Dispute Settlement: Dispute DS408, European Union and a Member State–Seizure of Generic Drugs in Transit [Internet]. Geneva, WTO. Available from: http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds408_e.htm [Accessed 10 March 2011].
- WTO. (n. d. (m)) Dispute Settlement: Dispute DS409, European Union and a Member State–Seizure of Generic Drugs in Transit [Internet]. Geneva, WTO. Available from: http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds409_e.htm [Accessed 10 March 2011].
- WTO. (n. d. (n)) Dispute Settlement: Dispute DS50, India–Patent Protection for Pharmaceutical and Agricultural Chemical Products [Internet]. Geneva, WTO. Available from: http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds50_e.htm [Accessed 13 March 2011].
- WTO. (n. d. (o)) Dispute Settlement: Dispute DS59, Indonesia–Certain Measures Affecting the Automobile Industry [Internet]. Geneva, WTO. Available from: http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds59_e.htm [Accessed 13 March 2011].
- WTO. (n. d. (p)) Dispute Settlement: Dispute DS579, India–Patent Protection for Pharmaceutical and Agricultural Chemical Products [Internet]. Geneva, WTO. Available from: http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds79_e.htm [Accessed 13 March 2011].
- Young, A. R. (2009) Analysing Compliance: The EU and the WTO. Paper to the International Studies Association Conference, New York, 15-18 February.