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**INTELLECTUAL PROPERTY PROVISIONS IN
REGIONAL TRADE AGREEMENTS: REVISION AND UPDATE**

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INTELLECTUAL PROPERTY PROVISIONS IN REGIONAL TRADE AGREEMENTS: REVISION AND UPDATE

by Raymundo Valdés and Maegan McCann¹

ABSTRACT

This is a revision and update of "Intellectual Property Provisions in Regional Trade Agreements" by Valdés and Runyowa (2012). This paper adjusts the methodology applied to assess the intellectual property (IP) provisions contained in regional trade agreements (RTAs) and the aggregation of such provisions into groups; it also updates the RTAs surveyed, from 194 in November 2010 to 245 in February 2014. New information contained in this revision relates to three IP-related investment and non-violation provisions in RTAs. The methodological revisions and new information result in changes to the assessment of the IP content of certain RTAs while the update reveals a growing and increasingly complex network of RTAs with IP content. This revision also provides new insights into possible improvements to the methodological toolkit for analysing IP in RTAs.

The paper assembles detailed information about the IP provisions contained in active RTAs notified to the WTO. The goal was to expand beyond the more commonly studied RTAs, to review the full array of agreements notified to the WTO and thus to enable consideration of the implications of this diverse range of norm-setting activity for the multilateral system. Mapping of the IP content in RTAs involving parties from all regions and levels of development is necessary to better understand cross-cutting trends in RTAs, and how all the parts of the international IP framework influence each other.

The methodology followed involved surveying each RTA in the sample to determine whether it made reference to any of 32 different IP-related provisions. Two of the three IP-related provisions new to this revision and update are investment-related IP provisions, while the other concerns dispute settlement for non-violation claims. The relevant provisions are discussed in detail and summary statistics used to identify patterns over time and by continent, level of economic development and selected traders. The number of IP provisions in each RTA is then used to classify agreements according to their level of IP content.

The first significant identified trend is the acceleration in the conclusion of RTAs with IP provisions after the creation of the WTO and the entry into force of the WTO TRIPS Agreement. A significant proportion of those RTAs contain some type of IP provision, but the number and type of those provisions vary widely across agreements. A majority of the RTAs surveyed include general IP provisions, while a smaller proportion contains explicit provisions on specific fields of IP law, such as geographical indications, patents, trademarks and copyright. The inclusion of even more detailed provisions elaborating on specific areas of IP law is less common. As a result, the actual IP content of RTAs differs greatly across the sample, with slightly less than half of these agreements found to have substantive IP standards that can be classified as moderate or high.

The RTAs containing a high level of IP provisions are characterized by a hub-and-spoke architecture in which the wording and structure of IP provisions converged around the RTAs of specific countries or blocs. The largest systems are grouped around the EFTA, the European Union and the United States. The hub-and-spoke architecture seems to have encouraged the convergence of domestic IP regimes among the respective RTA signatories. The mechanics of this potentially crucial process and its economic implications require further investigation.

Keywords: Regional Trade Agreements, Intellectual Property Rights, WTO, TRIPS

JEL Classifications: F13, F15, F53, O34

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A. INTRODUCTION

1. Non-discrimination, as embodied in the most-favoured-nation (MFN) principle established by Article 1 of GATT, Article 2 of GATS and Article 4 of the TRIPS Agreement, is one of the cornerstone principles of the multilateral trading system. A Member departs from this principle when it enters into a regional trade agreement (RTA) granting more favourable trade conditions to its fellow signatories than it does to other parties.²

2. WTO Members are permitted to depart from the MFN principle under specific conditions. These are spelled out in paragraphs 4 to 10 of Article XXIV of GATT (as clarified in the Understanding on the Interpretation of Article XXIV of the GATT 1994) providing for the formation and operation of customs unions and free-trade areas covering trade in goods; Article V of GATS governing the conclusion of economic integration agreements (EIAs) in the area of trade in services; and the Decision on Differential and More Favourable Treatment Reciprocity and Fuller Participation of Developing Countries (Enabling Clause), which provides the legal basis for preferential agreements between developing countries. No equivalent derogation from the MFN principle is available under the TRIPS Agreement.

3. Using the scope available under WTO rules to depart from the MFN principle, WTO Members have actively engaged in the formation of RTAs. As a result, one of the most prominent features of international trade policy in recent years has been the rapid increase in the number of those agreements. As of 31 January 2014, some 583 notifications of RTAs had been received by the GATT/WTO. Of these, 377 were in force.³ Of the 583 notifications, 411 RTAs were notified under the GATT, 133 under the GATS and 39 under the Enabling Clause.⁴ All WTO Members are party to at least one RTA. The WTO TRIPS Agreement has no requirement to notify relevant bilateral and regional agreements that set IP standards for their signatories, but many of those notified under other WTO Agreements have IP provisions, or provisions that indirectly touch on IP, such as system for bilateral dispute settlement.

4. This paper is based on 245 RTAs notified to the WTO and in force by February 2014 (counting only physical agreements, each of which may have resulted in more than one of the notifications counted in the previous paragraph). This represents a considerable expansion of the number of RTAs surveyed compared with the 194 agreements included in the paper by Valdés and Runyowa (2012).

5. Compared with the extensive literature on regionalism, relatively few comprehensive analyses have been carried out on the actual intellectual property (IP) content of RTAs involving parties from across the WTO membership.⁵ Moreover, many of those analyses have focused on RTAs comprising parties with narrow geographical and economic profiles. This paper seeks to make a contribution towards closing this gap by conducting a comprehensive mapping of the IP content in a larger number of RTAs involving parties from all regions and across different levels of development. The paper also

² This paper uses the term RTA to follow the usage in WTO's database on trade agreements under Article XXIV of GATT, Article V of GATS or the Enabling Clause. Note, however, that in practice an "RTA" need not define a geographical region as such, and a number of relevant agreements are bilateral trade deals between geographically distant countries. The terms free trade agreement (FTA) and preferential trade agreement (PTA) have narrower definitions than RTA within the WTO system but in practice both are often used interchangeably with the term RTA.

³ Counting goods, services and accession notifications separately. The number of actual agreements is smaller, as more than one notification can refer to the same RTA.

⁴ For further details see http://www.wto.org/english/tratop_e/region_e/region_e.htm.

⁵ Recent exceptions include Baccini (2011) and Fink (2011).

aims to complement the coverage of other RTA-related issues contained in the 2011 World Trade Report (WTO 2011a).⁶

6. The paper is organized as follows. Section B contains a brief description of WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement). Section C explains the methodology used to identify the IP provisions contained in RTAs, and provides a detailed description of each category, including the three new investment-related and non-violation categories. Section D develops a classification of RTAs according to their level of IP content. Section E investigates the architecture of RTAs containing IP provisions, and Section F discusses some possible regulatory and economic implications of such architecture.

B. THE AGREEMENT ON TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS

7. The TRIPS Agreement was negotiated during the 1986-94 Uruguay Round of trade negotiations. That Agreement was the first to introduce extensive IP rules into the multilateral trade law system.

8. Intellectual property rights (IPRs) refer to the exclusive rights that allow creators to prevent others from using their inventions, designs, distinctive marks or other creations without their permission. The TRIPS Agreement covers the following specific types of IP:

- copyright and related rights;
- trademarks;
- geographical indications;
- industrial designs;
- patents;
- layout-designs (topographies) of integrated circuits; and
- undisclosed information.

9. The TRIPS Agreement also contains provisions on the control of anti-competitive practices in contractual licences, and it incorporates standards on suppression of unfair competition from the WIPO-administered Paris Convention on the Protection of Industrial Property (Paris Convention).

10. The Uruguay Round established new internationally-agreed trade rules for IPRs in order to provide minimum standards of IP protection, and to provide for the systematic settlement of IP-related disputes. The TRIPS Agreement seeks to strike a balance between the long term benefits resulting from increased creation and invention, and the societal costs that may arise from the exclusive private rights defined by IPRs. Under the TRIPS Agreement, governments are allowed to address these potential pitfalls through various exclusions from the subject matter of protection (such as an exclusion of morally unacceptable technologies from patent protection) and exceptions and limitations on exclusive rights (for example, research exceptions to patent rights).

11. The TRIPS Agreement is structured in five parts which cover:

- general provisions and basic principles of IP in the WTO system, including those incorporated into the TRIPS Agreement from other international agreements;
- standards concerning the availability, scope and use of IPRs;
- the enforcement of IPRs;
- the acquisition and maintenance of IPRs and related *inter-partes* procedures;
- settlement of IP disputes between WTO Members;
- transitional arrangements during the period when the Agreement was introduced; and
- institutional arrangements, which include the delineation of the TRIPS Council's duties, as well as provisions on international cooperation, review and amendment.

⁶ The World Trade Report is WTO's flagship publication on trade policy trends.

12. In addition to the MFN obligation, another important principle of the TRIPS Agreement is the national treatment obligation that requires each Member to treat non-nationals no less favourably than it treats its own nationals. National treatment is also a key principle found in other IP agreements outside the WTO system. The TRIPS Agreement also sets an important objective for the IP system: the protection of IP should also contribute to technical innovation and the transfer of technology, and to broader social benefit.

13. The TRIPS Agreement sets the minimum benchmark for IP protection in the territories of WTO Members. The Agreement incorporates some of the main international agreements of the World Intellectual Property Organization (WIPO) that already existed before the WTO was created. These include the Paris Convention and the Berne Convention for the Protection of Literary and Artistic Works (copyright). However, the TRIPS Agreement covers additional areas of IP and introduces higher standards of protection than provided under the two WIPO treaties.

14. A key feature of the TRIPS Agreement is its provisions on enforcement and administration of IPRs, areas of regulation that had not been extensively covered in earlier multilateral agreements. The TRIPS Agreement requires WTO Members to ensure that IPRs can be effectively enforced under their laws, and that the penalties punish and deter violations. The procedures must be fair and equitable; not unnecessarily time-consuming, complicated or costly; and shall be applied in a manner that avoids the creation of barriers to legitimate trade. They shall offer the possibility of asking courts to review an administrative decision or of appealing a lower court's ruling. The TRIPS Agreement requires that commercial scale trademark counterfeiting and copyright piracy be treated as criminal offences. It also provides that rights owners shall have the assistance of customs authorities to prevent imports of counterfeit and pirated goods, subject to safeguards for legitimate traders.

C. INDIVIDUAL IP PROVISIONS CONTAINED IN RTAs

1. Methodology

15. The primary source of information for this paper was the WTO's database on RTAs.⁷ This database contains official information notified by Members through the WTO's notification system. The notification obligations for RTAs are contained in the GATT, the GATS, the Enabling Clause and the Transparency Mechanism for RTAs. No equivalent notification obligations exist under the TRIPS Agreement.

16. The WTO's database on RTAs maintained by the WTO Secretariat provides comprehensive information on individual agreements. The database is, however, incomplete since only about two-thirds of the RTAs in force have been notified to the GATT/WTO. As of February 2014, the database identified 245 agreements in force (counting as one goods, services and enlargement notifications). This group constitutes the sample for the analysis offered in this paper. Annex I provides basic information about those 245 RTAs. A constraint on this database is that – due to the basis of the notification requirements for RTAs falling under the GATT and GATS, and not the TRIPS Agreement itself – bilateral or regional agreements that deal with IP in particular, with co-operation on IP administration, or with specific areas of IP protection (such as geographical indications) are not notified through this system.⁸

⁷ The database is publicly accessible at <http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx>.

⁸ In this connection, the Council for TRIPS decided in 2010 to encourage Members to notify their bilateral agreements related to the protection of geographical indications (WTO 2010); these agreements are noteworthy as they require specific protection of geographical indications that goes beyond the wider standard-setting of the TRIPS Agreement. Following that decision, a number of WTO Members have updated the Council for TRIPS on their relevant bilateral agreements, for example the agreement between the Russian Federation and Switzerland (WTO 2013) and Australia and Malaysia (WTO 2012b).

17. The specific IP provisions in each of the RTAs in the sample were established by examining the text of each agreement for references to a particular variable or topic of interest. Examples include the presence of provisions on patents, reaffirmations of the TRIPS Agreement, compulsory licensing of patents or provisions of special interest to the public health and pharmaceuticals sector (on the latter, see section C(3)(c) below). The map of provisions was drawn almost exclusively from the texts of the RTAs. Based on the examination of these texts, each variable or topic was coded with a tick (✓) if it was directly mentioned in the text or left blank where no such reference could be found. See Baccini et al. (2011) for a recent survey of similar approaches to coding the provisions contained in RTAs.

18. It is important to note that actual national laws and their effect should be distinguished from the provisions of RTAs, which for many countries are not automatically enforceable under domestic law. Further, consistency with the TRIPS Agreement is a matter for the implemented national legislation so there is no basis for determining the conformity or otherwise of distinct international trade agreements separately entered into by WTO Members; moreover, given the complexity and sensitivity of interpreting legal texts, no attempt was made to establish whether the obligations matched, contradicted or exceeded those in the TRIPS Agreement. Neither was an assessment made of the substantive validity or legal enforceability of the RTA's provisions, except to some measure in the case of the European Union.

19. Some RTAs involving the European Union contain provisions in the form of loosely formulated treaty language referring to IP protection standards in a general sense (e.g., "Parties shall grant and ensure adequate and effective protection of IPRs in accordance with the highest international standards").⁹ Such agreements were categorized as lacking distinct, substantive provisions on the protection of IPRs because the language was general in character and could not be construed in terms of specific obligations to protect IP to a certain, defined standard. If instead it was assumed that the same language required parties to provide a level of protection similar to the prevailing standard in the European Union, then the aggregate number of IP provisions in the RTAs involving the European Union would have increased significantly.

20. For the Andean Community, the European Union and EFTA members, the mapping reflects regional laws and regulations enacted after the original RTAs came into force or treaties incorporated by reference into the RTA. In the case of the Andean Community, the mapping reflects the requirement in the Cartagena Agreement establishing the Community that a common Andean IP regime be established.¹⁰ In the case of the European Union and EU FTAs, the mapping reflects EU law (regulations, directives, decisions and treaties incorporated therein, such as the Convention on the Grant of European Patents (European Patent Convention, EPC)) to the extent EU law is incorporated in the RTA. In the case of EFTA FTAs, the mapping reflects IP provisions contained in the EFTA Convention, its Protocols, the European Economic Area Agreement (EEA) and the EPC to the extent they are incorporated into the FTA.

2. IP provisions of any type included in RTAs

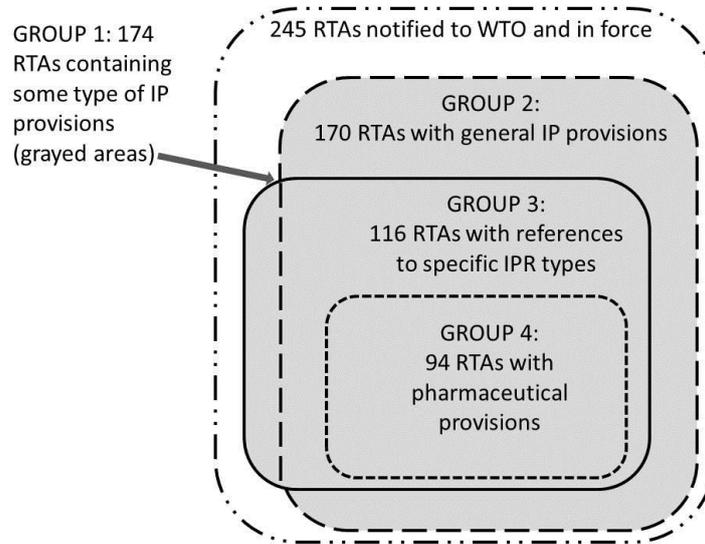
21. Following the methodology described above, out of the initial 245 RTAs, 174 were classified as containing some type of IP provision. In general, for the purpose of this study, language in an RTA was classified as an IP provision if it touched on the regulation of intellectual property. The 174 RTAs classified as containing some type of IP provision are identified as Group 1 in Chart 1. This group results from the aggregation of three others: Group 2 that includes RTAs containing general IP

⁹ The RTAs in this situation include the agreements between, on the one hand, the European Union and, on the other hand, Algeria, Cameroon, Egypt, Israel, Jordan, Lebanon, Morocco or Tunisia.

¹⁰ Article 52 of the Cartagena Agreement requires that "Before December 31, 1970, the Commission, shall at the General Secretariat's proposal, approve and submit to the Member Countries for their consideration a common regime on the treatment of foreign capital and, among others, about trademarks, patents, licenses, and royalties. The Member Countries shall take the necessary measures to put this regime into effect within six months following its approval by the Commission."

provisions, Group 3 incorporating RTAs that make references to specific IPR types, and Group 4 comprising RTAs that contain pharmaceutical provisions.¹¹

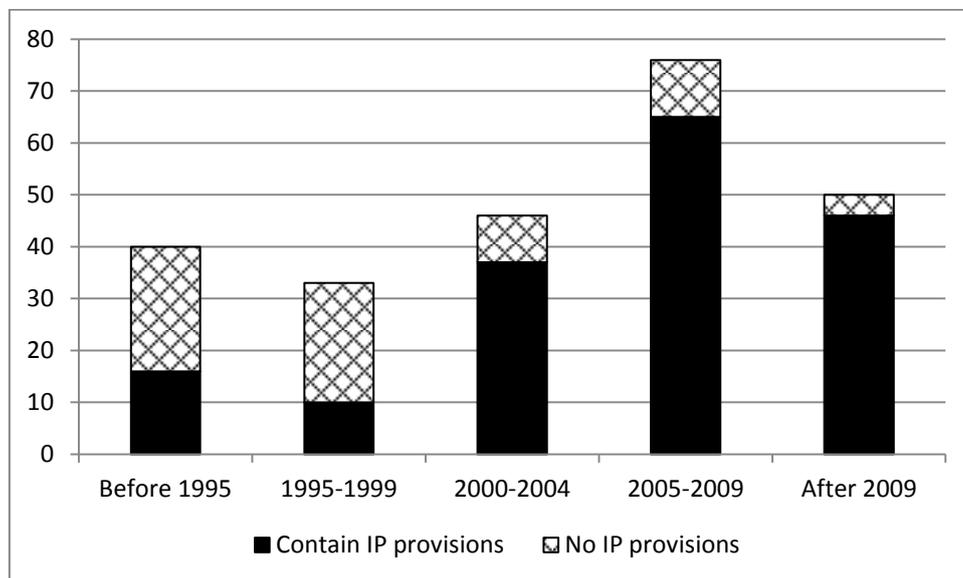
Chart 1. Groups of RTAs by IP content.



Source: Annexes I to IV

22. Chart 2 plots all 245 RTAs as well as the subset of those identified as containing IP provisions by date of entry into force. The chart confirms that the pace of adoption of RTAs has accelerated over time.

Chart 2. RTAs by date of entry into force.



Source: Annex I.

¹¹ All RTAs in Group 4 are also part of Group 3. Most RTAs in Group 3 also belong to Group 2, except for four RTAs that are in Group 3 but not in Group 2, namely *Canada-Chile*, *Canada-Costa Rica*, *MERCOSUR* and *Peru-Mexico*.

23. Of the 174 RTA containing IP provisions, only 16 entered into force before 1995, starting with the EC Treaty in 1958.¹² In contrast, 158 notified RTAs containing IP provisions have entered into force since the establishment of WTO in 1995.¹³ Chart 2 shows that before 2000, when the TRIPS Agreement became applicable to developing countries and (under certain conditions) transition economies, only a minority of the RTAs entering into force contained IP provisions. In contrast, most of the RTAs that have entered into force from 2000 contain some type of IP provision.

24. Table 1 presents key summary statistics for the RTAs containing IP provisions. The statistics show that the proportion of new RTAs that include IP provisions increased from less than 40% before 2000 to 80% or more after that year. Just over 90% of the RTAs that have entered into force since 2010 contained IP provisions, although this period may not be fully representative as some RTAs that have recently entered into force may not yet have been notified to the WTO.

25. The types of economic integration implicit in RTAs can vary substantially, from partial scope agreements (PSA), to free trade agreements (FTAs), customs unions and EIAs.¹⁴ Of the 174 RTAs containing IP provisions, 60 are FTAs, while a further 102 involve the higher degree of integration implicit in the combination of an FTA and an EIA. In earlier years, a few RTAs containing IP provisions took the form of a customs union. However, this form of close economic integration seems to have lost attractiveness. No new customs unions have been notified to the WTO since 2005, which may reflect a degree of disillusionment with customs unions, many of which have fallen short of their stated objectives in practice as documented for the Western Hemisphere in Valdés (2010).

26. Closely related to the above patterns, 107 of the 174 RTAs containing IP provisions covered trade in both goods and services, which is a considerably higher proportion than for RTAs in general.¹⁵

27. Table 1 also shows the RTAs containing IP provisions by continent. The table indicates considerable diversity within and across continents. The Americas are the leader in terms of purely intra-regional RTAs, accounting for 36 of all agreements containing IP provisions. Europe occupied the second place, closely followed by Asia where many intra-regional RTAs have been established in recent years. By contrast, the number of intra-African RTAs is very modest (4).

28. Almost 60% of the RTAs containing IP provisions are intra-regional, and the rest include trading partners in more than one continent. Europe plays a leading role in this respect but both Asia and the Americas have also become significant participants in this type of agreement.

29. Table 1 also indicates the level of participation in RTAs containing IP provisions by the parties' level of development. Some 68 of these RTAs involve developing or transition economies.¹⁶ Most RTAs containing IP provisions include at least one developing country or transition-economy signatory. Just 5 RTAs included only developed economies (considering the European Union as a single unit). LDC parties were signatory to 14 RTAs containing IP provisions.

¹² Formally, the Treaty of Rome establishing the European Economic Community.

¹³ The recent increase in RTAs with pharma-related provisions would be even more apparent if the agreements establishing the EEC, EFTA and the Andean Community were excluded from the count as initially they did not contain significant pharma-related provisions as such but rather established the legal frameworks within which such provisions were subsequently introduced.

¹⁴ This terminology corresponds to that used in WTO's database on RTAs. PSAs typically involve the elimination of import tariffs in only a few sectors. FTAs entail the elimination of import tariffs in most sectors but FTA members retain independent trade policies. Customs unions build on FTAs by requiring participants to harmonize their external trade policy, including establishing a common external tariff. EIAs involve the liberalization of trade in services.

¹⁵ The EEA is the one RTA notified as an EIA only, and also as covering trade in services alone.

¹⁶ The following were classified as transition economies: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Table 1. Number of RTAs containing any type of IP provisions

	Before 1995	1995- 1999	2000- 2004	2005- 2009	After 2009	Total
Type:						
Customs Union (CU)	3	1	1	0	0	5
Economic Integration Agreement (EIA)	1	0	0	0	0	1
Free Trade Agreement (FTA)	6	6	15	19	14	60
Partial Scope Agreement (PSA)	1	0	0	0	0	1
CU and EIA	3	0	0	0	1	4
FTA and EIA	2	3	21	45	31	102
PSA and EIA	0	0	0	1	0	1
Coverage:						
Goods	10	7	16	19	14	66
Services	1	0	0	0	0	1
Goods and Services	5	3	21	46	32	107
Continent:						
Americas	4	3	7	12	10	36
Americas - Asia	1	1	5	13	7	27
Americas - Europe	0	0	4	1	5	10
Europe	5	1	7	8	7	28
Europe - Africa	0	2	3	9	2	16
Europe - Asia	3	3	5	5	4	20
Asia	1	0	5	16	10	32
Africa or Africa - Americas	2	0	1	1	1	5
Type of economy:						
Developed only	3	0	0	2	0	5
Developing or Transition	2	3	14	30	19	68
Developing or Transition - Developed	6	7	22	30	22	87
Developing or Transition - Developed - LDC	0	0	0	2	2	4
Developing or Transition - LDC	5	0	1	1	3	10
RTA containing IP provisions	16	10	37	65	46	174
Memorandum items:						
RTAs not containing IP provision	24	23	9	11	4	71
All RTAs	40	33	46	76	50	245

Source: Annexes I and II.

30. The sizeable participation of developing countries in RTAs with IP provisions is expected since these countries constitute the majority of WTO Members. However, this high level of participation is still notable given the common assumption that developing countries do not have positive IP interests to progress in trade negotiations.

31. The participation of LDCs in RTAs with IP provisions is also somewhat unexpected since these countries have successfully argued for their (transitional) exclusion from implementing most of the substantive obligations of the TRIPS Agreement. Whether LDCs are excluded from IP

obligations under RTAs that include IP provisions, or whether LDCs enjoy more generous implementation periods, was not investigated; it would be worth looking into these questions as part of further refinements to the methodology of this paper.

3. Particular categories of IP provisions contained in RTAs

32. IP provisions in RTAs vary widely in terms of nature, scope and depth. The following sections describe the different types of provisions contained in RTAs, which are classified in three groups: (a) "general IP provisions", (b) provisions related to specific types of IP and (c) provisions of special interest for public health and the pharmaceutical sector. Annexes II, III and IV show the particular provisions included in each of those three different groups of IP provisions.

33. The next three sections follow the binary coding methodology explained above, i.e., an examination of the text of each RTA, and the attribution of a tick (✓) if an IP category or topic is explicitly mentioned in the text, or a blank where no such reference is present. The ticks attributed to each provision contained in a particular RTA are indicated in Annexes II, III and IV. The information in those three annexes constitutes the foundation for the rest of the analytical work in this paper.

34. It should be noted that in addition to the IP provisions contained in the main text of RTAs, IP-related requirements are also contained in side letters to some agreements. These letters cover IP-related areas such as public health, pharmaceutical products, enforcement or traditional knowledge. The subject matter of side letters is included in this paper to the extent that these letters generally elaborate on issues mentioned in the agreement itself.

(a) General IP provisions in RTAs

35. Chart 3 illustrates the incidence of general IP provisions with respect to the 174 RTAs in the sample. The chart shows that the incidence of general IP provisions in those agreements varies widely. Some 76% of the agreements in the sample (i.e., 132 agreements) contain statements of commitment to IP protection or provisions on assistance, cooperation or coordination, while just over 11% (19 agreements) incorporate provisions on non-violation complaints.

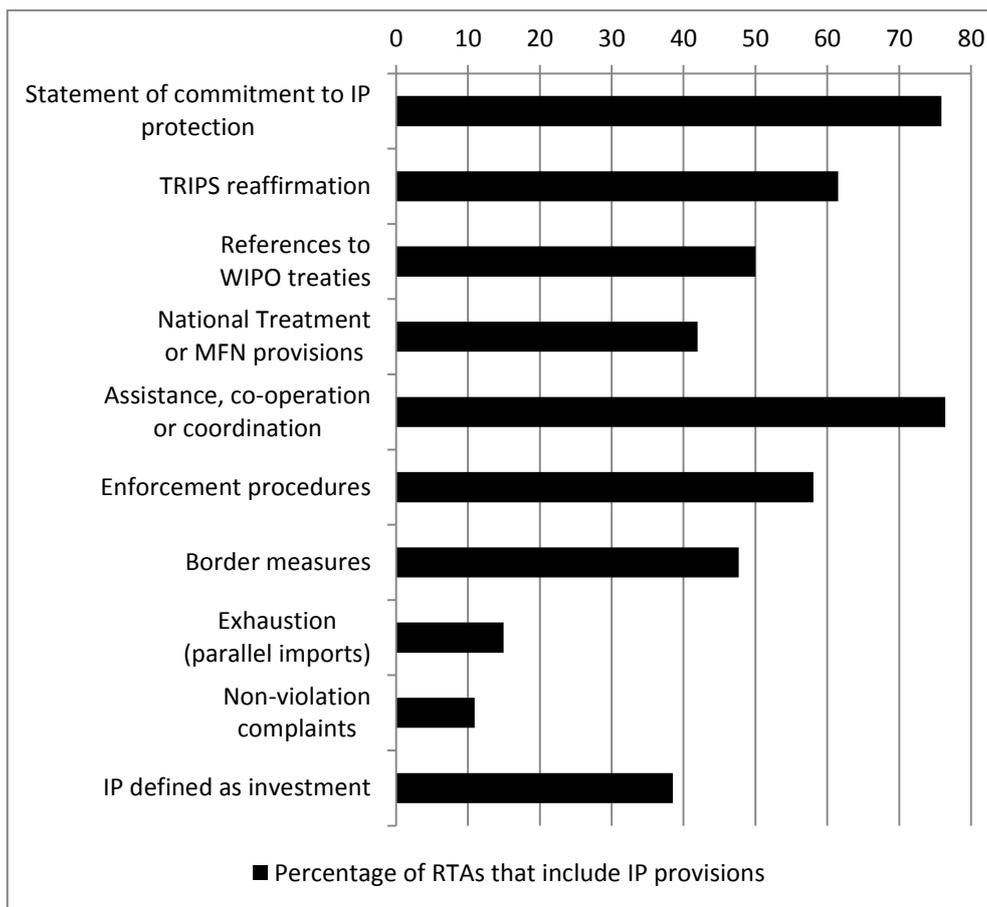
36. Table 2 contains summary statistics on the group of RTAs illustrated in Chart 3. The table presents data by period, continent, type of economy and selected WTO Member or group of Members. Each IP provision identified in Chart 3 corresponds to one column in the table. The values shown in each column correspond to the percentage of RTAs falling in a particular category (i.e., a particular row). For example, the value of "63" at the intersection of the column on "General statement of commitment to IP protection" and the row (category) labelled "Before 1995", means that 63% of the RTAs entering into force before 1995 contained provisions related to a commitment to IP protection.

37. The last column of Table 2 shows the actual number of RTAs containing IP provisions per category.¹⁷ For instance, that column shows that 16 RTAs entered into force before 1995.

38. Each of the ten types of general IP provisions included in Chart 2 and Table 2 are discussed in detail in the following sub-sections.

¹⁷ As a particular RTA falls within only one category, RTAs in all categories under a given heading add up to 174. The exception to this is the categorization by WTO Member or group, since a RTA includes multiple WTO Members.

Chart 3. Agreements containing general IP provisions, percentage.



Source: Table 2.

(i) *Commitment to IP Protection*

39. The question of whether a RTA affirms a commitment to IP protection was explored to assess the general attitudes that parties have towards the issue in the context of their preferential relationship. This provides a snapshot of how the range of approaches adopted by parties determines the nature and assertiveness of IP enforcement regimes that prevail across their territories.

Table 2. RTAs containing general IP provisions, % of agreements in each category (row)

	Statement of commitment to IP protection	TRIPS reaffirmation	References to WIPO treaties	National Treatment or MFN provisions	Assistance, co-operation or coordination	Enforcement procedures	Border measures	Exhaustion (parallel imports)	Non-violation complaints	IP defined as investment	Memorandum: number of RTAs in category
By period of entry into force:											
Before 1995	63	19	44	56	88	63	44	38	6	0	16
1995 - 1999	80	30	50	30	70	70	40	10	10	0	10
2000 - 2004	73	54	59	38	68	49	38	14	11	32	37
2005 - 2009	77	66	40	40	71	57	49	12	12	52	65
After 2009	80	83	59	46	89	63	57	13	11	46	46
By continent:											
Americas	44	47	33	39	39	50	47	3	22	64	36
Americas - Asia	67	70	48	41	59	59	59	15	30	59	27
Americas - Europe	100	90	90	60	100	90	70	30	0	0	10
Europe	96	61	61	68	93	57	57	36	0	4	28
Europe - Africa	94	56	50	38	100	50	19	6	0	0	16
Europe - Asia	90	55	70	40	95	70	40	20	0	10	20
Asia	78	75	41	25	91	56	47	6	6	72	32
Africa or Africa - Americas	60	20	20	20	60	40	20	20	20	40	5
By type of economy:											
Developed only	100	60	100	100	100	100	100	80	20	40	5
Developing or Transition	59	54	23	25	59	36	33	3	4	46	69
Developing or Transition - Developed	87	70	70	55	86	77	62	23	17	33	87
Developing or Transition - Developed - LDC	75	50	25	50	100	50	25	0	0	25	4
Developing or Transition - LDC	80	50	40	10	90	20	0	0	0	30	10
By selected WTO Member:											
Chile	55	45	35	25	50	40	35	10	15	55	20
EFTA members	100	80	88	92	100	100	88	32	0	12	25
European Union	89	50	79	32	100	71	43	39	0	0	28
Japan	100	69	54	54	100	69	69	0	0	62	13
Mexico	80	30	70	60	80	70	50	0	30	10	10
Turkey	95	58	26	37	95	26	16	5	0	0	19
United States	93	57	93	100	50	93	93	21	93	71	14
All RTAs with IP provisions	76	61	50	42	76	58	48	15	11	39	174

Source: Calculations based on Annex I.

40. There is significant diversity in how the parties express their attitudes, objectives and expectations with respect to protecting IP. In some cases, RTAs include single sentences affirming their commitment to protecting IP in general.¹⁸ A significant number of RTAs provide more detailed provisions elaborating on why effective protection is an important goal.¹⁹ Of these, some expressly provide that parties may exceed the standards of the TRIPS Agreement.²⁰ In other cases, a statement to commit to cooperation on intellectual property issues counted as an expression of commitment to IP protection.²¹ Elaboration on commitments to IP protection in some RTAs is expressed outside the main text, through Annexes obliging compliance or eventual accession to specific IP treaties.²²

41. In some cases, an explicit commitment is briefly stated and followed by the parties' express intention to elaborate on their IP protection regime at a later stage following the conclusion of the agreement.²³ Another interesting feature is reflected in RTAs that adopt a relatively "detached" stance with respect to IP protection.²⁴ The language used in the relevant provisions reflects the parties' mere intention to comply with their existing international legal obligations, rather than a proactive recognition that effective IP protection is central to their interests or relationship.

42. Some RTAs express recognition of the importance of protecting IP, but stop short of an express commitment to provide for protection of IPRs.²⁵ This group includes RTAs that only acknowledge IP as a factor that they must account for within the RTA relationship.

43. Table 2 shows that about three-fourths of RTAs containing IP provisions include commitments to protect IP generally. The frequency with which such commitments have been

¹⁸ For example, a single bullet point in Part III of the Common Economic Zone Agreement provides simply for the, "pursuance of a uniform policy of protecting intellectual property rights."

¹⁹ See Part 6: Chapter 17 of the *North American Free Trade Agreement (NAFTA)*. Article 10.2.1 of the *Trans-Pacific Strategic Economic Partnership RTA* states that: "The Parties recognise the importance of intellectual property in promoting economic and social development, particularly in the new digital economy, technological innovation and trade." In Article 10.2.3, sub-articles (a) - (c) it elaborates on how IP protection seeks to facilitate international trade and development, provide certainty to rights holders and users, and to promote the enforcement of IP rights.

²⁰ *NAFTA*, Article 1702: "A Party may implement in its domestic law more extensive protection of intellectual property rights than is required under this Agreement, provided that such protection is not inconsistent with this Agreement." This wording is identical to that of Article 16.2 of the *Korea, Republic of - Chile RTA*, which is between entirely different parties.

²¹ *Ukraine - Former Yugoslav Republic of Macedonia*, Article 28.1: "The Contracting Parties confirm their willingness to cooperate in the area of issues related to the trade-related intellectual property rights, and, if necessary, to apply measures provided for in Annex I C to the Marrakech Agreement establishing the WTO, as well as other multilateral agreements on issues concerning intellectual property protection, to which both Contracting Parties are parties; this list is included in Annex II."

²² *US - Australia* has Annexes and sides letters concerning areas ranging from pharmaceuticals to blood plasma, phonograms, whiskey, and ISP liability. See also Annex 2 of the *EU - Lebanon RTA*.

²³ *Faroe Island - Norway*, Article 17.1 provides that "The Contracting Parties shall co-operate with the aim of gradually improving the non-discriminatory protection of intellectual property rights, including measures for the grant and enforcement of such rights. Rules between the Contracting Parties concerning the protection of intellectual property rights shall be elaborated. These rules shall ensure a level of protection similar to that prevailing in the member states of the European Communities and in the member states of the European Free Trade Association."

²⁴ *Ukraine - Former Yugoslav Republic of Macedonia*, Article 28.1: "The Contracting Parties confirm their willingness to cooperate in the area of issues related to the trade-related intellectual property rights, and, if necessary, to apply measures provided for in Annex I C to the Marrakech Agreement establishing the WTO, as well as other multilateral agreements on issues concerning intellectual property protection, to which both Contracting Parties are parties; this list is included in Annex II." See also Article 19.1 of the *Ukraine - Moldova RTA*.

²⁵ *Pakistan - Malaysia*, Article 104.1 states that: "The Parties recognise the importance of intellectual property in promoting economic and social development, particularly in the new digital economy, technological innovation and trade."

included in RTAs has remain relatively steady over time. The table shows strong variations by continent, with all RTAs between the Americas and Europe containing commitments to IP protection. In general, such commitments are more common in RTAs involving Europe than in other agreements. This type of commitment is also more frequent in RTAs involving developed economies, and less usual in RTAs including only developing countries.

44. Commitments to IP protection vary across the RTAs signed by countries with a high number of RTAs in force. As shown at the end of Table 2, WTO Members identified as particularly active in RTAs include both developed economies (EFTA members, the European Union, Japan and the United States) and developing countries (Chile, Mexico and Turkey). Chile and Turkey have more RTAs with IP provisions than Japan or the United States, reflecting in part the larger number of RTAs that those three countries have individually signed.

(ii) *TRIPS Agreement Reaffirmation*

45. The TRIPS Agreement reaffirmation criterion is a narrower conception of the general commitment to IP protection. It may take the form of a phrase mandating compliance with, or application of, the TRIPS Agreement itself, requiring the application of TRIPS Agreement standards in the bilateral context.²⁶ It may also take the form of a reaffirmation of the parties' rights and obligations under the TRIPS Agreement.²⁷ This criterion deserves independent investigation for two reasons. First, though compliance with the TRIPS Agreement is compulsory for all WTO Members, overt reaffirmation could be regarded as a strong indicator that the parties actively embrace their rights and obligations under the Agreement. It may be seen as an acceptance of TRIPS Agreement provisions, including substantive standards and public policy safeguards and flexibilities, and thus recognition that it may serve as a kind of benchmark for a balanced and comprehensive IP system.

46. Further, even some of the RTAs that affirm the TRIPS Agreement may, arguably, diverge from this Agreement. This group mainly includes RTAs that express the intention to exceed TRIPS Agreement standards. Though the TRIPS Agreement does allow Members to go beyond the TRIPS Agreement standards of IP protection, certain WTO Members have highlighted the systemic implications of what they have termed TRIPS-plus initiatives, which "could disturb the fine balance of rights and obligations that had been provided in the TRIPS Agreement and could negate decisions like the Doha Declaration on Public Health" (WTO 2012a).

47. The second reason for investigating the presence of TRIPS Agreement reaffirmations in RTAs is that the accession of some non-WTO Members to the TRIPS Agreement is mandated in RTAs. Such accessions are often scheduled to occur by a particular date. This situation raises some interesting and potentially problematic legal issues since accession to the TRIPS Agreement alone is not possible without accession to the WTO. For example, in the case of the *EU - Algeria* RTA Algeria was required to have acceded to the TRIPS Agreement by 2009 (and not merely adopt TRIPS Agreement standards).²⁸ As Algeria is not a WTO Member, the legal effect and significance of such accession mandates is doubtful.

²⁶ *New Zealand – Singapore*, Article 57 provides that "The Parties agree that the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights shall govern and apply to all intellectual property issues arising from this Agreement." See also Article 15.1 of *Turkey - Palestinian Authority*.

²⁷ *Australia – Chile*, Article 17.3: "The Parties reaffirm their existing rights and obligations with respect to each other under the TRIPS Agreement and any other multilateral intellectual property agreements to which both are party."

²⁸ *EU - Algeria*, Annex 6 on Intellectual Property: "Before the end of the fourth year from the entry into force of this Agreement, Algeria and the European Communities and/or their Member States shall, to the extent they have not yet done so, accede to, and ensure an adequate and effective implementation of the obligations arising from, the following multilateral conventions.... Agreement on Trade-Related Aspects of Intellectual Property Rights (Marrakech, 15 April 1994), taking into consideration the transitional period provided for developing countries in Article 65 of that Agreement."

48. Further, in cases where RTAs require non-WTO Members to comply with the TRIPS Agreement, it is uncertain whether such compliance is restricted to the text of the Agreement or the accompanying body of TRIPS Agreement and WTO jurisprudence. It is also uncertain if or to what extent a reaffirmation of the TRIPS Agreement in an RTA would require the RTA dispute settlement mechanism to take into account a WTO panel or Appellate Body report involving interpretation of the TRIPS Agreement.

49. Table 2 shows that TRIPS Agreement reaffirmations appear in 61% of all RTAs containing IP provisions, with the frequency of inclusion of those reaffirmations steadily increasing over time. Strong variations across continents are identifiable, with TRIPS reaffirmations appearing less frequently than general statements of commitment to IP protection, particularly in the case of Europe. TRIPS Agreement reaffirmations are particularly frequent in RTAs involving developed and developing/transition countries. EFTA members have incorporated such reaffirmations in 80% of their RTAs; in contrast, Mexico has included them in less than one-third of its own agreements.

(iii) *References to WIPO Treaties*

50. The purpose of analysing references to the WIPO treaties and the UPOV Convention is to determine the importance that RTA parties place on these agreements.²⁹ Affirmation would increase the probability that the RTA parties' IP laws and policies would be in line with a significant part of the extensive WIPO framework. Affirmatory references to WIPO treaties provide WTO (and WIPO) Members a significant degree of predictability in terms of how any given RTA could alter, depart from or re-conceptualise the common understanding of the international IP framework.

51. An additional effect of mandated compliance with certain WIPO treaties is the facilitation of a more harmonized global IP regime. This would occur primarily through the extension of the WIPO system into the national laws of RTAs parties regardless of whether they are members of WIPO or not.

52. References to WIPO treaties may take the form of a reaffirmation of obligations under enumerated WIPO treaties. The wording of the reaffirmation differs slightly between the two affirmatory provisions.³⁰ Another group of RTAs mandates compliance with the provisions of certain WIPO treaties without requiring accession to the agreements themselves.³¹ Other treaties go a step further and actually mandate the eventual accession of some parties.³² A third manifestation of such

²⁹ Detailed information on the 24 treaties administered by WIPO may be found at <http://www.wipo.int/treaties/en/>. Information on the UPOV Convention is available at <http://www.upov.int/overview/en/>.

³⁰ For example, Article 46.3 of the *EU – South Africa* RTA states that: “The Community and its Member States confirm the importance they attach to the obligations arising from the:...” The provision then lists the Madrid Convention, the Rome Convention and the Patent Cooperation treaty. Article 46.5 then says, “The Parties confirm the importance they attach to the following instruments:...” The provision then lists various WIPO conventions and treaties.

Article 46.3 affirms the importance of obligations arising from one set of WIPO and UPOV treaties while Article 46.5 affirms the importance of other WIPO “instruments.” The meaning and significance of the phrase “obligations arising from” and the word “instruments” is unclear.

³¹ *NAFTA* Article 1701.2: “To provide adequate and effective protection and enforcement of intellectual property rights, each Party shall, at a minimum, give effect to this Chapter and to the substantive provisions of: ...” followed by a list of WIPO conventions.

³² *EU – Morocco* Annex 7, Article 1: “By the end of the fourth year after the entry into force of the Agreement, Morocco shall accede to the following multilateral conventions on the protection of intellectual, industrial and commercial property: ...”, followed by a list of WIPO conventions and treaties. See also Annex XII, Article 2.2 of the *EFTA – Chile* RTA.

references provides a “soft” mandate that encourages parties to make their “best efforts” to join WIPO treaties they are not already party to.³³

53. To avoid interpretation of the text of an RTA, unless explicit reference was made to a particular WIPO treaty or to WIPO treaties generally, a general reaffirmation of obligations under international IP agreements "in effect between the parties" was not counted as a reference to WIPO treaties for the purpose of this study.

54. Table 2 shows that references to WIPO treaties appear in just half of all RTAs that include IP provisions, with no particular trend over time. Such references are more frequent in inter-regional RTAs that include Asia or Europe. All RTAs between developed countries make references to WIPO treaties but the same is true for just under one-quarter of RTAs involving only developing/transition countries. Similarly, almost all of the United States RTAs include references to WIPO treaties while the percentages for RTAs involving Chile or Turkey are much lower.

(iv) *MFN or National Treatment for IP protection*

55. The rationale for including MFN and national treatment provisions specific to the protection of IP in this study is to determine whether the RTAs supplement the corresponding standards of the TRIPS Agreement. Some RTAs provide the TRIPS Agreement as the substantive benchmark for the application of MFN and national treatment standards.³⁴ Consequently, the corresponding standards of the Berne and Paris Conventions constitute a part of this benchmark as provided for by Article 1 of the TRIPS Agreement.

56. Certain MFN provisions are narrower in scope. Some mandate parties to provide for treatment no less favourable than they grant to their partners in other RTAs.³⁵

57. Some national treatment and MFN requirements have largely been phrased in the context of investment protection.³⁶ Absent the existence of an obligation for the RTA parties to provide MFN treatment or national treatment with respect to the protection of intellectual property, an RTA containing national treatment or MFN requirements for investments was not counted as containing MFN or national treatment for IP protection.

58. Around 42% of RTAs containing IP provisions address the MFN and/or national treatment principle in some capacity. The coverage of MFN and national treatment has varied relatively little over time. Only a minority of RTAs in the Americas or Asia include MFN and national treatment provisions while just over two-thirds of the RTAs in Europe include such provisions. However, there are strong differences in Europe, with EFTA members including MFN and national treatment provisions in most of their RTAs while the European Union includes them in less than one-third of its agreements. All RTAs between developed countries include MFN and national treatment provisions but this is the case for only one-quarter of RTAs exclusively including developing countries.

³³ *Nicaragua – Chinese Taipei* Article 17.03(3): “The Parties confirm that if either of them that is not a party to one or more of the multilateral treaties listed in Article 17.01, it commits itself to put forth its best efforts to seek to join those treaties in due time.” See also *Japan – Indonesia* Article 106.6, which encourages accession using the words, “Each Party shall endeavor to become a party if it is not a party, to the following international agreements in accordance with its necessary procedures.”

³⁴ *EFTA Treaty* Articles 19.2 and 19.3; *Egypt – Turkey*, Article 24.2 and 24.3.

³⁵ An example of such an agreement which limits the scope of its MFN mandate is the *EU - Serbia* RTA. Article 40.2 of this agreement provides that: "...in respect of the recognition and protection of intellectual, industrial and commercial property, treatment no less favourable than that granted by them to any third country under bilateral Agreements."

³⁶ *Japan – Mexico*, Article 73.2.

59. Section F.1 below contains a further discussion of MFN and national treatment in the context of RTAs including IP provisions. It is noted there that the application of IP commitments would be on an MFN basis regardless of whether the RTA specifically states so.

(v) *Statements on Assistance, Cooperation or Coordination regarding IP*

60. Statements on assistance, cooperation or coordination are one of the two most common forms of IP provisions in the RTAs surveyed, with just over three-quarters of them containing such provisions. Some provisions promote technical assistance for the primary benefit of the developing country parties. These include programmes that fund or facilitate technology transfer, IP education and legal assistance.³⁷ Other RTAs contained "mutual benefit" provisions that could be interpreted as providing balanced benefits to all parties.³⁸ Another group of RTAs is distinguishable by the parties' narrow focus on one or several areas of IP.³⁹

61. Coordination and capacity building efforts often include the establishment of bodies to facilitate these goals. Of the RTAs between developed and developing parties, some focus solely on improving the ability of the latter to better protect IP rights. Another group focuses on assistance that is meant to benefit developing parties. The RTAs in which the United States is a party tend to provide comprehensive packages encompassing all these approaches.

62. Table 2 shows that RTAs containing statements on technical assistance, cooperation or coordination are common in all continents except the Americas. These provisions are also found amongst agreements involving developed countries alone as well as those including developing/transitions countries or LDCs. All the RTAs maintained by EFTA members, the European Union and Japan contain statements on technical assistance, cooperation or coordination but only half of US RTAs contain these provisions.

(vi) *IP Enforcement Procedures*

63. Enforcement provisions can reflect parties' perceptions that they have a positive interest in the effective protection of IP rights in their trading partners, recognition of the need for cooperation on enforcement called for under the TRIPS Agreement and a concern that IP enforcement does not create a barrier to legitimate trade and is balanced and consistent with principles of natural justice.

64. The RTAs that contain enforcement provisions range from those with detailed and strict provisions on one end to those that merely require the parties to provide for enforcement frameworks in their national laws or to cooperate on IP enforcement. For example, some RTAs provide for criminal sanctions that expressly mandate imprisonment to be available as a sanction for some forms of infringement.⁴⁰ Other RTAs also provide for criminal remedies, but do not specifically provide

³⁷ *ASEAN - Australia - New Zealand*, Article 9.1: "The Parties acknowledge the significant differences in capacity between some Parties in the area of intellectual property. Mindful of this, where a Party's implementation of this Chapter is inhibited by capacity constraints, each other Party shall, as appropriate, and upon request, endeavour to provide co-operation to that Party to assist in the implementation of this Chapter." See also Article 166 of the *China - New Zealand* RTA and Article 58.3(a) of the *EU - Cameroon* RTA.

³⁸ For example, Article 15.1.16 of the *Dominican Republic - Central America - United States Free Trade Agreement (CAFTA-DR)* RTA provides for "coordination, training, specialization courses, and exchange of information between the intellectual property offices and other institutions of the Parties." It also calls for the enhancement of "knowledge, development, and implementation of the electronic systems used for the management of intellectual property."

³⁹ Article 1508(b) of *Canada - Peru* provides only for co-operation in e-commerce or Article 17D of *China - Hong Kong, China* which provides for cooperation in the area of traditional Chinese medicine.

⁴⁰ *US - Australia*, Article 17.11.27(a): "In cases of wilful trademark counterfeiting or copyright piracy on a commercial scale, each Party shall provide: (a) penalties that include imprisonment and monetary fines

imprisonment as an option.⁴¹ A third category of RTAs merely provides for cooperation in the area of enforcement without elaborating on the types of sanctions that must be available within the laws of each party.⁴² A typical approach is the inclusion of a brief statement obliging parties to "provide in their respective laws for the enforcement of intellectual property rights consistent with the TRIPS Agreement."⁴³

65. On the other hand, RTAs involving the United States stand out by their level of detail and enforcement mechanisms. They require extensive protection of IPRs in a variety of ways.⁴⁴ The *Australia - Chile* agreement mirrors the structure and language on IP enforcement in general of those in which the United States is a party (both Australia and Chile are separately parties to bilateral agreements with the United States).

66. Another approach to incorporating enforcement procedures in some RTAs is by reference to other treaties. For example, enforcement procedures in some of the EFTA agreements are provided by explicit reference to Article 41 – 61 of the TRIPS Agreement.⁴⁵ Other RTAs also provide for enforcement procedures by implicit incorporation of the TRIPS Agreement enforcement provisions as well as those of other multilateral IP treaties.⁴⁶

67. Overall, 58% of all RTAs containing IP provisions include references to enforcement procedures, as indicated in Table 2. The table also shows that a high proportion of inter-regional RTAs involving Europe, and RTAs that comprise developed countries, includes enforcement procedures. All of the EFTA agreements and slightly more than 90% of RTAs involving the United States refer to enforcement procedures. Less expected, 70% of the RTAs involving Mexico, a developing country, also include enforcement procedures, while only a minority of RTAs involving Chile or Turkey include such procedures.

(vii) *IP Border Measures*

68. An IP border measure provision is identified as an obligation to undertake action related to the treatment of IP at a party's border. This includes an obligation to cooperate, exchange information, or to form committees on border or customs procedures for IP.⁴⁷ Notably, RTA language

sufficiently high to provide a deterrent to infringement consistent with a policy of removing the monetary incentive of the infringer." See also *Japan – Indonesia*, Article 120; *Japan – Philippines*, Article 129.3.

⁴¹ Article 125.3 of the *Japan – Switzerland* is an example: "Each Party shall provide for, where permitted by its laws and regulations, stricter or separate penalties to offences listed in subparagraphs 1(a), 1(b) and 1(d) committed in connection with corporate activities or on a commercial scale."

⁴² *Malaysia – Pakistan*, Article 48: "The customs authorities shall, wherever possible, cooperate and exchange information in their enforcement against importation and exportation of goods suspected of infringing intellectual property rights." See also *Singapore – Australia* Article 5; *Thailand – New Zealand*, Article 12.4.

⁴³ *Korea, Republic of – India*, Article 12.4.

⁴⁴ Several examples are worth noting. Article 15.10.3 of the US – Oman RTA provides that "The Parties understand that a decision that a Party makes on the distribution of enforcement resources shall not excuse that Party from complying with this Chapter." Another example is Article 15.10.7 on the amount of damages available under civil judicial proceedings. Article 15.10.29 also provides extensive procedures regulating Internet service providers who, among other obligations, are required to cooperate with copyright owners and play an anti-piracy role.

⁴⁵ For example, Annex XII, Article 5 of the *EFTA - Turkey* RTA: "The States Parties to this Agreement shall provide for enforcement provisions under their national laws of the same level as that provided in the TRIPS Agreement, in particular Articles 41 to 61."

⁴⁶ See *EFTA - SACU* Article 26.2 which provides "The Parties shall grant and ensure adequate, effective and non-discriminatory protection of intellectual property rights, and provide for measures for the enforcement of such rights against infringement thereof, counterfeiting and piracy, in accordance with the provisions of this Article and the obligations set out in the international agreements to which they are parties."

⁴⁷ *ASEAN - Australia - New Zealand*, Article 9.6 provides that: "Parties shall co-operate on border measures with a view to eliminating trade which infringes intellectual property rights. Parties who are members of the WTO shall also cooperate with each other to support the effective implementation of the requirements relating to border measures set out in Articles 51 to 60 of the TRIPS Agreement."

that simply permits the parties to take measures relating to the protection of IP does not constitute an IP border measure provision for the purpose of this study.⁴⁸

69. Consistent with the pattern reflected under the enforcement procedures section, RTAs involving the United States also have the most extensive provisions relating to border measures. For instance, the *US – Australia* RTA provides extensive coverage on border measures for which both sides are compelled to enact appropriate legislation.⁴⁹

70. A notable feature of many of the RTAs involving the United States is that most require the parties to provide for *ex officio* action by customs authorities in the absence of a formal complaint by a rights holder.⁵⁰ Article 58 of the TRIPS Agreement allows, but does not mandate, Members to provide for *ex officio* action. Therefore, the decision to provide for such action is a clear indicator that the parties to RTAs involving the United States intend to provide a high and proactive level of IP protection through rigorous border measures.

71. In general, provisions concerning the application of border measures to IP are not common in RTAs. Table 2 shows that references to such measures appear in just only half of all RTAs that include IP provisions. Their incidence, however, has increased over time, with border measures appearing in 57% of the RTAs that entered into force after 2009. Those measures appear in all the RTAs including developed countries alone, and in 62% of the RTAs between developed and developing/transitions economies. More than 90% of RTAs involving the United States contain references to border measures, as do some 88% of EFTA's RTAs and 69% of Japan's agreements.

(viii) *Exhaustion of IPRs*

72. The term "exhaustion" refers to the principle that an IPR owner's exclusive right to control the distribution of a protected item lapses after the first act of distribution. In general, it is accepted that IPRs are exhausted within the jurisdiction where the first sale takes place, but whether IPRs are exhausted when the first sale takes place outside the jurisdiction in question depends on a country's exhaustion regime.

73. Under a national exhaustion regime, an IP rightholder's distribution rights are exhausted once it puts its goods embodying its IPR on the market in that country, but are not exhausted with regard to goods placed on the market in another country. Accordingly right holders can control the importation of goods embodying its IPR first sold on markets outside the market in which it first placed the good. Parallel imports, goods embodying a rightholder's IPR imported without consent of the rightholder, may be barred from entering the market of the country of importation.⁵¹

74. On the other hand, under an international exhaustion regime, the rightholder's distribution right is exhausted upon the first act of distribution regardless of where the first act of distribution took place and thus, parallel imports are legal.

⁴⁸ An example of such language can be found in *Armenia - Moldova*, Article 11: "This Agreement shall not impede the right of any of the Contracting Parties to take generally accepted in the international practice measures which it considers necessary for protecting its vital interests or which are undoubtedly necessary for compliance with international agreements to which it is or intends to become a party, if these measures relate to ... protection of industrial and intellectual property." For similar language see *Kyrgyz Republic - Ukraine* RTA, Article 9.

⁴⁹ *US – Australia*, Articles 17.11.19 - 17.11.25.

⁵⁰ *US – Australia*, Article 17.11.22. See also *US – Bahrain*, Article 14.10.23; *US – Jordan*, Article 4.26; *US – Singapore*, Article 16.9.19.

⁵¹ Parallel imports are not counterfeit or pirated goods but genuine original products sold in foreign countries with the authorization of the right holder.

75. Certain RTAs provide for an alternative regime of regional exhaustion. Under a regional exhaustion regime, the rightholder's IPRs are exhausted upon the first act of distribution within the territory of any party of the RTA in question. The European Union provides an example of regional exhaustion.

76. The TRIPS Agreement gives Members freedom to determine their exhaustion regime. Article 6 provides that for the purposes of dispute settlement under the TRIPS Agreement, nothing in the Agreement may be used to address the issue of the exhaustion, provided that a Member complies with its national and MFN treatment obligations. The 2001 Ministerial Declaration on the TRIPS Agreement and Public Health clarified Article 6, confirming that the TRIPS Agreement leaves each Member free to establish its own regime for exhaustion.

77. Like the TRIPS Agreement, most RTAs involve no substantive commitments on the exhaustion of IPRs. Indeed, references to exhaustion are one of the least common of all general IP provisions, appearing in only 15% of the RTAs that include IP provisions. However, provisions on exhaustion are included in 38% of RTAs predating 1995 and, more remarkably, 80% of RTAs including only developed countries. Among the selected traders listed in Table 2, provisions on exhaustion do not appear in the RTAs involving Japan or Mexico but are included in about one-third or more of the RTAs involving EFTA members or the European Union and one-fifth of US RTAs. RTAs involving the European Union tend to leave signatories free to choose the exhaustion regime, while RTAs including the United States narrow down the choice of exhaustion regime.⁵²

(ix) *Non-Violation Complaints*

78. Although trade disputes generally involve allegations that a party to a trade agreement acted inconsistently with an obligation or commitment in the agreement, under some RTAs the dispute settlement mechanism applies where a party considers a benefit it reasonably expected under the RTA is nullified or impaired due to a party's measure that is not inconsistent with the RTA.

79. Under WTO rules, non-violation complaints are possible for goods and services. The TRIPS Agreement provides that non-violation complaints shall not apply to TRIPS Agreement disputes for five years from 1 January 1995, the date of entry into force of the WTO Agreement. This "moratorium" has since been repeatedly extended and it is still in force.⁵³ Some Members consider that non-violation cases should be allowed under the TRIPS Agreement, while others would like to see the moratorium made permanent.

80. Only 11% of the RTAs that include IP provisions contain conditions related to non-violation complaints in the IP area. RTAs with non-violation provisions are rare in all continents and types of economy but 93% of the RTAs maintained by the United States include such provisions. US RTAs typically contain a statement that the dispute settlement mechanism of the RTA applies to benefits a party reasonably expected to accrue under the RTA chapter on IPRs.⁵⁴

(x) *IP-related Investment Provisions*

81. RTA provisions on IP are not exclusively found in the RTA chapter or article designated to IP. Provisions regulating the treatment of IP are found outside of the IP chapter, in the RTA's chapter

⁵² For example, Article 10.4 of *EU – Korea, Republic of RTA* provides that "The Parties shall be free to establish their own regime for the exhaustion of intellectual property rights", while Article 17.9.4 of the *US – Australia RTA* provides that "Each Party shall provide that the exclusive right of the patent owner to prevent importation of a patented product, or a product that results from a patented process, without the consent of the patent owner shall not be limited by the sale or distribution of that product outside its territory, at least where the patentee has placed restrictions on importation by contract or other means."

⁵³ The Bali Ministerial Decision of 7 December 2013 on TRIPS Non-Violation and Situation Complaints extended the moratorium to 2015 (WT/Min(13)/31 and WT/L/906).

⁵⁴ *US – Bahrain RTA*, Article 19.2.

on investment, in almost 40% of the RTAs identified as including IP provisions in Table 2. WTO 2011a identified investment as a policy area commonly included in RTAs.⁵⁵ Trade and investment literature asserts that IP ownership is one element that provides a competitive advantage to multinational firms in international markets and therefore, RTAs that provide for the protection of IP investments encourage FDI inflow.⁵⁶

82. One reason for mapping RTAs with IP-related investment provisions is to shed light on structure of the relationship between IP protection and investment protection in the context of RTAs.⁵⁷ Similar to RTAs containing IP provisions, RTAs containing investment provisions are generally part of a deep integration process. One general observation is that whether IP provisions and IP-related investment provisions appeared together in the text of an RTA largely depended upon the identity of the parties to the RTA. Thus, most of the RTAs involving Chile, Japan or the United States contained IP-related investment, while this was the case for none or only a small minority of the other selected traders listed in Table 2.

83. The IP-related investment provision included in this revision and update relates to RTAs that incorporate IP within the definition of "investment." The inclusion of IP within the definition of investment shows the importance parties to an RTA place on the protection of intangible commercial assets and on encouraging investment in IP-intensive industries. RTAs including IP within the definition of investment adopt one of two approaches. One approach is the use of the overarching term "intellectual property rights" as part of an illustrative list of forms an investment may take.⁵⁸ Another approach lists the categories of intellectual property encompassed within the term "intellectual property" included within the definition of investment.⁵⁹

84. Table 2 shows that including IP within the definition of investment in a RTA appears to be a relatively recent development, with none of the agreements that entered into force before 2000 including such a definition. Provisions defining IP as investment are relatively common in RTAs involving partners in the Americas or Asia which reflects in part the frequency of those provisions in RTAs signed by Chile, Japan or the United States. In contrast, IP as investment provision are never or rarely included in RTAs signed by EFTA members, the European Union or Mexico.

(b) Provisions related to specific IPR categories

85. In addition to the general IP provisions discussed in the previous section, RTAs may also contain more detailed references to specific categories of IP law. This study took into consideration the following 11 categories: copyright and related rights; trademarks; geographical indications; industrial designs; patents; undisclosed information; layout designs of integrated circuits; new plant varieties; traditional knowledge or genetic resources (TK-GR); encrypted program-carrying satellite signals; and domain names.

⁵⁵ 2011 World Trade Report (WTO 2011a), p. 128.

⁵⁶ 2011 World Trade Report (WTO 2011a), p. 137.

⁵⁷ The provisions of bilateral investment treaties (BITs), the number of which has increased drastically over the past 20 years, between WTO Members were not analysed in this study.

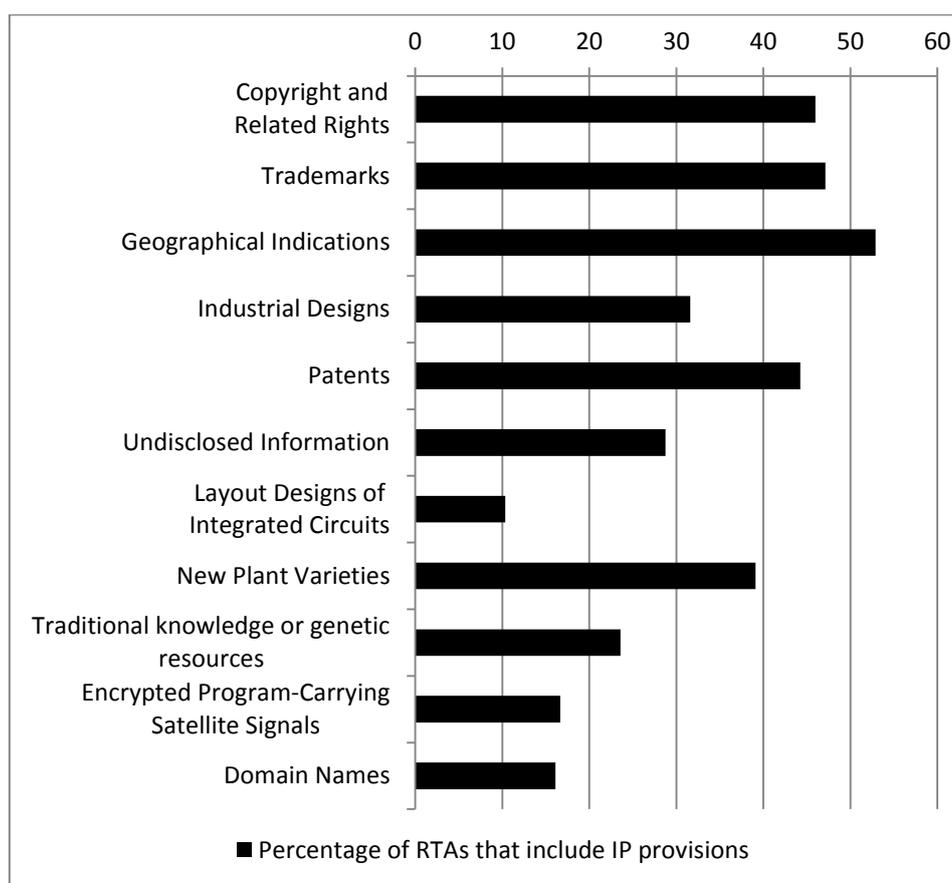
⁵⁸ Chapter 10, Article 10.1 of the *Korea, Republic of – India* RTA provides: "investment means every kind of asset that an investor owns or controls, directly or indirectly, and that has the characteristics of an investment, such as the commitment of capital or other resources, the expectation of gains or profits or the assumption of risk; (a) Forms that an investment may take include, but are not limited to: ... (vi) intellectual property rights".

⁵⁹ Chapter 11, Article 135 of the *China – New Zealand* RTA states: "investment means every kind of asset invested, directly or indirectly, by the investors of a Party in the territory of the other Party including, but not limited to, the following: ... (d) intellectual property rights, in particular, copyrights, patents and industrial designs, trade-marks, trade-names, technical processes, trade and business secrets, know-how and good-will".

86. For the purpose of this study, provisions related to specific IPR categories are language on a party's obligation, including reaffirmations or observations of a party's existing obligations, and language mandating a party to accede to, or otherwise apply, the disciplines of an international IP treaty specific to the respective IPR category. Out of the 174 RTAs containing IP provisions, 116 were found to also contain provisions related to one or more of those specific IPR categories. These RTAs are represented as Group 3 in Chart 1 and individually listed in Annex III.

87. The incidence of provisions related to specific IPR types is plotted in Chart 4. Of the 11 different types identified in that chart, eight are mentioned in the TRIPS Agreement.⁶⁰ In general, the incidence of specific IPR categories is lower than that of the general IP provisions examined in the previous section.

Chart 4. Agreements containing references to specific IPRs, percentage



Source: Table 3.

88. Chart 4 shows strong variations in the incidence of the different types of specific IPRs examined in this section. Geographical indications, copyrights, trademarks, patents and new plant varieties are the most commonly cited IPR categories, which appear in about 40% or more of the RTAs that include IP provisions. The next most commonly referenced categories are industrial designs and undisclosed information, followed by TK-GR and then the other three specific IPRs mentioned above.

89. Table 3 contains summary statistics for the specific IPR types illustrated in Chart 4. The table has the same structure and follows the same methodology as Table 2. The values in the table

⁶⁰ The eight categories are patents, copyright and related rights, trademarks, undisclosed information, industrial designs, geographical indications, layout designs of integrated circuits and new plant varieties.

correspond to the percentage of RTAs falling in a particular category. The actual number of RTAs per category is the same as those shown in the last column of Table 2. The eleven types of specific IPRs included in Chart 4 and Table 3 are discussed in the following sub-sections.

(i) *Copyright and Related Rights*

90. Literary and artistic works such as books, musical compositions, paintings, sculptures, computer programs and films are protected by copyright. Generally, the minimum period of protection is 50 years after the death of the author. Copyright and related rights, sometimes referred to as “neighbouring” rights, protect the rights of performers (e.g. actors, singers and musicians), producers of phonograms (sound recordings) and broadcasting organizations. The main social purpose of protection of copyright and related rights is to encourage and reward creative work.⁶¹

91. Table 3 shows that almost half of the RTAs under examination contain disciplines on copyrights (counting also RTAs that refer to relevant WIPO treaties). There is no distinct pattern over time. By continent, on the other hand, RTAs involving the Americas or Europe tend to have a greater incidence of references to copyrights than agreements involving other continents. This probably reflects the inclusion of copyright provisions in the RTAs involving the United States or EFTA members, the two traders which tend to include copyright provisions in their RTAs more often than others.

(ii) *Trademarks including Service Marks*

92. A trademark is any sign that individualizes the goods of a given enterprise and distinguishes them from the goods of its competitors. Such signs, in particular words including personal names, letters, numerals, figurative elements, combinations of colours as well as any combination of such signs, are generally eligible for registration as trademarks. Other marks that may constitute trademarks depending on the national jurisdiction include olfactory marks, sound marks and three dimensional marks.

93. The pattern of trademark provisions in the RTAs under study is remarkably similar to that identified for copyright provisions. Annex 3 also confirms the similarity of patterns between RTAs with trademarks and copyrights provisions.

(iii) *Geographical Indications*

94. A geographical indication (GI) is a sign used on goods that have a specific geographical origin and possess qualities, reputation or characteristics that are essentially attributable to that place of origin. Most commonly, a GI includes the name of the place of origin of the goods. Agricultural products typically have qualities that derive from their place of production, such as climate and soil. GIs may be used for a wide variety of products, whether natural, agricultural or manufactured. One example of a GI is "Darjeeling", applied to tea from that region of India.

95. As shown in Table 3, just over half of the RTAs contain provisions on GIs (counting also RTAs that make reference to related WIPO treaties). The inclusion of GIs in RTAs increased after 2009. Geographical indications are more prevalent in RTAs involving countries in the Americas than countries in other continents.

⁶¹ For further information on this and other types of IPRs see <http://www.wipo.int/export/sites/www/about-ip/en/iprm/pdf/ch2.pdf>.

Table 3. RTAs containing references to specific IPRs, % of agreements in each category

	Copyright and Related Rights	Trademarks	Geographical Indications	Industrial Designs	Patents	Undisclosed Information	Layout Designs of Integrated Circuits	New Plant Varieties	Traditional knowledge or genetic resources	Encrypted Program-Carrying Satellite Signals	Domain Names	Memorandum: number of RTAs
By period of entry into force:												
Before 1995	50	50	50	50	50	44	44	44	31	25	19	16
1995 - 1999	50	50	50	30	40	30	10	40	0	30	0	10
2000 - 2004	51	49	49	30	51	24	11	41	5	11	11	37
2005 - 2009	38	42	43	26	42	25	5	37	22	17	26	65
After 2009	50	52	72	35	41	33	7	39	43	15	9	46
By continent:												
Americas	36	36	64	11	28	28	6	31	22	28	14	36
Americas - Asia	44	44	85	15	41	15	0	33	30	22	26	27
Americas - Europe	90	90	90	90	90	50	10	80	50	0	10	10
Europe	61	61	57	61	61	54	36	57	29	36	29	28
Europe - Africa	44	38	25	25	44	19	6	44	0	0	0	16
Europe - Asia	60	60	45	45	55	35	15	40	5	5	5	20
Asia	25	34	19	22	31	16	0	22	31	3	16	32
Africa or Africa - Americas	40	40	40	20	40	20	20	40	20	20	20	5
By type of economy:												
Developed only	100	100	100	100	100	80	40	80	40	60	80	5
Developing or Transition	17	16	41	7	12	6	1	12	17	7	1	69
Developing or Transition - Developed	70	74	66	51	72	47	16	63	26	24	26	87
Developing or Transition - Developed - LDC	25	25	25	0	0	0	0	0	25	0	0	4
Developing or Transition - LDC	10	10	10	10	10	10	10	10	30	0	0	10
By selected WTO Member:												
Chile	30	40	90	10	30	10	0	25	10	15	10	20
EFTA members	92	92	92	92	92	84	36	80	16	8	12	25
European Union	75	71	50	57	75	36	25	68	39	32	29	28
Japan	54	69	54	54	77	54	0	54	15	0	38	13
Mexico	70	70	90	50	60	50	20	50	0	50	0	10
Turkey	16	16	21	11	11	11	5	11	0	5	0	19
United States	93	93	93	21	93	64	7	93	21	86	79	14
All RTAs with IP provisions	46	47	53	32	44	29	10	39	24	17	16	174

Source: Calculations based on Annex III

96. Geographical indications are included all the RTAs involving only developed economies although they are also important for some developing countries. Thus, the frequency of inclusion of GIs in Chile's and Mexico's RTAs is almost as high as that in EFTA's or U.S. RTAs. On the other hand, the European Union's low score is surprising but probably related to the considerations mentioned below in relation to patents and the European Union's practice of protecting geographical indications through specific bilateral agreements.

(iv) *Industrial Designs*

97. Industrial design protection is provided for the aesthetic or other non-functional features of industrial products, and does not extend to any functional features of the object to which it is applied. Generally, novelty, originality and visual appeal are the essential criteria for industrial design protection, but these criteria can differ from one country to another. Industrial designs increase an object's marketability by rendering it attractive or appealing, which then enhances its commercial value.

98. Table 3 shows that 32% of the RTAs under consideration include provisions on industrial designs. There are no obvious patterns by period or continent, although RTAs involving Europe tend to cover industrial designs more often than other agreements. References to industrial designs appear much more frequently in RTAs involving only developed countries, and are also common in RTAs involving EFTA members. In contrast, Chile's or Turkey's RTAs seldom cover industrial designs.

(v) *Patents*

99. A patent is a document issued by a government office, or a regional office acting for several countries, which describes an invention and confers a range of exclusive rights. These include the exclusive rights to the manufacture, use, sale, offering for sale and importation of the invention. The patent regime is concerned with protecting inventions in fields of technology, which include both products and innovative processes. The protection conferred by the patent is time-limited (generally to 20 years).

100. Table 3 shows that 44% of the 174 RTAs under consideration contain explicit references to patents (counting also agreements that make reference to related WIPO treaties). There is no clear pattern over time but clear differences by continent emerge: 90% of RTAs between the Americas and Europe include references to patents, and more than half of RTAs involving Europe only or Europe and Asia also contain such provisions. The percentage is lower elsewhere.

101. The above patterns are reflected in the fact that patents are mostly included in RTAs involving developed countries, with over 90% of the RTAs signed by the United States or EFTA members, and about three-quarters of the European Union's or Japan's agreements containing patent provisions.

(vi) *Undisclosed Information, including Trade Secrets.*

102. Undisclosed information, also known as trade secrets, is confidential information not generally known among, or not readily accessible to, other persons apart from those in lawful control of the information. Undisclosed information is kept secret because it has commercial value that would be eroded if disclosed to others. Such information remains legally protected provided the person lawfully in control of it takes reasonable steps to keep it secret. Unlike other forms of IP protection, undisclosed information is not protected by a specially conferred right. They are protected without registration or any procedural formalities.

103. The subject matter of undisclosed information is usually broadly defined to include sales methods, consumer profiles, advertising strategies, lists of suppliers and clients and manufacturing

processes. Unfair practices with respect to undisclosed information include industrial or commercial espionage, breach of contract and breach of confidence. An example of undisclosed information is the recipe for Coca Cola. In the context of this paper references to undisclosed information also include provisions that provide for test data protection, a specific form of protection that is distinguished in the TRIPS Agreement (Article 39.3) and is provided in many countries by separate legal mechanisms other than the general protection afforded to undisclosed information or trade secrets.

104. Table 3 indicates that 29% of the agreements under consideration in this section include provisions on undisclosed information. There are no obvious patterns by period although, like for patents, RTAs involving Europe tend to cover undisclosed information more often than other agreements. References to undisclosed information also appear much more frequently in RTAs involving developed countries. The highest occurrence of this IPR category is found in RTAs involving EFTA members, with 84% of these agreements containing references to undisclosed information. In contrast, Chile's or Turkey's RTAs seldom make reference to undisclosed information.

(vii) *Layout-Designs (topographies) of Integrated Circuits*

105. An integrated circuit (IC) is an electronic circuit with its elements integrated into some medium, thus creating a single functional unit.⁶² Integrated circuits are utilized in a large range of products, including articles of everyday use, such as watches, television sets, automobiles and data processing equipment.

106. The TRIPS Agreement contains provisions that require WTO Member to protect the layout-designs of IC in accordance with provisions of the Treaty on Intellectual Property in Respect of Integrated Circuits (IPIC Treaty) and with additional provisions of the TRIPS Agreement. The IPIC Treaty was negotiated under the auspices of WIPO but has never entered into force due to an insufficient number of ratifications. Thus, it is only through their incorporation into the TRIPS Agreement that a number of provisions from the IPIC Treaty are binding on WTO Members.

107. Table 3 shows that references to IC topographies in RTAs are the least common of the eleven specific IPRs under consideration. According to the table, those references are included in only 10% of the 174 RTAs containing IP provisions. References to IC topographies are also different from other specific IPRs in that their inclusion, although not frequent, is more common in RTAs that entered into force before 1995. While still the exception, references to IC topographies are more frequently found in RTAs involving European parties. Consistent with this observation, references to IC topographies appear less infrequently in RTAs involving EFTA members or the European Union.

(viii) *New Plant Varieties*

108. WTO Members that do not provide patent protection for new plant varieties are required to protect plant varieties through a system created especially for this purpose (*sui generis* system). Members also have the option of using a combination of patents and a *sui generis* system. The main *sui generis* system for the protection of plant varieties at the international level is contained in the convention establishing the International Union for the Protection of New Plant Varieties (the UPOV Convention). This Convention is administered by the Geneva-based *Union internationale pour la protection des obtentions végétales*.⁶³

109. Table 3 shows that close to 40% of RTAs with IP provisions include references to new plant varieties. They are more common in RTAs involving European countries or developed economies.

⁶² The terms "integrated circuit", "semiconductor" and "silicon chip" are used synonymously.

⁶³ International Convention for the Protection of New Varieties of Plants of December 2, 1961, as Revised at Geneva on November 10, 1972, on October 23, 1978, and on March 19, 1991 (the "UPOV Convention"), available at <http://www.upov.int/en/publications/conventions/1991/act1991.htm>.

However, the highest number of references to new plant varieties is found in US RTAs, often by reference to the UPOV Convention.⁶⁴

(ix) *Traditional Knowledge or Genetic Resources*

110. Traditional knowledge and genetic resources (TK-GR) are not covered in the TRIPS Agreement. However, these subjects are evolving and controversial areas of the international IP debate. It is both interesting and important to determine how these issues are being dealt with in the parallel system of proliferating RTAs given the lack of agreement on these subjects in the WTO context, and the continuing work of WIPO's Intergovernmental Committee to conclude international instruments in this area. Though TK-GR relate to distinct subject matter, they are included in the same category for the purposes of this paper because legislative and policy debates tend to cover them together.

111. According to Table 3, almost one-quarter of the RTAs under consideration incorporate references to TK-GR. The frequency of inclusion of such references has increased since 1995, and became more common in the RTAs entering into force since 2010. Their incidence is also relatively significant in RTAs involving developed economies reflecting the above-average inclusion of TK-GR provisions in RTAs involving the European Union.⁶⁵ On the other hand, some of the most extensive provisions on TK-GR are found in RTAs involving developing countries.⁶⁶

(x) *Encrypted Programme-Carrying Satellite Signals*

112. "Encrypted program-carrying satellite signal" means "...a program-carrying satellite signal that is transmitted in a form whereby the aural or visual characteristics, or both, are modified or altered for the purpose of preventing the unauthorized reception, by persons without the authorized equipment that is designed to eliminate the effects of such modification or alternation, of a program carried in that signal."⁶⁷ Parties to WIPO's Brussels Convention are required to take measures to prevent the unauthorized distribution on or from their territories of any programme-carrying signal transmitted by satellite.⁶⁸

113. As shown in Table 3, references to encrypted programme-carrying satellite signals are included in only some 17% of the agreements under consideration. There is no clear pattern over time but references to encrypted programme-carrying satellite signals are less uncommon in RTAs involving the Americas or Europe. Consistent with this, some 86% of RTAs involving the United States include such references, while the equivalent proportions for Mexico and the European Union are 50% and 32%. The incidence of provisions on encrypted programme-carrying satellite signals is much lower for other traders listed in Table 3.

⁶⁴ For example, Article 4 of the *US - Jordan* RTA provides that each Party shall, at a minimum, give effect to Articles 1 through 22 of the UPOV Convention.

⁶⁵ For example, Article 10.40 of the *EU - Korea, Republic of* RTA provides that "Subject to their legislation, the Parties shall respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the involvement and approval of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilisation of such knowledge, innovations and practices."

⁶⁶ For example, Section H of the *Nicaragua - Chinese Taipei* RTA has separate provisions dealing with each TK-GR areas. The *Panama - Chinese Taipei* RTA also provides the same extensive provisions.

⁶⁷ *NAFTA*, Article 1721.2.

⁶⁸ The Brussels Convention Relating to the Distribution of Programme-Carrying Signals Transmitted by Satellite (1974) has 35 contracting parties.

(xi) *Domain Names*

114. Unlike other IP rights, the registration of domain names is global rather than territorial in scope. Access to the websites that correspond to their URLs are uninhibited by national borders. Further, the successful registration of a domain name in one part of the world precludes the registration of that domain name in every other part of the world. The registration of domain names is not managed by national IP authorities but generally by organizations accredited by the Internet Corporation for Assigned Names and Numbers (ICANN). As a non-state entity, much of ICANN's responsibilities and activities are neither based in, nor driven by the legislation of any country.

115. Table 3 shows that the proportion of RTAs containing a reference to domain name management is low (16%). References to domain names are more common in RTAs involving developed economies. The United States is an outlier, with almost 80% of its RTAs containing references to domain names. Japan follows far behind.

(c) Provisions of special interest to public health and the pharmaceuticals sector

(i) *Introduction*

116. As a general observation regarding the analysis of IP provisions in RTAs, two broad analytical avenues may be pursued: the first approach, outlined above, works towards a comprehensive overview of broad trends and developments across geographical boundaries and over time; the second approach is to look at the significance of provisions for specific areas of public policy that are linked with the IP system. The second approach is of interest because a number of RTAs contain provisions that directly bear on particular policy issues, reflecting the interplay between IP law and related areas of public policy. This section therefore explores the potential applicability of the general review methodology described above to some more detailed provisions in order to identify patterns that could help inform policy discussions in the public health and pharmaceuticals sector.

117. The public health and pharmaceuticals sector is of multilateral interest because of the Doha Declaration on the TRIPS Agreement and Public Health and the on-going discussion within the Council for TRIPS on the Paragraph 6 System.⁶⁹ The sector is also of interest in the context of the joint study by the WHO, WIPO and WTO Secretariats on public health, IP and trade and related policy discussions, notably the work of the World Health Organization through its Global Strategy and Plan of Action.⁷⁰ The WHO, WIPO and WTO Secretariats study found that a number of RTAs provided for more extensive protection for patents and test data, as well as higher enforcement standards, which affected trade in pharmaceuticals and could have an impact on prices for medical technologies. The study also found that many RTAs formed "families" grouped around "hubs", and that reasons of principle and practicality had led to a "ratcheting-up" effect on IP standards (see also section F below).

118. Although some insights may be derived from an initial application of this methodology, the relevance, utility and clarity of its application to this particular policy field could profit from further development, for example to take account of the fact that while the majority of the detailed IP provisions examined in this section are relevant to public health and pharmaceuticals, such provisions are typically not exclusive to this sector, and may have relevance to a wide range of other areas.

119. Hereafter, for convenience a selection of provisions relevant to public health and the pharmaceutical sector is referred to as "pharma-related provisions" for short, although the above

⁶⁹ See WTO documents WT/MIN(01)/DEC/2, 20 November 2001 and WT/L/540 and Corr.1, 1 September 2003.

⁷⁰ The study "Promoting Access to Medical Technologies and Innovation: intersections between public health, intellectual property and trade" is available at http://www.wto.org/english/res_e/publications_e/who-wipo-wto_2013_e.htm.

caveat, that these provisions need not be considered as exclusively concerned with this one sector, should be noted carefully.

(ii) *Particular pharma-related provisions in RTAs*

120. As with other IPRs analysed in this study, pharma-related provisions were investigated on the basis of whether or not the texts of the RTAs referenced specific sub-criteria of this subject area. The sub-criteria were selected because of their connection to the flexibilities available under the TRIPS Agreement. They cover policy areas of particular interest access to the public health and pharmaceutical sector, including patent linkage, compulsory licensing, the patenting of life forms, regulatory approval and others. The list of the 11 criteria is presented in Box 1, which also provides examples taken from specific RTAs.

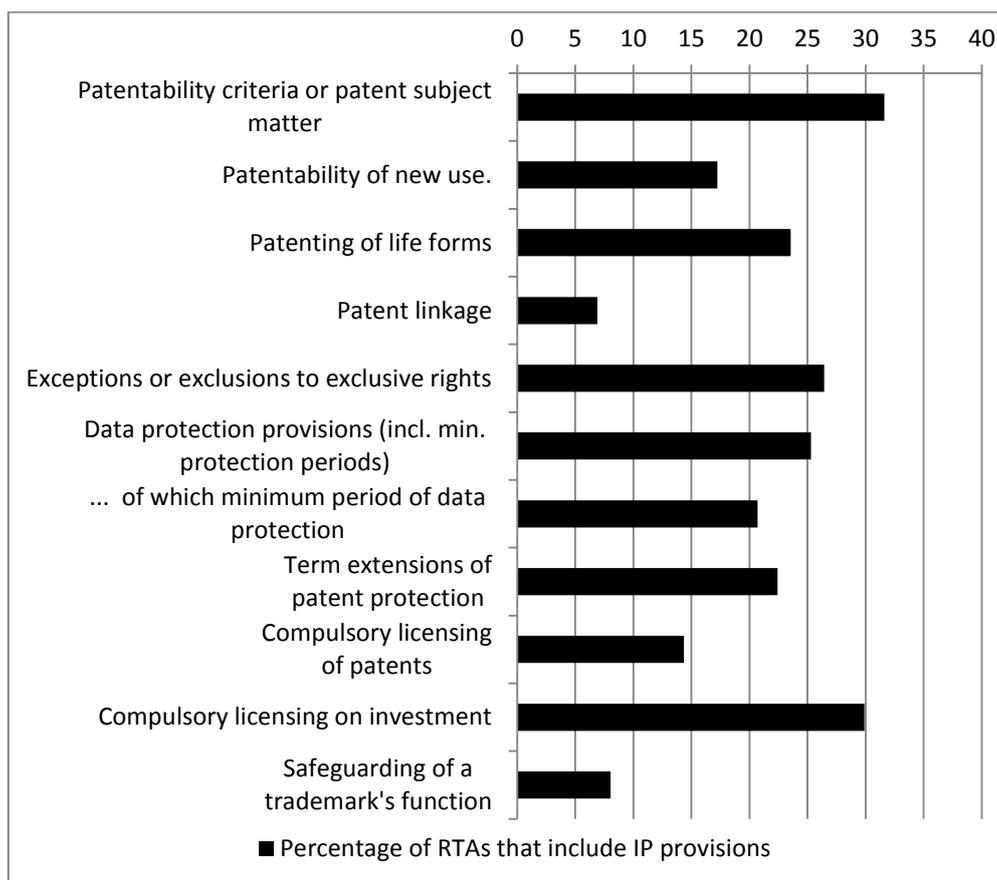
Box 1. Examples of pharma-related provisions in RTAs

- i. Patentability criteria or patent subject matter – Article 130.1 of the *Japan - Thailand* RTA provides that patents be made available for any inventions in all fields of technology provided that they are new, involve an inventive step and are capable of industrial application.
- ii. Patentability of new uses – Article 21 of Decision 486 by the *Andean Community* provides that products or processes that are already patented may not form the subject matter of a new patent owing to the fact of having a use different from that originally provided for in the first patent.
- iii. Patenting of life forms – Article 15.9.2 of the *US – Morocco* RTA provides that patents be made available for inventions of plants and animals.
- iv. Patent linkage – Article 18.9.5 of the *Korea, Republic of – US* RTA provides that the marketing approval process for pharmaceuticals include measures to prevent third parties from marketing a patented product during the term of that patent without the consent of the patent owner.
- v. Exceptions or exclusions to exclusive rights – Article 17.20 of the *Australia - Chile* RTA provides that a party may permit limited exceptions to the exclusive rights conferred by a patent, provided that such exceptions do not unreasonably conflict with a normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties.
- vi. Data protection – Article 3 of Annex XIII to the *EFTA – Korea, Republic of* RTA requires the Parties to prevent applicants for marketing approval for pharmaceuticals products from relying on undisclosed test data submitted for marketing approval by a first applicant "for an adequate number of years", to be determined by the relevant regulations of the Parties. Any Party may instead allow applicants to rely on such data if the first applicant is adequately compensated.
- vii. Minimum period of data protection – Article 1711.6 of the *NAFTA* requires that, normally, no person other than the person submitting test data may, without permission, rely on such data in support of an application for product approval during a period of not less than five years after approval is granted to the person that produced the data.
- viii. Term extensions of patent protection – Article 2(b) in Annex XIII of the *EFTA – Korea, Republic of* RTA requires parties to provide in their national laws a compensatory term of protection for pharmaceuticals of up to five years for curtailment of the patent term as a result of the marketing approval process.
- ix. Compulsory licensing – Article 1709.10 of the *NAFTA* setting out conditions for the granting of compulsory licences, including requirements that such licences be non-exclusive and non-assignable, be predominantly to supply the domestic market, efforts be made to obtain authorization from the right holder and this be paid adequate remuneration, and do not authorize the use of the subject matter of a patent to permit the exploitation of another patent except as a remedy for violation of domestic competition laws.
- x. Compulsory licensing on investment – Article 10.12.6 of the *Korea, Republic of – India* RTA provides that the Article containing a general prohibition on the nationalization or expropriation of investments of an investor of the other Party is inapplicable to the issuance of compulsory licenses granted in relation to IPRs to the extent such grant is consistent with the TRIPS Agreement.
- xi. Safeguarding a trademark's function – Article 15.2.3 of the *US – Oman* RTA requires that measures mandating the use of common names, including requirements on size, placement or style of use of the trademark, do not impair the use or effectiveness of trademarks.

121. As indicated in Chart 1, 94 RTAs were found to contain at least one of the pharma-related provisions mentioned in Box 1. The frequency with which those provisions are included in RTAs is illustrated in Chart 5. This chart shows, in general, the inclusion of pharma-related provisions in RTAs is not common, even in those agreements that otherwise contain other types of IP provisions.

122. As illustrated in Chart 5, there are wide variations in the inclusion of the different sub-categories of pharma-related provisions. The provision most frequently included in RTAs relates to patentability criteria and compulsory licensing on investment, with about 30% of the 174 agreements in the sample. The other two sub-categories that are more often included are those relating to exceptions to exclusive rights and to data protection provisions.

Chart 5. Agreements containing pharma-related provisions, percentage



Source: Table 4.

123. Table 4 contains summary statistics for each of the 11 pharma-related provisions. The table has the same structure and follows the same methodology as Tables 2 and 3. Hence, all the values in Table 4 refer to the percentage of RTAs falling in a particular category. The number of RTAs per row is the same as that shown in the last columns of Tables 2 and 3.

124. Table 4 shows that the proportion of RTAs containing pharma-related provisions slightly dipped in the five years after the TRIPS Agreement entered into force. However, no other patterns over time are evident. RTAs containing pharma-related provisions are common for agreements involving only developed economies and, to a much lesser extent, for agreements between developed and developing/transitions economies. However, RTAs involving other combinations of economies seldom contain such provisions.

Table 4. RTAs containing pharma-related provisions, % of agreements in each category

	Patentability criteria or patent subject matter	Patentability of new use.	Patenting of life forms	Patent linkage	Exceptions or exclusions to exclusive rights	Data protection provisions (incl. min. protection periods)	... of which min. period of protection	Term extensions of patent protection	Compulsory licensing of patents	Compulsory licensing on investment	Safeguarding of a trademark's function	Memorandum: number of RTAs
By period of entry into force:												
Before 1995	50	44	50	0	50	31	25	44	44	6	6	16
1995 - 1999	20	10	20	0	20	20	20	10	20	20	10	10
2000 - 2004	30	16	19	8	24	16	11	19	22	19	8	37
2005 - 2009	31	15	23	9	23	28	20	18	11	37	9	65
After 2009	30	13	20	7	26	28	28	26	2	39	7	46
By continent:												
Americas	22	6	17	14	19	22	19	19	8	61	22	36
Americas - Asia	33	15	7	22	30	22	19	22	11	56	15	27
Americas - Europe	40	20	40	0	40	50	40	40	20	0	0	10
Europe	57	50	57	0	57	46	46	50	39	0	0	28
Europe - Africa	19	13	13	0	13	13	13	13	13	0	0	16
Europe - Asia	40	25	35	0	35	25	20	25	20	0	5	20
Asia	19	0	9	0	3	13	0	0	0	44	0	32
Africa or Africa - Americas	20	20	20	20	20	20	20	20	0	20	20	5
By type of economy:												
Developed only	100	80	80	20	100	80	80	100	60	20	20	5
Developing or Transition	4	1	1	0	3	3	1	1	3	38	3	69
Developing or Transition - Developed	54	29	41	13	45	44	36	38	23	25	13	87
Developing or Transition - Developed - LDC	0	0	0	0	0	0	0	0	0	25	0	4
Developing or Transition - LDC	0	0	0	0	0	0	0	0	0	20	0	10
By selected WTO Member:												
Chile	15	5	10	5	15	10	10	10	5	35	10	20
EFTA members	92	68	88	0	88	64	56	68	48	0	0	25
European Union	32	25	29	0	29	36	36	32	29	0	4	28
Japan	54	0	31	0	8	38	8	8	0	15	0	13
Mexico	30	10	20	0	20	30	20	10	30	40	30	10
Turkey	11	5	11	0	11	5	5	5	11	0	0	19
United States	93	43	57	86	93	93	86	93	29	79	79	14
All RTAs with IP provisions	32	17	24	7	26	25	21	22	14	30	8	174

Source: Calculations based on Annex IV.

125. Table 4 shows a tendency for a higher proportion of RTAs involving the Americas or Europe to include pharma-related provisions. RTAs involving the United States and EFTA members are primarily responsible for these trends. Indeed, the great majority of US RTAs incorporate pharma-related provisions, many of which include several of the 11 provisions identified in this study. While far behind the United States and EFTA members, the European Union and Mexico also contribute significantly to the prevalence of pharma-related provisions in RTAs involving parties from the Americas or Europe. Although pharma-related provisions are relatively significant in RTAs involving the European Union, this average masks wide differences across individual RTAs.

126. A more detailed analysis of RTAs signed by the United States is due given their extensive treatment of pharma-related provisions. As shown in Annex IV, 13 of the 14 agreements involving the United States contain pharma-related provisions (all except for the *US – Israel* RTA). The 13 RTAs include provisions on patentability criteria and patent subject matter, patent exceptions or exclusions, data protection and patent term extensions. Twelve of those RTAs also cover patent linkage and minimum periods of data exclusivity. In all, 10 RTAs cover at least 8 of the 11 pharma-related provisions under consideration. As a consequence, many of the RTAs involving the United States contain provisions that can result in longer than normal periods of market exclusivity.⁷¹

127. While the RTAs signed by other WTO Members fall behind those maintained by the United States in terms of coverage and depth, as previously noted, the RTAs involving EFTA members and, to a lesser extent, the European Union also contain significant pharma-related provisions (see also section on patents above). Although considerably behind, the RTAs involving Japan or Mexico also have some significant pharma-related provisions.

D. AGGREGATING THE INDIVIDUAL PROVISIONS: THE OVERALL IP CONTENT OF RTAS

128. We conclude with a general set of observations on the findings from this study and on the methodology used: as a working paper, one function of the present study is to promote consideration of suitable methodologies for the categorization, filtering and analysis of IP provisions in RTAs, both for general, systemic analysis, and for specific insights on certain policy issues. The need for a continuing methodological discussion is apparent from the diversity of IP provisions, both in their substantive subject matter, and in the institutional and legal manner in which they are applied.

129. As discussed in the previous sections, of the 245 RTAs considered in this study, 174 were found to contain IP provisions of some type or another. However, some of the references to IP were cursory and did not provide for any substantive rights or obligations. Hence, it was considered important to distinguish between RTAs that merely mention IP from those that contain provisions that could actually qualify or elaborate on the relationship between the parties.

130. The next sections present the methodology implemented to make that distinction. Following the structure of previous sections, separate measures of IP content were estimated for general IP provisions, for specific IP categories and for pharma-related provisions. These three measures were then consolidated in a global score representing the overall level of IP content of individual RTAs.

1. Methodology

131. The level of IP content of each of the 174 RTAs under consideration was established by counting the number of different IP-related provisions identified in the agreements. Thus, the content of "general" IP provisions was measured by counting the general provisions in each RTA as recorded in Annex II. Likewise, the level of specific and pharma-related provisions in each RTA corresponded to the tally of the related provisions recorded in Annexes III and IV. This methodology reflects the

⁷¹ A specific example of a provision that extends market exclusivity is Article 15.9.6(a) of the *CAFTA – DR* RTA. This sub-section provides for patent term extension where the issuance of a patent has been delayed. Article 15.9.6(b) of the same RTA also provides for patent term extension to compensate patent owners for the unreasonable curtailment of the effective patent term.

nature of the information resulting from the binary coding methodology followed in previous sections. A more elaborated approach to estimating the IP content of RTAs would require a richer dataset than the one compiled for this paper.

132. As discussed in earlier sections, 10 different types of general IP provisions were defined, as were 11 specific IPR provisions and 11 pharma-related provisions. Hence, the highest possible score for an individual RTA was 10 in regards to general IP provisions, 11 for provisions of specific IPR categories and 11 for provisions relating to pharmaceuticals. To facilitate the presentation, those tallies were all normalized to 100.⁷² The three resulting scores for each of the RTAs containing IP provisions are shown in Annex V.

133. A score for overall IP content was computed by combining the scores for the three groups of IP provisions previously mentioned. The overall score was estimated as the weighted average of the partial scores for those three groups. The following asymmetric weights were given to general, specific and pharma-related provisions, respectively: 60%, 30% and 10%. These values were chosen to give greater importance to general IP provisions and a lower but still significant weight to specific provisions. Pharma-related provisions were given the lowest weight because they mostly represent an elaboration on provisions already included under specific provisions, with 9 of the 11 pharma-related provisions relating to patents alone.

134. The above weights might overstate the overall IP content of RTAs since they give greater importance to general IP provisions, which are the most frequent and have the highest score of the three types of provisions included in the study. However, the weights used were considered appropriately conservative in the absence of a deeper analysis of the substance of IP provisions in RTAs. The resulting scores for the overall IP content of individual RTAs are indicated in Annex V.

135. For comparison purposes, the overall score was also estimated using a proportional weighting scheme that defines the weights as the ratio of the number of general, specific or pharma-related provisions to the maximum possible number of provisions (32). This scheme thus assigned the following weights to general, specific and pharma-related provisions, respectively: 10/32, 11/32 and 11/32. The resulting scores for the overall IP content of individual RTAs calculated using these weights are shown in Annex VI. The proportional weighting scheme gives a much greater weight to the score of pharma-related provisions compared with their weight in Annex V. This and the fact that the pharmaceutical score is in general much lower than the scores for general or specific provisions mean that the overall scores in Annex VI are lower than those in Annex V.

136. As a final step, based on the score of overall IP content, the 174 RTAs containing IP provisions were classified in three categories: RTAs containing a high level of IP provisions, RTAs with a moderate level of IP provisions and RTAs with negligible IP provisions. Agreements scoring 60 points or more were included in the first group, while those having 20 or more but less than 60 points were classified in the second group. RTAs with less than 20 points were classified as containing negligible IP provisions. These thresholds were selected to favour the classification of RTAs in the moderate and high IP content categories, and may thus overstate the number of agreements in these two categories.

137. Annex V shows the classification of RTAs in each of the three categories defined in the previous paragraph when using asymmetric weights (10%, 30% and 60%) to calculate their overall IP content. Note that there is an implicit fourth category of agreements: RTAs containing no IP provisions of any type, i.e., those not included among the 174 RTAs in the other three categories but part of the original group of 245 agreements.

⁷² A linear relationship was used to convert the ranges of 0-10 and 0-11 to a scale of 0-100. This means that in the case of general provisions the inclusion of one particular provision in a RTA adds 10 points to the score, while in the case of specific or pharma-related provisions each additional provision contributes 9.1 points.

138. The following sections are based on the overall scores obtained using asymmetric weights, as shown in Annex V, which were deemed more representative than those derived using a proportional weighting scheme (Annex VI). This is mainly because proportional weighting introduces a strong bias in favour of patents reflecting the high importance that these are given as part of pharma-related provisions. This also implicitly plays down the role of other forms of IP.

2. RTAs by level of IP content

139. The data in Annex V were used to categorise RTAs according to their content of IP provisions and by period, continent and their parties' level of development. The resulting landscape is summarized in Table 5. The following paragraphs describe this landscape with a particular emphasis on RTAs containing moderate or high IP content. Naturally, other RTAs containing negligible IP content, and those without any IP content at all, are of much less interest in the context of this paper.

140. Table 5 shows that 115 (47%) of the 245 RTAs in the original sample contain high or moderate levels of IP content. Of those, 54 RTAs (22% of the total) are classified as having high levels of IP content, and 61 RTAs (about 25% of the total) as having moderate levels of IP content.

141. Table 5 also shows that the proportion of RTAs with high or moderate levels of IP content tends to increase with time, from less than one-quarter in earlier years to more than two-thirds after 2009.

142. Additionally, Table 5 shows that the IP content of RTAs varies widely across continents. Almost 60% of the 54 RTAs with high IP content involve countries in Europe. In contrast, Africa is by some margin the continent with the lowest proportion of RTAs with moderate or high levels of IP content.

143. Of the 94 RTAs involving both developed and developing/transition economies, just under half contain high IP content and almost 30% contain moderate levels. This makes RTAs combining developing and developed countries the agreements with the highest proportion of high or moderate IP content. Half of the RTAs involving only developed economies have high levels of IP content. Excluding agreements involving developed economies, developing, transition and least-developed countries tend to conclude RTAs with at most moderate IP content at most.

144. The bottom of Table 5 contains statistics for selected WTO Members that are particularly active in concluding RTAs. It shows that the distribution of RTAs with moderate and high levels of IP content varies considerably across the economies listed. Thus, while 86% of the 14 RTAs signed by the United States contain high levels of IP content, the equivalent share for Turkey is only 10%.

145. A modest difference in IP content between the several RTAs involving the European Union on the one hand and EFTA members on the other was anticipated in view of the close institutional links between the two trading groups, notably through the EEA. However, according to Table 5 the proportion of RTAs involving the European Union and classified as having high levels of IP content is significantly lower than for EFTA members, with just under one-third of the European Union's 34 RTAs so classified as compared to 71% of the 32 RTAs entered into by EFTA members.

Table 5. Number of RTAs by level of IP content

	High content	Moderate content	Negligible content	No IP content	Any content level
By period:					
Before 1995	7	2	7	24	40
1995 - 1999	2	3	5	23	33
2000 - 2004	9	15	13	9	48
2005 - 2009	20	23	22	11	76
After 2009	16	18	12	4	50
By continent:					
Americas	9	10	17	3	39
Americas - Asia	7	12	8	3	30
Americas - Europe	6	4	0	1	11
Europe	16	3	9	43	73
Europe - Africa	3	7	6	0	16
Europe - Asia	7	6	7	1	21
Asia	5	18	9	16	48
Africa, Africa-Americas or Africa-Asia	1	1	3	4	9
By economy type:					
Developed only	5	0	0	5	10
Developing or Transition	4	27	37	45	113
Developing or Transition - Developed	45	27	15	7	94
Developing or Transition - Developed - LDC	0	2	2	1	5
Developing or Transition - LDC	0	5	5	13	23
By selected WTO Member or group:					
Chile	3	8	9	2	22
EFTA members	22	2	1	6	32
European Union	11	11	6	6	34
Japan	5	6	2	0	13
Mexico	4	3	3	1	11
Turkey	2	4	13	0	20
United States	12	1	1	0	14
All RTAs	54	61	59	71	245

Source: Calculations based on Annex V.

146. Annex V shows that the above is the result of the average IP content for all of the European Union's RTAs concealing a wide gap between two types of agreements: those involving the European Union's trading partners in Europe and certain others, and those involving partners further afield.⁷³ Thus, the EEA Agreement between the European Union and EFTA members requires that the latter provide the same level of protection provided under EU law.⁷⁴ The IP regime of countries such as Turkey is also expected to converge with that of the European Union.⁷⁵

147. On the other hand, it is far from clear to what extent the legal language of the so called Euro-Mediterranean Agreements, such as the RTAs between the European Union and Algeria or Tunisia, require the convergence of the relevant national IP regimes.⁷⁶ As observed before, it is an open question whether such language is enforceable and, thus, of practical significance.⁷⁷

148. Valdes and Tavengwa (2012) noted that Mexico was the country with the highest proportion of RTAs containing high levels of IP content after the United States. This largely resulted from the high scores of the NAFTA and Mexico's RTAs with individual countries in Central America. The situation changed after the RTAs between Mexico and individual countries in Central America were replaced by a single *Mexico-Central America* RTA in 2012. The replacement of five RTAs by only one agreement has resulted in the proportion of Mexico's RTAs with high IP content falling from 60% to 36%. Although much reduced, this proportion is still comparable to that of the European Union or Japan and considerably higher than that of other developing countries.

149. The fall in the proportion of Mexico's RTAs with high IP content is an arithmetic result that does not necessarily reflect a reduction in the number of bilateral IP-related commitments between Mexico and its partners in Central America. This result points to the possible future need to use alternative methodologies to estimate the IP content of RTAs if the consolidation of regional blocs were to become a significant trend.

E. THE ARCHITECTURE OF RTAS CONTAINING IP PROVISIONS

150. RTAs containing IP provisions are characterized by a distinct hub-and-spoke architecture. The largest systems are grouped around the European Union, EFTA and the United States. However, Chile, Japan and Mexico constitute other centres of gravity. This architecture probably emerged in large part from the frequent use of template approaches to the negotiation of RTAs. This has generated a tendency for IP provisions to be replicated in RTAs linked to a common hub. As a result, several important characteristics of those provisions arise from the identity of the central entity.

151. Charts 6 and 7 present graphic overviews of RTAs containing a high level of IP provisions. Chart 6 depicts the links among such RTAs in force in 2000. Chart 7 shows the links for RTAs containing high IP content in force in 2014. Neither chart provides a comprehensive mapping of all

⁷³ As shown in Annex V, in addition to countries in Europe, the EU has entered into RTAs containing high IP content with Central America; Colombia; Korea and Peru.

⁷⁴ Article 1.2 of Protocol 28 states that "Without prejudice to the provisions of this Protocol and of Annex XVII, the Contracting Parties shall upon the entry into force of the Agreement adjust their legislation on intellectual property so as to make it compatible with the principles of free circulation of goods and services and with the level of protection of intellectual property attained in Community law, including the level of enforcement of those rights."

⁷⁵ Article 31 of the *EU - Turkey* RTA states that "The Parties recognize that the Customs Union can function properly only if equivalent levels of effective protection of intellectual property rights are provided in both constituent parts of the customs Union."

⁷⁶ Those texts typically use wording such as in Article 30 of the *EU - Lebanon* RTA: "the Parties shall ensure adequate and effective protection of intellectual, industrial and commercial property rights in conformity with the highest international standards, including effective means of enforcing such rights."

⁷⁷ As noted, the RTAs in this ambiguous situation include the agreements between, on the one hand, the European Union and, on the other hand, Algeria, Cameroon, Egypt, Israel, Jordan, Lebanon, Morocco or Tunisia. The issue of the enforceability of some of the European Union's RTAs is raised in the foreword to Horn (2007), which observes that those agreements "are marred by considerable legal inflation."

agreements with IP content because such a complete picture in 2014 would undoubtedly resemble Bhagwati's proverbial spaghetti bowl!

152. As illustrated in Chart 6, in 2000 only a handful of RTAs containing a high level of IP provisions were in force. These included essentially two pivots: Mexico and the EU-EFTA twin hub. The EU-EFTA hub had only a couple of spokes while Mexico was linked to four trading partners. The five members of the Andean Community represented a separate group with its own comprehensive common IP regime. Chart 7 shows that the number of hubs and the density of links among RTAs containing a high level of IP provisions increased considerably between 2000 and 2014.

153. Chart 7 highlights some important features of the RTAs containing IP provisions currently in force. Thus, the Chart's far right identifies the links between the members of EFTA and the European Union hubs, which together make up a system of "deep integration", which is both extensive and tightly knitted together. This may have arisen from the successive replication of the European Union's IP regime through the provisions of the relevant RTAs. As illustrated, with one exception, all the countries in Europe with which the European Union maintains RTAs with high IP content also have RTAs containing high IP content with EFTA members.⁷⁸ However, differences do arise between the spokes linked to the European Union or to EFTA, with a few countries tied to the European Union through RTAs with high IP content but not to EFTA, or tied to EFTA but not to the European Union. In particular, EFTA has more RTAs with high IP content linking its members to non-European countries.⁷⁹

154. The left side of Chart 7 suggests the existence of another large hub formed around the United States. However, the IP provisions of this system would be less tightly knitted than those in Europe, reflecting the fact that RTAs in the Americas do not usually involve deep integration processes.⁸⁰ As noted, Canada, Mexico and the United States are linked through the NAFTA. In addition, as noted, Mexico has one RTA with high IP content with Central American countries while another RTA links the United States to the same Central American countries plus the Dominican Republic. The IP regimes of Andean Community members are connected through comprehensive Andean IP statutes.

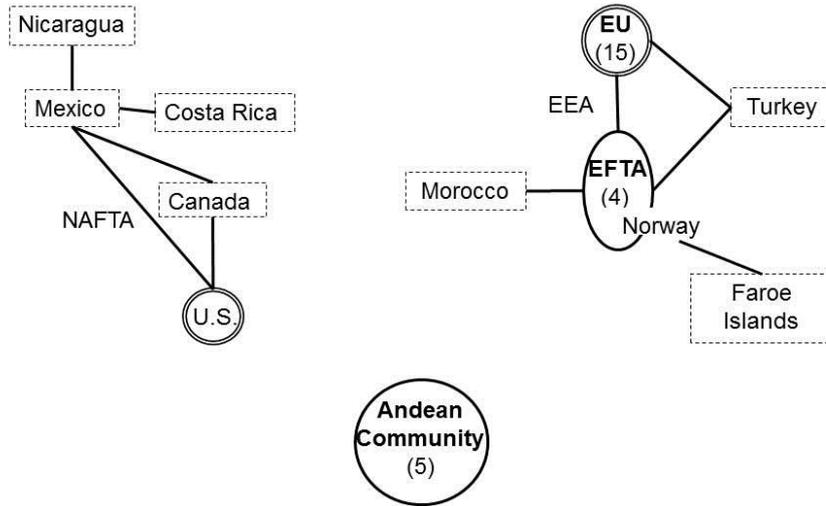
155. Chart 7 also shows the links drawing together, directly or indirectly, the hubs in the Americas and Europe. The chart shows, for example, that Chile and Mexico are directly connected to EFTA and the United States through RTAs with high IP content. Colombia, Peru, Korea, Morocco and Singapore also maintain RTAs with high IP content directly linking them to EFTA and the United States. In turn, Colombia, Korea, Panama and Peru also have RTAs with high IP content linking them to both the European Union and the United States. Five countries in Central America have separate RTAs with high IP content that simultaneously link them to the European Union, Mexico and the United States.

⁷⁸ The exception is Bosnia and Herzegovina, which has a RTA with the EU but not with EFTA members. However, Bosnia and Herzegovina signed a RTA with EFTA members in June 2013.

⁷⁹ Switzerland and Japan, on the one hand, and Norway and the Faroe Islands, on the other hand, maintain RTAs with high IP content which do not involve other EFTA members.

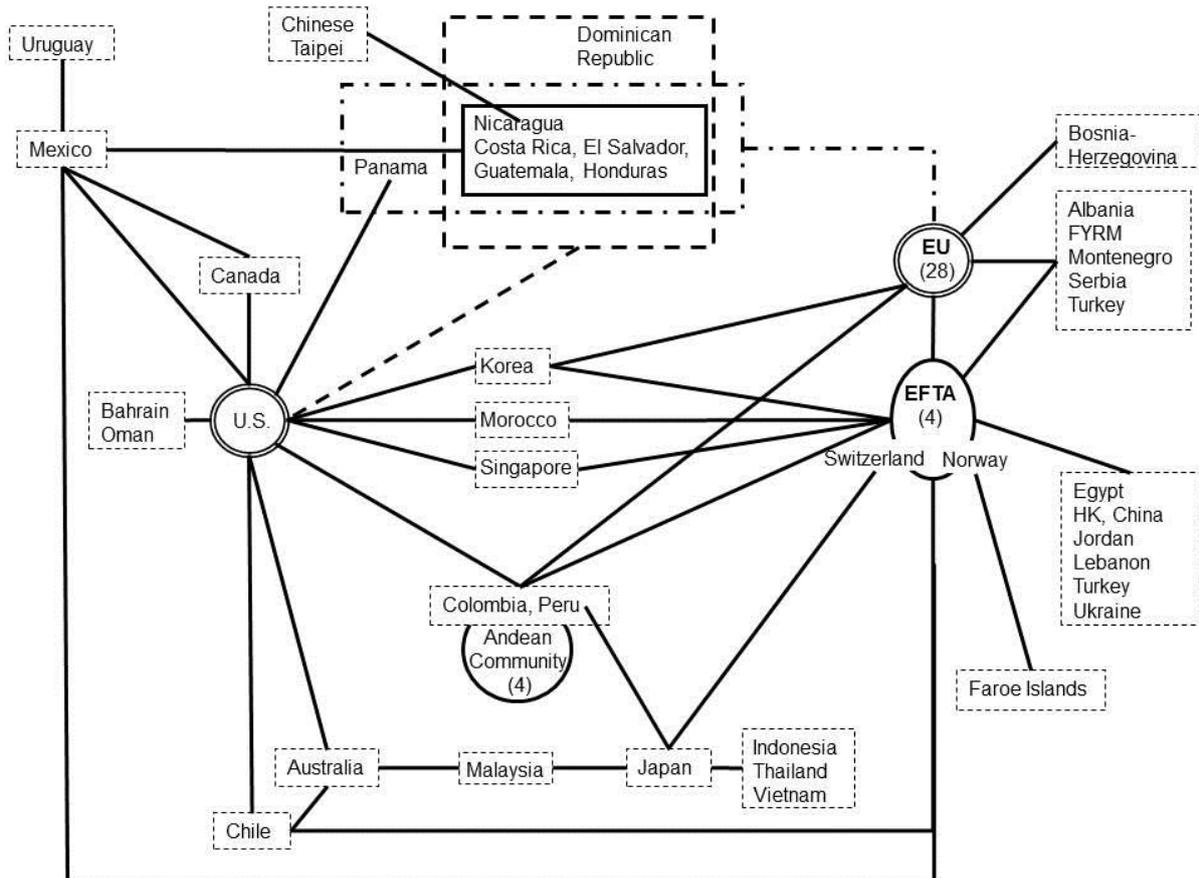
⁸⁰ See Valdés (2010).

Chart 6. Network of RTAs with high IP content, 2000



Source: Based on Annex V.

Chart 7. Network of RTAs with high IP content, 2013



Source: Based on Annex V.

F. POSSIBLE IMPLICATIONS

1. Impact for domestic regulation

156. The interconnections among hub-and-spoke systems create networks that transmit IP provisions across RTAs, and eventually from one domestic IP regime to another. For example, the separate RTAs between EFTA and Jordan and EFTA and Morocco require the two Arab countries to provide patent protection similar to the EPC. This echoes the provision in the EEA Agreement between EFTA and the European Union, which also mandates EFTA members to comply with the substantive provisions of the EPC.⁸¹

157. The impact of RTAs on domestic regulations can be substantial in part because IP provisions covered by the TRIPS Agreement and contained in a particular RTA must be applied without discrimination to the nationals of countries that are not parties to the RTA in question. While for trade in goods, WTO rules provide for departures from the MFN principle, for IP, Members are required to apply the MFN principle with only a few exceptions.⁸²

158. Even if WTO Members were not required to abide by the MFN principle in regard to IP, they would find it difficult and costly to tailor their domestic regulations to favour RTA partners because IP provisions generally take the form of domestic regulations rather than measures applied at the border. In this regard, Baldwin (2011) concludes that:

"many but not all deeper provisions [in RTAs] tend to act as general liberalisations rather than discriminatory liberalisations because it is difficult or impossible to write rules of origin for them that exclude third nations. The deep reasons are the difficulties in establishing the nationality of modern corporations and of services as well as the public-good nature of the many regulatory reforms in deep [RTAs]."

159. The hub-and-spoke architecture and non-discriminatory nature of IP provisions in RTAs mean that membership in additional RTAs can create a process of ratchet-like steps whose effect is to incrementally tighten a country's domestic IP regulations. This ratchet-up effect is likely to feed back into the international arena because a country will want to include in future RTAs the domestic regulations resulting from commitments it already made under previous agreements for any number of reasons: to achieve deeper integration, to lock-in domestic reforms and to prevent policy reversal, or to serve political motives. Both developed and a few developing countries thus appear to have engaged in a process that "exports" their domestic regulatory regimes to trading partners.

160. The ratchet-like process could lead to the creation of new "international standards" of IP, which although established through bilateral rather than multilateral negotiations, would result in the non-discriminatory treatment of RTA members and non-members alike. In the goods area, this type of treatment would tend to enhance competition and trade, and ultimately economic welfare. However, it is not clear to which extent this would be true in the case of IP given in particular the usual intangible nature and public-good characteristics of intellectual property. Moreover, adherence to diverse treaty standards implies the risk of regulatory confusion and implementation problems.⁸³

⁸¹ Article 3.4 of Protocol 28 of the EEA Agreement: "The EFTA States shall comply in their law with the substantive provisions of the European Patent Convention of 5 October 1973."

⁸² As observed before, Article 4 of the TRIPS Agreement contains the MFN principle, which provides for only limited exceptions. Additionally, Article 3 of the same agreement requires a WTO Member to extend the treatment accorded to its own nationals to the nationals of other WTO Members. The application of the national treatment principle implies granting MFN treatment to all nationals if a country chooses to apply a RTA without discriminating against its own nationals, which in practice is almost without exception the case.

⁸³ See Kampf (2007).

2. Economic aspects

161. WTO 2011a provided an in-depth analysis of the increase in the number of RTAs. The presentation in this section relies heavily on the perspectives and insights contained in that report. The report discusses the possible motives for RTAs, including neutralizing "beggar-thy-neighbour" trade policies, increasing market size, enhancing policy predictability or signalling openness to investors. The report also observes that the creation of RTAs cannot be fully understood without considering the political context within which they are formed.

162. RTAs containing IP provisions are typically part of deep integration processes. WTO 2011a argues that trade openness resulting from these processes creates pressures to reconcile divergent national practices, and produces demands for governance and the rule of law that transcend national borders. This is a particularly relevant consideration in the case of IPRs, which have remained essentially territorial despite the growing globalization of virtually all national economies.

163. In addition, WTO 2011a notes that the international fragmentation of production imposes additional costs, particularly for developing countries that are part of North-South production networks, and that lack sophisticated regulations. Multilateral rules do not go far enough to manage the resultant tightening of economic bonds. As a result, the expansion of international production networks has become a main driver for the creation of deeply integrative RTAs aimed at harmonizing national policies across jurisdictions.

164. The assessment of the economic impact of deep integration RTAs, including those containing IP provisions, has proved to be difficult. For RTAs covering goods alone, the analysis reflects the established insight that RTAs have both trade creation and trade diversion effects, and may increase or reduce the economic welfare of its members. The fact that deep integration agreements involve not only the reduction of trade barriers at the border but also changes to domestic regulations makes their analysis even more complex and the conclusions more tentative.

165. A particularly difficult question concerning the economic impact of RTAs with IP provisions relates to the estimation of the costs and benefits of adopting common policies and regulations among countries at different stages of economic development. WTO 2011a concludes that for developing countries, common policies with advanced economies may create benefits by allowing them to import regulatory systems that are "pre-tested" and represent "best practices", without having to pay the costs of developing them from scratch.

166. With regards to disadvantages, the report observes that developing countries may be pressured into adopting common rules which are inappropriate for their level of development, or rules that are used to protect the vested interests of certain groups.

167. The difficulties of conducting an economic analysis of RTAs containing IP provisions are also compounded by certain economic features of IP, which require particular solutions regarding the protection of IPRs and innovation. In particular, the "public good" characteristics of intellectual property require adopting second-best solutions. Moreover, a delicate balance between the interest of IP owners and users is also required. Providing for such balance is especially complex when inventors, owners and users are located in different countries. Reflecting these difficulties, the economy-wide effects of including IP provisions in RTAs have seldom been quantified, even in countries with well-established records of sound economic analysis.⁸⁴

⁸⁴ For example, policy-makers in Australia typically formulate trade policies through rigorous economic analysis undertaken by government institutions such as the Productivity Commission. Yet Productivity Commission (2010) recommended that in the future "Australia's participation in international negotiations in relation to IP laws ... should be informed by a robust economic analysis of size and distribution of the resultant benefits and costs."

168. Valuable sector-specific efforts have been made to quantify the economic impact of including IP provisions in RTAs, particularly those affecting more directly the public health and pharmaceuticals sectors. Such studies have concluded that by increasing the standards of pharmaceutical-related provisions, RTAs were likely to lead to higher prices and expenditures on pharmaceuticals, and thus, reduced access to medicines.⁸⁵ These results were based on partial equilibrium models which, while making the analysis workable, necessarily simplified the real world conditions. In particular, those studies did not address the key questions of whether a RTA was likely to increase the overall welfare of a country, raise income levels or improve a government's fiscal position, which could in principle more than offset the price-increasing effects of a RTA on medicines. Additional attention could also be given to the impact of further medical innovation and adaptation of existing technologies, as well as the effect of measures to contain prices or otherwise to promote access. Clearly, further empirical analysis and a consideration of all interlocking factors are required in this area.

169. Likewise, the methodology followed in this paper requires additional development, in particular to take better advantage of the information contained in the texts of the numerous agreements put together as part of this study. For example, means could be identified to differentiate provisions in separate RTAs that touch on the same area of IP law but whose nature and depth may vary greatly. Future work could further identify the links between IP and investment provisions or other provisions in RTAs that aim to frame production and trade through the use of internal rather than border measures. Taking better account of measures related to investment, services, competition policy or government procurement could be of particular relevance to develop a more comprehensive overview of the broader systemic implications of the IP provisions contained in RTAs.

⁸⁵ See Hernández-González and Valverde (2009), Rathe et al (2009) and Cortes et al (2004).

G. ANNEXES I - VI

Annex I. Regional trade agreements surveyed

RTA Name (a)	Coverage (b)	Type (c)	Date of entry into force	Inclusion of IP provisions
Andean Community (CAN)	Goods	CU	25/05/1988	Yes
Armenia - Kazakhstan	Goods	FTA	25/12/2001	No
Armenia - Moldova	Goods	FTA	21/12/1995	No
Armenia - Russian Federation	Goods	FTA	25/03/1993	No
Armenia - Turkmenistan	Goods	FTA	07/07/1996	No
Armenia - Ukraine	Goods	FTA	18/12/1996	No
ASEAN - Australia - New Zealand	Goods & Services	FTA & EIA	01/01/2010	Yes
ASEAN - China	Goods & Services	PSA & EIA	01/01/2005	Yes
ASEAN - India	Goods	FTA	01/01/2010	Yes
ASEAN - Japan	Goods	FTA	01/12/2008	Yes
ASEAN - Korea, Republic of	Goods & Services	FTA & EIA	01/01/2010	Yes
ASEAN Free Trade Area (AFTA)	Goods	FTA	28/01/1992	Yes
Asia Pacific Trade Agreement (APTA)	Goods	PSA	17/06/1976	No
Australia - Chile	Goods & Services	FTA & EIA	06/03/2009	Yes
Australia - New Zealand (ANZCERTA)	Goods & Services	FTA & EIA	01/01/1983	No
Australia - Papua New Guinea (PATCRA)	Goods	FTA	01/02/1977	No
Brunei Darussalam - Japan	Goods & Services	FTA & EIA	31/07/2008	Yes
Canada - Chile	Goods & Services	FTA & EIA	05/07/1997	Yes
Canada - Colombia	Goods & Services	FTA & EIA	15/08/2011	Yes
Canada - Costa Rica	Goods	FTA	01/11/2002	Yes
Canada - Israel	Goods	FTA	01/01/1997	Yes
Canada - Jordan	Goods	FTA	01/10/2012	No
Canada - Panama	Goods & Services	FTA & EIA	01/04/2013	Yes
Canada - Peru	Goods & Services	FTA & EIA	01/08/2009	Yes
Caribbean Community and Common Market (CARICOM)	Goods & Services	CU & EIA	01/08/1973	Yes
Central American Common Market (CACM)	Goods	CU	04/06/1961	No
Central European Free Trade Agreement (CEFTA)	Goods	FTA	01/05/2007	Yes
Chile - China	Goods & Services	FTA & EIA	01/10/2006	Yes
Chile - Colombia	Goods & Services	FTA & EIA	08/05/2009	Yes
Chile - Costa Rica (Chile - Central America)	Goods & Services	FTA & EIA	15/02/2002	Yes
Chile - El Salvador (Chile - Central America)	Goods & Services	FTA & EIA	01/06/2002	Yes
Chile - Guatemala (Chile - Central America)	Goods & Services	FTA & EIA	23/03/2010	Yes
Chile - Honduras (Chile - Central America)	Goods & Services	FTA & EIA	19/07/2008	Yes
Chile - India	Goods	PSA	17/08/2007	No
Chile - Japan	Goods & Services	FTA & EIA	03/09/2007	Yes
Chile - Malaysia	Goods	FTA	25/02/2012	Yes
Chile - Mexico	Goods & Services	FTA & EIA	01/08/1999	Yes
Chile - Nicaragua (Chile - Central America)	Goods & Services	FTA & EIA	19/10/2012	Yes
China - Costa Rica	Goods & Services	FTA & EIA	01/08/2011	Yes
China - Hong Kong, China	Goods & Services	FTA & EIA	29/06/2003	Yes

RTA Name (a)	Coverage (b)	Type (c)	Date of entry into force	Inclusion of IP provisions
China - Macao, China	Goods & Services	FTA & EIA	17/10/2003	Yes
China - New Zealand	Goods & Services	FTA & EIA	01/10/2008	Yes
China - Singapore	Goods & Services	FTA & EIA	01/01/2009	No
Colombia - Mexico	Goods & Services	FTA & EIA	01/01/1995	Yes
Colombia - Northern Triangle (El Salvador, Guatemala, Honduras)	Goods & Services	FTA & EIA	12/11/2009	Yes
Common Economic Zone (CEZ)	Goods	FTA	20/05/2004	Yes
Common Market for Eastern and Southern Africa (COMESA)	Goods	CU	08/12/1994	Yes
Commonwealth of Independent States (CIS)	Goods	FTA	30/12/1994	No
Costa Rica - Peru	Goods & Services	FTA & EIA	01/06/2013	Yes
Costa Rica - Singapore	Goods & Services	FTA & EIA	01/07/2013	Yes
Dominican Republic - Central America	Goods & Services	FTA & EIA	04/10/2001	Yes
Dominican Republic - Central America - United States Free Trade Agreement (CAFTA-DR)	Goods & Services	FTA & EIA	01/03/2006	Yes
East African Community (EAC) - goods & services	Goods & Services	CU & EIA	01/07/2010	Yes
EC Treaty	Goods & Services	CU & EIA	01/01/1958	Yes
Economic and Monetary Community of Central Africa (CEMAC)	Goods	CU	24/06/1999	No
Economic Community of West African States (ECOWAS)	Goods	CU	24/07/1993	Yes
Economic Cooperation Organization (ECO)	Goods	PSA	17/02/1992	Yes
EFTA - Albania	Goods	FTA	01/11/2010	Yes
EFTA - Canada	Goods	FTA	01/07/2009	No
EFTA - Chile	Goods & Services	FTA & EIA	01/12/2004	Yes
EFTA - Colombia	Goods & Services	FTA & EIA	01/07/2011	Yes
EFTA - Egypt	Goods	FTA	01/08/2007	Yes
EFTA - FYRM	Goods	FTA	01/05/2002	Yes
EFTA - Hong Kong, China	Goods & Services	FTA & EIA	01/10/2012	Yes
EFTA - Israel	Goods	FTA	01/01/1993	Yes
EFTA - Jordan	Goods	FTA	01/09/2002	Yes
EFTA - Korea, Republic of	Goods & Services	FTA & EIA	01/09/2006	Yes
EFTA - Lebanon	Goods	FTA	01/01/2007	Yes
EFTA - Mexico	Goods & Services	FTA & EIA	01/07/2001	Yes
EFTA - Montenegro	Goods	FTA	01/09/2012	Yes
EFTA - Morocco	Goods	FTA	01/12/1999	Yes
EFTA - Palestinian Authority	Goods	FTA	01/07/1999	Yes
EFTA - Peru	Goods	FTA	01/07/2011	Yes
EFTA - SACU	Goods	FTA	01/05/2008	Yes
EFTA - Serbia	Goods	FTA	01/10/2010	Yes
EFTA - Singapore	Goods & Services	FTA & EIA	01/01/2003	Yes
EFTA - Tunisia	Goods	FTA	01/06/2005	Yes
EFTA - Turkey	Goods	FTA	01/04/1992	Yes
EFTA - Ukraine	Goods & Services	FTA & EIA	01/06/2012	Yes
Egypt - Turkey	Goods	FTA	01/03/2007	Yes
El Salvador - Cuba	Goods	PSA	01/08/2012	No
EU - Albania	Goods & Services	FTA & EIA	01/12/2006	Yes

RTA Name (a)	Coverage (b)	Type (c)	Date of entry into force	Inclusion of IP provisions
EU - Algeria	Goods	FTA	01/09/2005	Yes
EU - Andorra	Goods	CU	01/07/1991	No
EU - Bosnia and Herzegovina	Goods	FTA	01/07/2008	Yes
EU - Cameroon	Goods	FTA	01/10/2009	Yes
EU - CARIFORUM States EPA	Goods & Services	FTA & EIA	01/11/2008	Yes
EU - Central America	Goods & Services	FTA & EIA	01/08/2013	Yes
EU - Chile	Goods & Services	FTA & EIA	01/02/2003	Yes
EU - Colombia and Peru	Goods & Services	FTA & EIA	01/03/2013	Yes
EU - Côte d'Ivoire	Goods	FTA	01/01/2009	Yes
EU - Eastern and Southern Africa States Interim (ESASI) EPA	Goods	FTA	14/05/2012	Yes
EU - Egypt	Goods	FTA	01/06/2004	Yes
EU - Faroe Islands	Goods	FTA	01/01/1997	No
EU - FYRM	Goods & Services	FTA & EIA	01/06/2001	Yes
EU - Iceland	Goods	FTA	01/04/1973	No
EU - Israel	Goods	FTA	01/06/2000	Yes
EU - Jordan	Goods	FTA	01/05/2002	Yes
EU - Korea, Republic of	Goods & Services	FTA & EIA	01/07/2011	Yes
EU - Lebanon	Goods	FTA	01/03/2003	Yes
EU - Mexico	Goods & Services	FTA & EIA	01/07/2000	Yes
EU - Montenegro	Goods & Services	FTA & EIA	01/01/2008	Yes
EU - Morocco	Goods	FTA	01/03/2000	Yes
EU - Norway	Goods	FTA	01/07/1973	No
EU - Palestinian Authority	Goods	FTA	01/07/1997	Yes
EU - Papua New Guinea / Fiji	Goods	FTA	20/12/2009	No
EU - San Marino	Goods	CU	01/04/2002	Yes
EU - Serbia	Goods	FTA	01/02/2010	Yes
EU - South Africa	Goods	FTA	01/01/2000	Yes
EU - Switzerland - Liechtenstein	Goods	FTA	01/01/1973	No
EU - Syria	Goods	FTA	01/07/1977	Yes
EU - Tunisia	Goods	FTA	01/03/1998	Yes
EU - Turkey	Goods	CU	01/01/1996	Yes
Eurasian Economic Community (EAEC)	Goods	CU	08/10/1997	No
European Economic Area (EEA)	Services	EIA	01/01/1994	Yes
European Free Trade Association (EFTA)	Goods & Services	FTA & EIA	03/05/1960	Yes
Faroe Islands - Norway	Goods	FTA	01/07/1993	Yes
Faroe Islands - Switzerland	Goods	FTA	01/03/1995	No
Georgia - Armenia	Goods	FTA	11/11/1998	No
Georgia - Azerbaijan	Goods	FTA	10/07/1996	No
Georgia - Kazakhstan	Goods	FTA	16/07/1999	No
Georgia - Russian Federation	Goods	FTA	10/05/1994	No
Georgia - Turkmenistan	Goods	FTA	01/01/2000	No
Georgia - Ukraine	Goods	FTA	04/06/1996	No
Guatemala - Chinese Taipei	Goods & Services	FTA & EIA	01/07/2006	Yes
Gulf Cooperation Council (GCC)	Goods	CU	01/01/2003	No
Honduras - El Salvador - Chinese Taipei	Goods & Services	FTA & EIA	01/03/2008	Yes

RTA Name (a)	Coverage (b)	Type (c)	Date of entry into force	Inclusion of IP provisions
Hong Kong, China - New Zealand	Goods & Services	FTA & EIA	01/01/2011	Yes
Iceland - Faroe Islands	Goods & Services	FTA & EIA	01/11/2006	No
India - Afghanistan	Goods	PSA	13/05/2003	No
India - Bhutan	Goods	FTA	29/07/2006	No
India - Japan	Goods & Services	FTA & EIA	01/08/2011	Yes
India - Malaysia	Goods & Services	FTA & EIA	01/07/2011	Yes
India - Nepal	Goods	PSA	27/10/2009	No
India - Singapore	Goods & Services	FTA & EIA	01/08/2005	Yes
India - Sri Lanka	Goods	FTA	15/12/2001	No
Israel - Mexico	Goods	FTA	01/07/2000	Yes
Japan - Indonesia	Goods & Services	FTA & EIA	01/07/2008	Yes
Japan - Malaysia	Goods & Services	FTA & EIA	13/07/2006	Yes
Japan - Mexico	Goods & Services	FTA & EIA	01/04/2005	Yes
Japan - Peru	Goods & Services	FTA & EIA	01/03/2012	Yes
Japan - Philippines	Goods & Services	FTA & EIA	11/12/2008	Yes
Japan - Singapore	Goods & Services	FTA & EIA	30/11/2002	Yes
Japan - Switzerland	Goods & Services	FTA & EIA	01/09/2009	Yes
Japan - Thailand	Goods & Services	FTA & EIA	01/11/2007	Yes
Japan - Viet Nam	Goods & Services	FTA & EIA	01/10/2009	Yes
Jordan - Singapore	Goods & Services	FTA & EIA	22/08/2005	Yes
Korea, Republic of - Chile	Goods & Services	FTA & EIA	01/04/2004	Yes
Korea, Republic of - India	Goods & Services	FTA & EIA	01/01/2010	Yes
Korea, Republic of - Singapore	Goods & Services	FTA & EIA	02/03/2006	Yes
Korea, Republic of - Turkey	Goods	FTA	01/05/2013	Yes
Korea, Republic of - US	Goods & Services	FTA & EIA	15/03/2012	Yes
Kyrgyz Republic - Armenia	Goods	FTA	27/10/1995	No
Kyrgyz Republic - Kazakhstan	Goods	FTA	11/11/1995	No
Kyrgyz Republic - Moldova	Goods	FTA	21/11/1996	No
Kyrgyz Republic - Russian Federation	Goods	FTA	24/04/1993	No
Kyrgyz Republic - Ukraine	Goods	FTA	19/01/1998	No
Kyrgyz Republic - Uzbekistan	Goods	FTA	20/03/1998	No
Lao People's Democratic Republic - Thailand	Goods	PSA	20/06/1991	No
Latin American Integration Association (LAIA)	Goods	PSA	18/03/1981	No
Malaysia - Australia	Goods & Services	FTA & EIA	01/01/2013	Yes
Melanesian Spearhead Group (MSG)	Goods	PSA	01/01/1994	No
MERCOSUR - India	Goods	PSA	01/06/2009	No
Mexico - Central America	Goods & Services	FTA & EIA	01/09/2012	Yes
Mexico - Uruguay	Goods & Services	FTA & EIA	15/07/2004	Yes
New Zealand - Chinese Taipei	Goods & Services	FTA & EIA	01/12/2013	Yes
New Zealand - Malaysia	Goods & Services	FTA & EIA	01/08/2010	Yes
New Zealand - Singapore	Goods & Services	FTA & EIA	01/01/2001	Yes
Nicaragua - Chinese Taipei	Goods & Services	FTA & EIA	01/01/2008	Yes
North American Free Trade Agreement (NAFTA)	Goods & Services	FTA & EIA	01/01/1994	Yes
Pacific Island Countries Trade Agreement (PICTA)	Goods	FTA	13/04/2003	No

RTA Name (a)	Coverage (b)	Type (c)	Date of entry into force	Inclusion of IP provisions
Pakistan - China	Goods & Services	FTA & EIA	01/07/2007	Yes
Pakistan - Malaysia	Goods & Services	FTA & EIA	01/01/2008	Yes
Pakistan - Sri Lanka	Goods	FTA	12/06/2005	No
Panama - Chile	Goods & Services	FTA & EIA	07/03/2008	Yes
Panama - Costa Rica (Panama - Central America)	Goods & Services	FTA & EIA	23/11/2008	Yes
Panama - El Salvador (Panama - Central America)	Goods & Services	FTA & EIA	11/04/2003	Yes
Panama - Guatemala (Panama - Central America)	Goods & Services	FTA & EIA	20/06/2009	Yes
Panama - Honduras (Panama - Central America)	Goods & Services	FTA & EIA	09/01/2009	Yes
Panama - Nicaragua (Panama - Central America)	Goods & Services	FTA & EIA	21/11/2009	Yes
Panama - Peru	Goods & Services	FTA & EIA	01/05/2012	Yes
Panama - Singapore	Goods & Services	FTA & EIA	24/07/2006	Yes
Panama - Chinese Taipei	Goods & Services	FTA & EIA	01/01/2004	Yes
Pan-Arab Free Trade Area (PAFTA)	Goods	FTA	01/01/1998	No
Peru - Chile	Goods & Services	FTA & EIA	01/03/2009	Yes
Peru - China	Goods & Services	FTA & EIA	01/03/2010	Yes
Peru - Korea, Republic of	Goods & Services	FTA & EIA	01/08/2011	Yes
Peru - Mexico	Goods & Services	FTA & EIA	01/02/2012	Yes
Peru - Singapore	Goods & Services	FTA & EIA	01/08/2009	Yes
Russian Federation - Azerbaijan	Goods	FTA	17/02/1993	No
Russian Federation - Belarus	Goods	FTA	20/04/1993	No
Russian Federation - Belarus - Kazakhstan	Goods	CU	03/12/1997	No
Russian Federation - Kazakhstan	Goods	FTA	07/06/1993	No
Russian Federation - Republic of Moldova	Goods	FTA	30/03/1993	No
Russian Federation - Serbia	Goods	FTA	03/06/2006	Yes
Russian Federation - Tajikistan	Goods	FTA	08/04/1993	No
Russian Federation - Turkmenistan	Goods	FTA	06/04/1993	No
Russian Federation - Uzbekistan	Goods	FTA	25/03/1993	No
Singapore - Australia	Goods & Services	FTA & EIA	28/07/2003	Yes
South Asian Free Trade Agreement (SAFTA)	Goods	FTA	01/01/2006	No
South Asian Preferential Trade Arrangement (SAPTA)	Goods	PSA	07/12/1995	No
South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA)	Goods	PSA	01/01/1981	No
Southern African Customs Union (SACU)	Goods	CU	15/07/2004	No
Southern African Development Community (SADC)	Goods	FTA	01/09/2000	Yes
Southern Common Market (MERCOSUR)	Goods & Services	CU & EIA	29/11/1991	Yes
Thailand - Australia	Goods & Services	FTA & EIA	01/01/2005	Yes
Thailand - New Zealand	Goods & Services	FTA & EIA	01/07/2005	Yes
Trans-Pacific Strategic Economic Partnership	Goods & Services	FTA & EIA	28/05/2006	Yes
Treaty on a Free Trade Area between members of the Commonwealth of Independent States (CIS)	Goods	FTA	20/09/2012	No
Turkey - Albania	Goods	FTA	01/05/2008	Yes
Turkey - Bosnia and Herzegovina	Goods	FTA	01/07/2003	Yes
Turkey - Chile	Goods	FTA	01/03/2011	Yes

RTA Name (a)	Coverage (b)	Type (c)	Date of entry into force	Inclusion of IP provisions
Turkey - FYRM	Goods	FTA	01/09/2000	Yes
Turkey - Georgia	Goods	FTA	01/11/2008	Yes
Turkey - Israel	Goods	FTA	01/05/1997	Yes
Turkey - Jordan	Goods	FTA	01/03/2011	Yes
Turkey - Mauritius	Goods	FTA	01/06/2013	Yes
Turkey - Montenegro	Goods	FTA	01/03/2010	Yes
Turkey - Morocco	Goods	FTA	01/01/2006	Yes
Turkey - Palestinian Authority	Goods	FTA	01/06/2005	Yes
Turkey - Serbia	Goods	FTA	01/09/2010	Yes
Turkey - Syria	Goods	FTA	01/01/2007	Yes
Turkey - Tunisia	Goods	FTA	01/07/2005	Yes
Ukraine - Azerbaijan	Goods	FTA	02/09/1996	No
Ukraine - Belarus	Goods	FTA	11/11/2006	No
Ukraine - FYRM	Goods	FTA	05/07/2001	Yes
Ukraine - Kazakhstan	Goods	FTA	19/10/1998	No
Ukraine - Moldova	Goods	FTA	19/05/2005	Yes
Ukraine - Montenegro	Goods & Services	FTA & EIA	01/01/2013	No
Ukraine - Russian Federation	Goods	FTA	21/02/1994	No
Ukraine - Tajikistan	Goods	FTA	11/07/2002	No
Ukraine - Uzbekistan	Goods	FTA	01/01/1996	No
Ukraine - Turkmenistan	Goods	FTA	04/11/1995	No
US - Australia	Goods & Services	FTA & EIA	01/01/2005	Yes
US - Bahrain	Goods & Services	FTA & EIA	01/08/2006	Yes
US - Chile	Goods & Services	FTA & EIA	01/01/2004	Yes
US - Colombia	Goods & Services	FTA & EIA	15/05/2012	Yes
US - Israel	Goods	FTA	19/08/1985	Yes
US - Jordan	Goods & Services	FTA & EIA	17/12/2001	Yes
US - Morocco	Goods & Services	FTA & EIA	01/01/2006	Yes
US - Oman	Goods & Services	FTA & EIA	01/01/2009	Yes
US - Panama	Goods & Services	FTA & EIA	31/10/2012	Yes
US - Peru	Goods & Services	FTA & EIA	01/02/2009	Yes
US - Singapore	Goods & Services	FTA & EIA	01/01/2004	Yes
West African Economic and Monetary Union (WAEMU)	Goods	CU	01/01/2000	No

Notes:

(a) The name corresponds to the short title used in the RTA database and not to the full name used in the text of the respective agreement; however, the table uses Chinese Taipei instead of Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu and FYRM instead of Former Yugoslav Republic of Macedonia, which are the names employed in the RTA database. The members of the different RTAs listed in this table can be found in the RTA database.

(b) Goods, services or both, as notified by the signatories to the agreement.

(c) FTA - Free Trade Agreement, as defined in Paragraph 8(b) of Article XXIV of GATT 1994; CU - Customs Union, as defined in Paragraph 8(a) of Article XXIV of GATT 1994; EIA - Economic Integration Agreement, as defined in Article V of GATS; and PSA - Partial Scope Agreement, which cover only certain products and are notified under paragraph 4(a) of the Enabling Clause.

Source: Authors' estimates and WTO RTA database, accessible at <http://www.wto.org/rta>.

Annex II. General IP provisions in individual RTAs (a)

Regional Trade Agreement (see Annex I)	Statement of commitment to IP protection	TRIPS reaffirmation	References to WIPO treaties	National Treatment or MFN provisions	Assistance, co-operation or coordination	Enforcement procedures	Border measures	Exhaustion (parallel imports)	Non-violation complaints	IP defined as investment
Andean Community (CAN)				✓	✓	✓	✓	✓		
ASEAN - Australia - New Zealand	✓	✓	✓	✓	✓	✓	✓			✓
ASEAN - China	✓	✓	✓		✓					✓
ASEAN - India	✓	✓	✓		✓					
ASEAN - Japan	✓	✓			✓					
ASEAN - Korea, Republic of	✓	✓	✓		✓					✓
ASEAN Free Trade Area (AFTA)	✓	✓			✓					
Australia - Chile	✓	✓	✓	✓	✓	✓	✓		✓	✓
Brunei Darussalam - Japan	✓				✓	✓	✓			✓
Canada - Chile										
Canada - Colombia		✓			✓					✓
Canada - Costa Rica										
Canada - Israel		✓								
Canada - Panama		✓								✓
Canada - Peru		✓			✓					
CARICOM	✓				✓					
CEFTA	✓	✓	✓		✓					
Chile - China		✓			✓	✓	✓			
Chile - Colombia	✓									
Chile - Costa Rica (Chile - CA)										✓
Chile - El Salvador (Chile - CA)										✓
Chile - Guatemala (Chile - CA)										✓
Chile - Honduras (Chile - CA)										✓
Chile - Japan	✓	✓			✓	✓	✓			✓
Chile - Malaysia					✓					
Chile - Mexico	✓		✓	✓	✓	✓	✓		✓	
Chile - Nicaragua (Chile - CA)										✓
China - Costa Rica	✓	✓			✓	✓	✓			
China - Hong Kong, China					✓					
China - Macao, China	✓				✓					
China - New Zealand	✓	✓			✓					✓
Colombia - Mexico	✓		✓	✓		✓	✓			
Colombia - Northern Triangle										✓
Common Economic Zone (CEZ)	✓									
COMESA					✓					
Costa Rica - Peru	✓	✓	✓	✓	✓	✓	✓			
Costa Rica - Singapore	✓	✓			✓					✓
Dominican Republic - Central America	✓	✓								✓
CAFTA-DR	✓	✓	✓	✓	✓	✓	✓		✓	✓
EAC - goods & services	✓				✓	✓				✓

Regional Trade Agreement (see Annex I)	Statement of commitment to IP protection	TRIPS reaffirmation	References to WIPO treaties	National Treatment or MFN provisions	Assistance, co-operation or coordination	Enforcement procedures	Border measures	Exhaustion (parallel imports)	Non-violation complaints	IP defined as investment
EC Treaty	✓		✓	✓	✓	✓	✓	✓		
ECOWAS					✓					
Economic Cooperation Organization (ECO)	✓		✓	✓	✓	✓				
EFTA - Albania	✓	✓	✓	✓	✓	✓	✓			
EFTA - Chile	✓	✓	✓	✓	✓	✓	✓	✓		
EFTA - Colombia	✓	✓	✓	✓	✓	✓	✓			
EFTA - Egypt	✓	✓	✓	✓	✓	✓	✓			
EFTA - FYRM	✓	✓	✓	✓	✓	✓	✓			
EFTA - Hong Kong, China	✓	✓	✓	✓	✓	✓	✓			
EFTA - Israel	✓		✓	✓	✓	✓		✓		
EFTA - Jordan	✓	✓	✓	✓	✓	✓	✓			
EFTA - Korea, Republic of	✓	✓	✓	✓	✓	✓	✓			
EFTA - Lebanon	✓	✓	✓	✓	✓	✓	✓	✓		
EFTA - Mexico	✓	✓	✓	✓	✓	✓	✓			
EFTA - Montenegro	✓	✓	✓	✓	✓	✓	✓			
EFTA - Morocco	✓	✓	✓	✓	✓	✓	✓			
EFTA - Palestinian Authority	✓				✓	✓				
EFTA - Peru	✓	✓	✓	✓	✓	✓	✓			
EFTA - SACU	✓			✓	✓	✓				
EFTA - Serbia	✓	✓	✓	✓	✓	✓	✓			
EFTA - Singapore	✓	✓	✓	✓	✓	✓	✓	✓		✓
EFTA - Tunisia	✓	✓	✓	✓	✓	✓	✓	✓		
EFTA - Turkey	✓	✓	✓	✓	✓	✓	✓			
EFTA - Ukraine	✓	✓	✓	✓	✓	✓	✓			✓
Egypt - Turkey	✓			✓	✓	✓				
EU - Albania	✓	✓	✓	✓	✓	✓	✓	✓		
EU - Algeria	✓	✓	✓		✓	✓				
EU - Bosnia and Herzegovina	✓	✓	✓	✓	✓	✓	✓	✓		
EU - Cameroon	✓	✓			✓					
EU - CARIFORUM States EPA	✓	✓	✓		✓	✓	✓			
EU - Central America	✓	✓	✓	✓	✓	✓	✓	✓		
EU - Chile	✓	✓	✓		✓	✓				
EU - Colombia and Peru	✓	✓	✓	✓	✓	✓	✓	✓		
EU - Côte d'Ivoire	✓				✓					
EU - ESASI EPA					✓					
EU - Egypt	✓	✓	✓		✓					
EU - FYRM	✓		✓	✓	✓	✓	✓	✓		
EU - Israel	✓		✓		✓	✓				
EU - Jordan	✓		✓		✓					
EU - Korea, Republic of	✓	✓	✓		✓	✓	✓	✓		

Regional Trade Agreement (see Annex I)	Statement of commitment to IP protection	TRIPS reaffirmation	References to WIPO treaties	National Treatment or MFN provisions	Assistance, co-operation or coordination	Enforcement procedures	Border measures	Exhaustion (parallel imports)	Non-violation complaints	IP defined as investment
EU - Lebanon	✓		✓		✓					
EU - Mexico	✓		✓		✓	✓				
EU - Montenegro	✓	✓	✓	✓	✓	✓	✓	✓		
EU - Morocco	✓		✓		✓	✓				
EU - Palestinian Authority	✓				✓	✓				
EU - San Marino					✓					
EU - Serbia	✓	✓	✓	✓	✓	✓	✓	✓		
EU - South Africa	✓	✓	✓		✓					
EU - Syria					✓	✓				
EU - Tunisia	✓		✓		✓	✓				
EU - Turkey	✓	✓	✓		✓	✓	✓	✓		
EEA	✓		✓	✓	✓	✓	✓	✓		
EFTA	✓	✓	✓	✓	✓	✓	✓	✓		
Faroe Islands - Norway	✓				✓	✓	✓	✓		
Guatemala - Chinese Taipei	✓	✓			✓					✓
Honduras - El Salvador - Chinese Taipei										✓
Hong Kong, China - New Zealand	✓	✓			✓	✓		✓		
India - Japan	✓	✓	✓		✓					
India - Malaysia					✓		✓			✓
India - Singapore					✓					✓
Israel - Mexico		✓			✓					
Japan - Indonesia	✓	✓	✓	✓	✓	✓	✓			✓
Japan - Malaysia	✓	✓	✓	✓	✓	✓	✓			✓
Japan - Mexico	✓				✓					
Japan - Peru	✓	✓	✓	✓	✓	✓	✓			
Japan - Philippines	✓		✓		✓	✓	✓			✓
Japan - Singapore	✓			✓	✓					✓
Japan - Switzerland	✓	✓	✓	✓	✓	✓	✓			✓
Japan - Thailand	✓	✓	✓	✓	✓	✓	✓			✓
Japan - Viet Nam	✓	✓		✓	✓	✓	✓			
Jordan - Singapore		✓								
Korea, Republic of - Chile	✓	✓	✓			✓	✓			✓
Korea, Republic of - India	✓	✓	✓		✓	✓	✓			✓
Korea, Republic of - Singapore	✓	✓	✓		✓	✓	✓			✓
Korea, Republic of - Turkey	✓	✓	✓		✓	✓	✓			
Korea, Republic of - US	✓	✓	✓	✓	✓	✓	✓		✓	✓
Malaysia - Australia	✓	✓	✓	✓	✓	✓	✓			✓
Mexico - Central America	✓	✓	✓	✓	✓	✓				✓
Mexico - Uruguay	✓		✓	✓	✓	✓	✓		✓	
New Zealand - Chinese Taipei	✓	✓			✓	✓	✓	✓	✓	✓
New Zealand - Malaysia	✓	✓			✓	✓			✓	✓

Regional Trade Agreement (see Annex I)	Statement of commitment to IP protection	TRIPS reaffirmation	References to WIPO treaties	National Treatment or MFN provisions	Assistance, co-operation or coordination	Enforcement procedures	Border measures	Exhaustion (parallel imports)	Non-violation complaints	IP defined as investment
New Zealand - Singapore		✓								✓
Nicaragua and Chinese Taipei	✓	✓	✓		✓	✓	✓		✓	✓
NAFTA	✓		✓	✓	✓	✓	✓		✓	
Pakistan - China						✓	✓			✓
Pakistan - Malaysia	✓	✓			✓	✓	✓			✓
Panama - Chile										✓
Panama - Costa Rica (Panama - CA)		✓				✓	✓			✓
Panama - El Salvador (Panama - CA)		✓				✓	✓			✓
Panama - Guatemala (Panama - CA)		✓				✓	✓			✓
Panama - Honduras (Panama - CA)		✓				✓	✓			✓
Panama - Nicaragua (Panama - CA)		✓				✓	✓			✓
Panama - Peru	✓	✓	✓	✓	✓	✓	✓			✓
Panama - Singapore										✓
Panama and Chinese Taipei		✓	✓	✓		✓	✓	✓		✓
Peru - Chile	✓			✓						✓
Peru - China	✓	✓			✓	✓	✓			✓
Peru - Korea, Republic of	✓	✓	✓	✓	✓	✓	✓			✓
Peru - Mexico										
Peru - Singapore		✓								✓
Russian Federation - Serbia	✓									
Singapore - Australia		✓	✓	✓	✓	✓	✓			✓
SADC	✓	✓								
MERCOSUR										
Thailand - Australia	✓	✓			✓	✓	✓			✓
Thailand - New Zealand	✓	✓			✓	✓				✓
Trans-Pacific Strategic Economic Partnership	✓	✓	✓		✓			✓		
Turkey - Albania	✓			✓	✓					
Turkey - Bosnia and Herzegovina	✓	✓			✓					
Turkey - Chile	✓	✓			✓					
Turkey - FYRM	✓				✓					
Turkey - Georgia	✓			✓	✓					
Turkey - Israel	✓				✓					
Turkey - Jordan		✓	✓		✓					
Turkey - Mauritius	✓	✓			✓					
Turkey - Montenegro	✓			✓	✓					
Turkey - Morocco	✓			✓	✓					
Turkey - Palestinian Authority	✓	✓			✓					
Turkey - Serbia	✓	✓			✓					
Turkey - Syria	✓	✓								
Turkey - Tunisia	✓	✓			✓					

Regional Trade Agreement (see Annex I)	Statement of commitment to IP protection	TRIPS reaffirmation	References to WIPO treaties	National Treatment or MFN provisions	Assistance, co-operation or coordination	Enforcement procedures	Border measures	Exhaustion (parallel imports)	Non-violation complaints	IP defined as investment
Ukraine - FYRM	✓	✓	✓	✓	✓					
Ukraine - Moldova	✓	✓		✓	✓					
US - Australia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
US - Bahrain	✓		✓	✓		✓	✓		✓	
US - Chile	✓	✓	✓	✓	✓	✓	✓		✓	✓
US - Colombia	✓	✓	✓	✓	✓	✓	✓		✓	✓
US - Israel				✓						
US - Jordan	✓		✓	✓		✓	✓		✓	
US - Morocco	✓		✓	✓		✓	✓	✓	✓	✓
US - Oman	✓		✓	✓		✓	✓		✓	✓
US - Panama	✓	✓	✓	✓		✓	✓		✓	✓
US - Peru	✓	✓	✓	✓	✓	✓	✓		✓	✓
US - Singapore	✓	✓	✓	✓		✓	✓	✓	✓	✓

(a) Only RTAs with an overall score greater than zero are listed, i.e., RTAs that include at least one IP provision.

Source: Authors' estimates

Annex III. Specific IPRs referred to in individual RTAs (a)

Regional Trade Agreement (see Annex I)	Copyright and Related Rights	Trademarks	Geographical Indications	Industrial Designs	Patents	Undisclosed Information	Layout Designs of Integrated Circuits	New Plant Varieties	Traditional knowledge or genetic resources	Encrypted Program-Carrying Satellite Signals	Domain Names
Andean Community (CAN)	✓	✓	✓	✓	✓	✓	✓	✓	✓		
ASEAN - Australia - New Zealand	✓	✓	✓						✓		
ASEAN - China									✓		
ASEAN - India											
ASEAN - Japan											
ASEAN - Korea, Republic of											
ASEAN Free Trade Area (AFTA)											
Australia - Chile	✓	✓	✓		✓			✓		✓	✓
Brunei Darussalam - Japan											
Canada - Chile			✓								
Canada - Colombia											
Canada - Costa Rica			✓								
Canada - Israel											
Canada - Panama											
Canada - Peru			✓								
CARICOM									✓		
CEFTA	✓	✓		✓	✓			✓		✓	
Chile - China			✓								
Chile - Colombia											
Chile - Costa Rica (Chile - CA)			✓								
Chile - El Salvador (Chile - CA)			✓								
Chile - Guatemala (Chile - CA)			✓								
Chile - Honduras (Chile - CA)			✓								
Chile - Japan		✓	✓		✓			✓			
Chile - Malaysia			✓								
Chile - Mexico	✓	✓	✓		✓					✓	
Chile - Nicaragua (Chile - CA)			✓								
China - Costa Rica			✓						✓		
China - Hong Kong, China											
China - Macao, China											
China - New Zealand									✓		
Colombia - Mexico	✓	✓	✓			✓		✓		✓	
Colombia - Northern Triangle											
Common Economic Zone (CEZ)											
COMESA											
Costa Rica - Peru	✓	✓	✓						✓		
Costa Rica - Singapore			✓						✓		
Dominican Republic - Central America											

Regional Trade Agreement (see Annex I)	Copyright and Related Rights	Trademarks	Geographical Indications	Industrial Designs	Patents	Undisclosed Information	Layout Designs of Integrated Circuits	New Plant Varieties	Traditional knowledge or genetic resources	Encrypted Program-Carrying Satellite Signals	Domain Names
CAFTA-DR	✓	✓	✓		✓	✓		✓	✓	✓	✓
EAC - goods & services	✓	✓	✓	✓	✓	✓	✓	✓	✓		
EC Treaty	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ECOWAS											
Economic Cooperation Organization (ECO)											
EFTA - Albania	✓	✓	✓	✓	✓	✓		✓			
EFTA - Chile	✓	✓	✓	✓	✓	✓		✓			
EFTA - Colombia	✓	✓	✓	✓	✓	✓		✓	✓		
EFTA - Egypt	✓	✓	✓	✓	✓	✓		✓			
EFTA - FYRM	✓	✓	✓	✓	✓	✓	✓	✓			
EFTA - Hong Kong, China	✓	✓	✓	✓	✓	✓	✓	✓			
EFTA - Israel	✓	✓	✓	✓	✓	✓	✓				
EFTA - Jordan	✓	✓	✓	✓	✓	✓	✓	✓			
EFTA - Korea, Republic of	✓	✓	✓	✓	✓	✓		✓			
EFTA - Lebanon	✓	✓	✓	✓	✓	✓		✓			
EFTA - Mexico	✓	✓	✓	✓	✓	✓	✓	✓			
EFTA - Montenegro	✓	✓	✓	✓	✓	✓		✓			
EFTA - Morocco	✓	✓	✓	✓	✓	✓	✓	✓			
EFTA - Palestinian Authority											
EFTA - Peru	✓	✓	✓	✓	✓	✓		✓	✓		
EFTA - SACU											
EFTA - Serbia	✓	✓	✓	✓	✓	✓		✓			
EFTA - Singapore	✓	✓	✓	✓	✓						
EFTA - Tunisia	✓	✓	✓	✓	✓	✓		✓			
EFTA - Turkey	✓	✓	✓	✓	✓	✓	✓	✓			
EFTA - Ukraine	✓	✓	✓	✓	✓	✓		✓			
Egypt - Turkey											
EU - Albania	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EU - Algeria	✓	✓			✓			✓			
EU - Bosnia and Herzegovina	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EU - Cameroon											
EU - CARIFORUM States EPA	✓	✓	✓	✓	✓			✓	✓		✓
EU - Central America	✓	✓	✓	✓	✓			✓	✓		
EU - Chile	✓	✓	✓	✓	✓			✓			
EU - Colombia and Peru	✓	✓	✓	✓	✓	✓		✓	✓		
EU - Côte d'Ivoire											
EU - ESASI EPA											
EU - Egypt	✓	✓			✓			✓			
EU - FYRM	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EU - Israel	✓	✓			✓						

Regional Trade Agreement (see Annex I)	Copyright and Related Rights	Trademarks	Geographical Indications	Industrial Designs	Patents	Undisclosed Information	Layout Designs of Integrated Circuits	New Plant Varieties	Traditional knowledge or genetic resources	Encrypted Program-Carrying Satellite Signals	Domain Names
EU - Jordan	✓	✓			✓			✓			
EU - Korea, Republic of	✓	✓	✓	✓	✓	✓		✓	✓	✓	
EU - Lebanon	✓	✓		✓	✓			✓			
EU - Mexico	✓	✓		✓	✓						
EU - Montenegro	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EU - Morocco	✓				✓			✓			
EU - Palestinian Authority											
EU - San Marino											
EU - Serbia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EU - South Africa			✓								
EU - Syria											
EU - Tunisia	✓	✓		✓	✓			✓			
EU - Turkey	✓	✓	✓	✓	✓	✓		✓		✓	
EEA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EFTA	✓	✓	✓	✓	✓						
Faroe Islands - Norway	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Guatemala - Chinese Taipei			✓						✓		
Honduras - El Salvador - Chinese Taipei											
Hong Kong, China - New Zealand									✓		
India - Japan		✓	✓		✓						
India - Malaysia											
India - Singapore											
Israel - Mexico			✓								
Japan - Indonesia	✓	✓		✓	✓	✓		✓	✓		✓
Japan - Malaysia	✓	✓		✓	✓	✓		✓			✓
Japan - Mexico			✓								
Japan - Peru	✓	✓	✓	✓	✓	✓					
Japan - Philippines	✓	✓		✓	✓	✓		✓			
Japan - Singapore					✓						
Japan - Switzerland	✓	✓	✓	✓	✓	✓		✓			✓
Japan - Thailand	✓	✓	✓	✓	✓	✓		✓	✓		✓
Japan - Viet Nam	✓	✓	✓	✓	✓	✓		✓			✓
Jordan - Singapore											
Korea, Republic of - Chile		✓	✓								
Korea, Republic of - India								✓	✓		
Korea, Republic of - Singapore					✓						
Korea, Republic of - Turkey	✓	✓	✓								
Korea, Republic of - US	✓	✓	✓	✓	✓			✓		✓	✓
Malaysia - Australia	✓	✓	✓	✓	✓			✓		✓	

Regional Trade Agreement (see Annex I)	Copyright and Related Rights	Trademarks	Geographical Indications	Industrial Designs	Patents	Undisclosed Information	Layout Designs of Integrated Circuits	New Plant Varieties	Traditional knowledge or genetic resources	Encrypted Program-Carrying Satellite Signals	Domain Names
Mexico - Central America	✓	✓	✓	✓	✓	✓		✓		✓	
Mexico - Uruguay	✓	✓	✓	✓	✓	✓		✓		✓	
New Zealand - Chinese Taipei		✓	✓						✓		
New Zealand - Malaysia									✓		
New Zealand - Singapore											
Nicaragua and Chinese Taipei	✓	✓	✓	✓	✓				✓		✓
NAFTA	✓	✓	✓	✓	✓	✓	✓	✓		✓	
Pakistan - China											
Pakistan - Malaysia											
Panama - Chile			✓								
Panama - Costa Rica (Panama - CA)											
Panama - El Salvador (Panama - CA)											
Panama - Guatemala (Panama - CA)											
Panama - Honduras (Panama - CA)											
Panama - Nicaragua (Panama - CA)											
Panama - Peru	✓	✓	✓						✓		
Panama - Singapore											
Panama and Chinese Taipei	✓		✓		✓			✓	✓		
Peru - Chile									✓		
Peru - China			✓						✓		
Peru - Korea, Republic of	✓		✓						✓		
Peru - Mexico			✓								
Peru - Singapore			✓								
Russian Federation - Serbia											
Singapore - Australia	✓	✓		✓							✓
SADC											
MERCOSUR								✓			
Thailand - Australia											
Thailand - New Zealand		✓			✓				✓		
Trans-Pacific Strategic Economic Partnership	✓	✓	✓						✓		
Turkey - Albania											
Turkey - Bosnia and Herzegovina											
Turkey - Chile			✓								
Turkey - FYRM											
Turkey - Georgia											
Turkey - Israel											
Turkey - Jordan											
Turkey - Mauritius											
Turkey - Montenegro											
Turkey - Morocco											

Regional Trade Agreement (see Annex I)	Copyright and Related Rights	Trademarks	Geographical Indications	Industrial Designs	Patents	Undisclosed Information	Layout Designs of Integrated Circuits	New Plant Varieties	Traditional knowledge or genetic resources	Encrypted Program-Carrying Satellite Signals	Domain Names
Turkey - Palestinian Authority											
Turkey - Serbia											
Turkey - Syria											
Turkey - Tunisia											
Ukraine - FYRM											
Ukraine - Moldova											
US - Australia	✓	✓	✓	✓	✓	✓		✓		✓	✓
US - Bahrain	✓	✓	✓		✓			✓		✓	✓
US - Chile	✓	✓	✓		✓	✓		✓		✓	✓
US - Colombia	✓	✓	✓		✓	✓		✓	✓	✓	✓
US - Israel											
US - Jordan	✓	✓	✓		✓	✓		✓			
US - Morocco	✓	✓	✓		✓			✓		✓	✓
US - Oman	✓	✓	✓		✓			✓		✓	✓
US - Panama	✓	✓	✓		✓	✓		✓	✓	✓	✓
US - Peru	✓	✓	✓		✓	✓		✓		✓	✓
US - Singapore	✓	✓	✓		✓	✓		✓		✓	✓

(a) Only RTAs with an overall score greater than zero are listed, i.e., RTAs that include at least one IP provision.

Source: Authors' estimates

Annex IV. Pharma-related provisions in individual RTAs (a)

Regional Trade Agreement (see Annex I)	Patentability criteria or patent subject matter	Patentability of new use.	Patenting of life forms	Patent linkage	Exceptions or exclusions to exclusive rights	Data protection provisions (incl. min. protection periods)	... of which min. period of data protection	Term extensions of patent protection	Compulsory licensing of patents	Compulsory licensing on investment	Safeguarding of a trademark's function
Andean Community (CAN)	✓	✓	✓		✓	✓		✓	✓		
ASEAN - Australia - New Zealand										✓	
ASEAN - China										✓	
ASEAN - India											
ASEAN - Japan											
ASEAN - Korea, Republic of										✓	
ASEAN Free Trade Area (AFTA)											
Australia - Chile	✓				✓					✓	
Brunei Darussalam - Japan											
Canada - Chile										✓	
Canada - Colombia										✓	
Canada - Costa Rica											
Canada - Israel											
Canada - Panama										✓	
Canada - Peru										✓	
CARICOM											
CEFTA											
Chile - China											
Chile - Colombia											
Chile - Costa Rica (Chile - CA)											
Chile - El Salvador (Chile - CA)											
Chile - Guatemala (Chile - CA)											
Chile - Honduras (Chile - CA)											
Chile - Japan										✓	
Chile - Malaysia											
Chile - Mexico										✓	✓
Chile - Nicaragua (Chile - CA)											
China - Costa Rica											
China - Hong Kong, China											
China - Macao, China											
China - New Zealand										✓	
Colombia - Mexico						✓	✓				
Colombia - Northern Triangle										✓	
Common Economic Zone (CEZ)											
COMESA											

Regional Trade Agreement (see Annex I)	Patentability criteria or patent subject matter	Patentability of new use.	Patenting of life forms	Patent linkage	Exceptions or exclusions to exclusive rights	Data protection provisions (incl. min. protection periods)	... of which min. period of data protection	Term extensions of patent protection	Compulsory licensing of patents	Compulsory licensing on investment	Safeguarding of a trademark's function
Costa Rica - Peru										✓	
Costa Rica - Singapore										✓	
Dominican Republic - Central America											
CAFTA-DR	✓		✓	✓	✓	✓	✓	✓		✓	✓
EAC - goods & services											
EC Treaty	✓	✓	✓		✓	✓	✓	✓	✓		
ECOWAS											
Economic Cooperation Organization (ECO)											
EFTA - Albania	✓	✓	✓		✓	✓	✓	✓			
EFTA - Chile	✓	✓	✓		✓	✓	✓	✓	✓		
EFTA - Colombia	✓		✓		✓	✓	✓	✓			
EFTA - Egypt	✓					✓	✓				
EFTA - FYRM	✓	✓	✓		✓				✓		
EFTA - Hong Kong, China	✓		✓		✓	✓	✓				
EFTA - Israel	✓	✓	✓		✓					✓	
EFTA - Jordan	✓	✓	✓		✓			✓	✓	✓	
EFTA - Korea, Republic of	✓	✓	✓		✓	✓		✓	✓	✓	
EFTA - Lebanon	✓	✓	✓		✓	✓	✓		✓	✓	
EFTA - Mexico	✓	✓	✓		✓	✓			✓	✓	
EFTA - Montenegro	✓	✓	✓		✓	✓	✓	✓			
EFTA - Morocco	✓	✓	✓		✓			✓	✓		
EFTA - Palestinian Authority											
EFTA - Peru	✓		✓		✓	✓	✓	✓			
EFTA - SACU											
EFTA - Serbia	✓	✓	✓		✓	✓	✓	✓			
EFTA - Singapore	✓	✓	✓		✓			✓			
EFTA - Tunisia	✓	✓	✓		✓	✓	✓	✓	✓		
EFTA - Turkey	✓	✓	✓		✓			✓	✓		
EFTA - Ukraine	✓		✓		✓	✓	✓	✓			
Egypt - Turkey											
EU - Albania	✓	✓	✓		✓	✓	✓	✓	✓		
EU - Algeria											
EU - Bosnia and Herzegovina	✓	✓	✓		✓	✓	✓	✓	✓		
EU - Cameroon											
EU - CARIFORUM States EPA											

Regional Trade Agreement (see Annex I)	Patentability criteria or patent subject matter	Patentability of new use.	Patenting of life forms	Patent linkage	Exceptions or exclusions to exclusive rights	Data protection provisions (incl. min. protection periods)	... of which min. period of data protection	Term extensions of patent protection	Compulsory licensing of patents	Compulsory licensing on investment	Safeguarding of a trademark's function
EU - Central America											
EU - Chile											
EU - Colombia and Peru						✓	✓	✓			
EU - Côte d'Ivoire											
EU - ESASI EPA											
EU - Egypt	✓	✓	✓		✓	✓	✓	✓	✓		
EU - FYRM	✓	✓	✓		✓	✓	✓	✓	✓		
EU - Israel	✓										
EU - Jordan	✓										
EU - Korea, Republic of						✓	✓	✓			✓
EU - Lebanon											
EU - Mexico											
EU - Montenegro	✓	✓	✓		✓	✓	✓	✓	✓		
EU - Morocco											
EU - Palestinian Authority											
EU - San Marino											
EU - Serbia	✓	✓	✓		✓	✓	✓	✓	✓		
EU - South Africa											
EU - Syria											
EU - Tunisia											
EU - Turkey	✓		✓		✓	✓	✓		✓		
EEA	✓	✓	✓		✓	✓	✓	✓	✓		
EFTA	✓	✓	✓		✓	✓	✓	✓			
Faroe Islands - Norway	✓	✓	✓		✓	✓	✓	✓	✓		
Guatemala - Chinese Taipei											✓
Honduras - El Salvador - Chinese Taipei											✓
Hong Kong, China - New Zealand											
India - Japan	✓										✓
India - Malaysia											✓
India - Singapore											✓
Israel - Mexico											
Japan - Indonesia	✓					✓					
Japan - Malaysia	✓		✓			✓					
Japan - Mexico											
Japan - Peru	✓										
Japan - Philippines											
Japan - Singapore											

Regional Trade Agreement (see Annex I)	Patentability criteria or patent subject matter	Patentability of new use.	Patenting of life forms	Patent linkage	Exceptions or exclusions to exclusive rights	Data protection provisions (incl. min. protection periods)	... of which min. period of data protection	Term extensions of patent protection	Compulsory licensing of patents	Compulsory licensing on investment	Safeguarding of a trademark's function
Japan - Switzerland	✓		✓		✓	✓	✓	✓			
Japan - Thailand	✓		✓			✓					
Japan - Viet Nam	✓		✓			✓					
Jordan - Singapore											
Korea, Republic of - Chile										✓	
Korea, Republic of - India										✓	
Korea, Republic of - Singapore										✓	
Korea, Republic of - Turkey										✓	
Korea, Republic of - US	✓	✓		✓	✓	✓	✓	✓		✓	
Malaysia - Australia	✓				✓					✓	
Mexico - Central America										✓	
Mexico - Uruguay	✓								✓	✓	✓
New Zealand - Chinese Taipei										✓	
New Zealand - Malaysia										✓	
New Zealand - Singapore										✓	
Nicaragua and Chinese Taipei	✓				✓					✓	
NAFTA	✓		✓		✓	✓	✓	✓	✓	✓	✓
Pakistan - China											
Pakistan - Malaysia										✓	
Panama - Chile											
Panama - Costa Rica (Panama - CA)										✓	
Panama - El Salvador (Panama - CA)										✓	
Panama - Guatemala (Panama - CA)										✓	
Panama - Honduras (Panama - CA)										✓	
Panama - Nicaragua (Panama - CA)										✓	
Panama - Peru										✓	
Panama - Singapore										✓	
Panama and Chinese Taipei										✓	
Peru - Chile										✓	
Peru - China										✓	
Peru - Korea, Republic of										✓	
Peru - Mexico										✓	
Peru - Singapore										✓	
Russian Federation - Serbia										✓	
Singapore - Australia										✓	
SADC											

Regional Trade Agreement (see Annex I)	Patentability criteria or patent subject matter	Patentability of new use.	Patenting of life forms	Patent linkage	Exceptions or exclusions to exclusive rights	Data protection provisions (incl. min. protection periods)	... of which min. period of data protection	Term extensions of patent protection	Compulsory licensing of patents	Compulsory licensing on investment	Safeguarding of a trademark's function
MERCOSUR											
Thailand - Australia											
Thailand - New Zealand											
Trans-Pacific Strategic Economic Partnership											
Turkey - Albania											
Turkey - Bosnia and Herzegovina											
Turkey - Chile											
Turkey - FYRM											
Turkey - Georgia											
Turkey - Israel											
Turkey - Jordan											
Turkey - Mauritius											
Turkey - Montenegro											
Turkey - Morocco											
Turkey - Palestinian Authority											
Turkey - Serbia											
Turkey - Syria											
Turkey - Tunisia											
Ukraine - FYRM											
Ukraine - Moldova											
US - Australia	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
US - Bahrain	✓	✓	✓	✓	✓	✓	✓	✓			✓
US - Chile	✓		✓	✓	✓	✓	✓	✓		✓	✓
US - Colombia	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
US - Israel											
US - Jordan	✓			✓	✓	✓		✓	✓		
US - Morocco	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
US - Oman	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
US - Panama	✓			✓	✓	✓	✓	✓		✓	✓
US - Peru	✓		✓	✓	✓	✓	✓	✓		✓	✓
US - Singapore	✓			✓	✓	✓	✓	✓	✓	✓	✓

(a) Only RTAs with an overall score greater than zero are listed, i.e., RTAs that include at least one IP provision.

Source: Authors' estimates

Annex V. IP content and categorization of individual RTAs, asymmetric weights (a)

- ★★★ high content
★★ moderate content
★ negligible content

Regional Trade Agreement (see Annex I)	IP content score (0 - 100):			Overall score (b)	Overall IP content
	Pharma- ceutical	Specific IPR types	General IP provisions		
Andean Community (CAN)	64	82	50	61	★★★
ASEAN - Australia - New Zealand	9	36	80	60	★★
ASEAN - China	9	9	50	34	★★
ASEAN - India	0	0	40	24	★★
ASEAN - Japan	0	0	30	18	★
ASEAN - Korea, Republic of	9	0	50	31	★★
ASEAN Free Trade Area (AFTA)	0	0	30	18	★
Australia - Chile	27	64	90	76	★★★
Brunei Darussalam - Japan	0	0	50	30	★★
Canada - Chile	9	9	0	4	★
Canada - Colombia	9	0	30	19	★
Canada - Costa Rica	0	9	0	3	★
Canada - Israel	0	0	10	6	★
Canada - Panama	9	0	20	13	★
Canada - Peru	9	9	20	16	★
CARICOM	0	9	20	15	★
CEFTA	0	55	40	40	★★
Chile - China	0	9	40	27	★★
Chile - Colombia	0	0	10	6	★
Chile - Costa Rica (Chile - CA)	0	9	10	9	★
Chile - El Salvador (Chile - CA)	0	9	10	9	★
Chile - Guatemala (Chile - CA)	0	9	10	9	★
Chile - Honduras (Chile - CA)	0	9	10	9	★
Chile - Japan	9	36	60	48	★★
Chile - Malaysia	0	9	10	9	★
Chile - Mexico	18	45	70	57	★★
Chile - Nicaragua (Chile - CA)	0	9	10	9	★
China - Costa Rica	0	18	50	35	★★
China - Hong Kong, China	0	0	10	6	★
China - Macao, China	0	0	20	12	★
China - New Zealand	9	9	40	28	★★
Colombia - Mexico	18	55	50	48	★★
Colombia - Northern Triangle	9	0	10	7	★
Common Economic Zone (CEZ)	0	0	10	6	★
COMESA	0	0	10	6	★
Costa Rica - Peru	9	36	70	54	★★
Costa Rica - Singapore	9	18	40	30	★★
Dominican Republic - Central America	0	0	30	18	★
CAFTA-DR	82	82	90	87	★★★
EAC - goods & services	0	82	40	49	★★
EC Treaty	73	100	70	79	★★★
ECOWAS	0	0	10	6	★

Regional Trade Agreement (see Annex I)	IP content score (0 - 100):			Overall score (b)	Overall IP content
	Pharma- ceutical	Specific IPR types	General IP provisions		
Economic Cooperation Organization (ECO)	0	0	50	30	★★
EFTA - Albania	64	64	70	67	★★★
EFTA - Chile	73	64	80	74	★★★
EFTA - Colombia	55	73	70	69	★★★
EFTA - Egypt	27	64	70	64	★★★
EFTA - FYRM	45	73	70	68	★★★
EFTA - Hong Kong, China	45	73	70	68	★★★
EFTA - Israel	45	64	60	60	★★
EFTA - Jordan	55	73	70	69	★★★
EFTA - Korea, Republic of	64	64	70	67	★★★
EFTA - Lebanon	64	64	80	73	★★★
EFTA - Mexico	55	73	70	69	★★★
EFTA - Montenegro	64	64	70	67	★★★
EFTA - Morocco	55	73	70	69	★★★
EFTA - Palestinian Authority	0	0	30	18	★
EFTA - Peru	55	73	70	69	★★★
EFTA - SACU	0	0	40	24	★★
EFTA - Serbia	64	64	70	67	★★★
EFTA - Singapore	45	45	90	72	★★★
EFTA - Tunisia	73	64	80	74	★★★
EFTA - Turkey	55	73	70	69	★★★
EFTA - Ukraine	55	64	80	73	★★★
Egypt - Turkey	0	0	40	24	★★
EU - Albania	73	100	80	85	★★★
EU - Algeria	0	36	50	41	★★
EU - Bosnia and Herzegovina	73	100	80	85	★★★
EU - Cameroon	0	0	30	18	★
EU - CARIFORUM States EPA	0	73	60	58	★★
EU - Central America	0	64	80	67	★★★
EU - Chile	0	55	50	46	★★
EU - Colombia and Peru	27	73	80	73	★★★
EU - Côte d'Ivoire	0	0	20	12	★
EU - ESASI EPA	0	0	10	6	★
EU - Egypt	0	36	40	35	★★
EU - FYRM	73	100	70	79	★★★
EU - Israel	0	27	40	32	★★
EU - Jordan	9	36	30	30	★★
EU - Korea, Republic of	36	82	70	70	★★★
EU - Lebanon	0	45	30	32	★★
EU - Mexico	0	36	40	35	★★
EU - Montenegro	73	100	80	85	★★★
EU - Morocco	0	27	40	32	★★
EU - Palestinian Authority	0	0	30	18	★
EU - San Marino	0	0	10	6	★
EU - Serbia	73	100	80	85	★★★
EU - South Africa	0	9	40	27	★★

Regional Trade Agreement (see Annex I)	IP content score (0 - 100):			Overall score (b)	Overall IP content
	Pharma- ceutical	Specific IPR types	General IP provisions		
EU - Syria	0	0	20	12	★
EU - Tunisia	0	45	40	38	★★
EU - Turkey	55	73	70	69	★★★
EEA	73	100	70	79	★★★
EFTA	45	45	80	66	★★★
Faroe Islands - Norway	73	100	50	67	★★★
Guatemala - Chinese Taipei	9	18	40	30	★★
Honduras - El Salvador - Chinese Taipei	9	0	10	7	★
Hong Kong, China - New Zealand	0	9	50	33	★★
India - Japan	18	27	40	34	★★
India - Malaysia	9	0	30	19	★
India - Singapore	9	0	20	13	★
Israel - Mexico	0	9	20	15	★
Japan - Indonesia	18	73	80	72	★★★
Japan - Malaysia	27	64	80	70	★★★
Japan - Mexico	0	9	20	15	★
Japan - Peru	9	55	70	59	★★
Japan - Philippines	0	55	60	52	★★
Japan - Singapore	0	9	40	27	★★
Japan - Switzerland	55	73	80	75	★★★
Japan - Thailand	27	82	80	75	★★★
Japan - Viet Nam	27	73	60	61	★★★
Jordan - Singapore	0	0	10	6	★
Korea, Republic of - Chile	9	18	60	42	★★
Korea, Republic of - India	9	18	70	48	★★
Korea, Republic of - Singapore	9	9	60	40	★★
Korea, Republic of - Turkey	0	27	60	44	★★
Korea, Republic of - US	73	73	90	83	★★★
Malaysia - Australia	27	64	80	70	★★★
Mexico - Central America	9	73	70	65	★★★
Mexico - Uruguay	36	73	70	67	★★★
New Zealand - Chinese Taipei	9	27	80	57	★★
New Zealand - Malaysia	9	9	60	40	★★
New Zealand - Singapore	0	0	20	12	★
Nicaragua and Chinese Taipei	27	64	80	70	★★★
NAFTA	82	82	70	75	★★★
Pakistan - China	0	0	30	18	★
Pakistan - Malaysia	9	0	60	37	★★
Panama - Chile	0	9	10	9	★
Panama - Costa Rica (Panama - CA)	9	0	40	25	★★
Panama - El Salvador (Panama - CA)	9	0	40	25	★★
Panama - Guatemala (Panama - CA)	9	0	40	25	★★
Panama - Honduras (Panama - CA)	9	0	40	25	★★
Panama - Nicaragua (Panama - CA)	9	0	40	25	★★
Panama - Peru	9	36	80	60	★★

Regional Trade Agreement (see Annex I)	IP content score (0 - 100):			Overall score (b)	Overall IP content
	Pharma- ceutical	Specific IPR types	General IP provisions		
Panama - Singapore	9	0	10	7	★
Panama and Chinese Taipei	9	45	70	57	★★
Peru - Chile	9	9	30	22	★★
Peru - China	0	18	60	41	★★
Peru - Korea, Republic of	9	27	80	57	★★
Peru - Mexico	0	9	0	3	★
Peru - Singapore	9	9	20	16	★
Russian Federation - Serbia	0	0	10	6	★
Singapore - Australia	9	36	70	54	★★
SADC	0	0	20	12	★
MERCOSUR	0	9	0	3	★
Thailand - Australia	0	0	60	36	★★
Thailand - New Zealand	0	27	50	38	★★
Trans-Pacific Strategic Economic Partnership	0	36	50	41	★★
Turkey - Albania	0	0	30	18	★
Turkey - Bosnia and Herzegovina	0	0	30	18	★
Turkey - Chile	0	9	30	21	★★
Turkey - FYRM	0	0	20	12	★
Turkey - Georgia	0	0	30	18	★
Turkey - Israel	0	0	20	12	★
Turkey - Jordan	0	0	30	18	★
Turkey - Mauritius	0	0	30	18	★
Turkey - Montenegro	0	0	30	18	★
Turkey - Morocco	0	0	30	18	★
Turkey - Palestinian Authority	0	0	30	18	★
Turkey - Serbia	0	0	30	18	★
Turkey - Syria	0	0	20	12	★
Turkey - Tunisia	0	0	30	18	★
Ukraine - FYRM	0	0	50	30	★★
Ukraine - Moldova	0	0	40	24	★★
US - Australia	91	82	100	94	★★★★
US - Bahrain	82	64	60	63	★★★★
US - Chile	82	73	90	84	★★★★
US - Colombia	91	82	90	88	★★★★
US - Israel	0	0	10	6	★
US - Jordan	55	55	60	58	★★
US - Morocco	91	64	80	76	★★★★
US - Oman	91	64	70	70	★★★★
US - Panama	73	82	80	80	★★★★
US - Peru	82	73	90	84	★★★★
US - Singapore	82	73	90	84	★★★★

(a) Only RTAs with an overall score greater than zero are listed, i.e., RTAs that include at least one IP provision.
(b) Weighted average of pharmaceutical, specific and general provisions (10%, 30% and 60% respectively).

Source: Authors' estimates

Annex VI. IP content and categorization of individual RTAs, proportional weights

- ★★★ high content
★★ moderate content
★ negligible content

Regional Trade Agreement (see Annex I)	Overall score (b)	IP level	Regional Trade Agreement (see Annex I)	Overall score (b)	IP level
Andean Community (CAN)	65	★★★	EU - South Africa	16	★
ASEAN - Australia - New Zealand	42	★★	EU - Syria	7	★
ASEAN - China	23	★★	EU - Tunisia	28	★★
ASEAN - India	13	★	EU - Turkey	66	★★★
ASEAN - Japan	10	★	EEA	81	★★★
ASEAN - Korea, Republic of	20	★	EFTA	57	★★
ASEAN Free Trade Area (AFTA)	10	★	Faroe Islands - Norway	74	★★★
Australia - Chile	60	★★★	Guatemala - Chinese Taipei	22	★★
Brunei Darussalam - Japan	17	★	Honduras - El Salvador - Chinese Taipei	6	★
Canada - Chile	6	★	Hong Kong, China - New Zealand	20	★
Canada - Colombia	13	★	India - Japan	28	★★
Canada - Costa Rica	3	★	India - Malaysia	13	★
Canada - Israel	3	★	India - Singapore	10	★
Canada - Panama	10	★	Israel - Mexico	10	★
Canada - Peru	13	★	Japan - Indonesia	57	★★
CARICOM	10	★	Japan - Malaysia	57	★★
CEFTA	32	★★	Japan - Mexico	10	★
Chile - China	16	★	Japan - Peru	45	★★
Chile - Colombia	3	★	Japan - Philippines	38	★★
Chile - Costa Rica (Chile - CA)	6	★	Japan - Singapore	16	★
Chile - El Salvador (Chile - CA)	6	★	Japan - Switzerland	69	★★★
Chile - Guatemala (Chile - CA)	6	★	Japan - Thailand	63	★★★
Chile - Honduras (Chile - CA)	6	★	Japan - Viet Nam	53	★★
Chile - Japan	35	★★	Jordan - Singapore	3	★
Chile - Malaysia	6	★	Korea, Republic of - Chile	29	★★
Chile - Mexico	45	★★	Korea, Republic of - India	32	★★
Chile - Nicaragua (Chile - CA)	6	★	Korea, Republic of - Singapore	26	★★
China - Costa Rica	23	★★	Korea, Republic of - Turkey	29	★★
China - Hong Kong, China	3	★	Korea, Republic of - US	78	★★★
China - Macao, China	7	★	Malaysia - Australia	57	★★
China - New Zealand	19	★	Mexico - Central America	51	★★
Colombia - Mexico	41	★★	Mexico - Uruguay	60	★★
Colombia - Northern Triangle	6	★	New Zealand - Chinese Taipei	39	★★
Common Economic Zone (CEZ)	3	★	New Zealand - Malaysia	26	★★
COMESA	3	★	New Zealand - Singapore	7	★
Costa Rica - Peru	38	★★	Nicaragua and Chinese Taipei	57	★★
Costa Rica - Singapore	22	★★	NAFTA	78	★★★
Dominican Republic - Central America	10	★	Pakistan - China	10	★
CAFTA-DR	85	★★★	Pakistan - Malaysia	23	★★
EAC - goods & services	41	★★	Panama - Chile	6	★
EC Treaty	81	★★★	Panama - Costa Rica (Panama - CA)	16	★
ECOWAS	3	★	Panama - El Salvador (Panama - CA)	16	★

Regional Trade Agreement (see Annex I)	Overall score (b)	IP level	Regional Trade Agreement (see Annex I)	Overall score (b)	IP level
Economic Cooperation Organization	17	★	Panama - Guatemala (Panama - CA)	16	★
EFTA - Albania	66	★★★	Panama - Honduras (Panama - CA)	16	★
EFTA - Chile	72	★★★	Panama - Nicaragua (Panama - CA)	16	★
EFTA - Colombia	66	★★★	Panama - Peru	42	★★
EFTA - Egypt	54	★★	Panama - Singapore	6	★
EFTA - FYRM	63	★★★	Panama and Chinese Taipei	42	★★
EFTA - Hong Kong, China	63	★★★	Peru - Chile	16	★
EFTA - Israel	56	★★	Peru - China	26	★★
EFTA - Jordan	66	★★★	Peru - Korea, Republic of	39	★★
EFTA - Korea, Republic of	66	★★★	Peru - Mexico	3	★
EFTA - Lebanon	69	★★★	Peru - Singapore	13	★
EFTA - Mexico	66	★★★	Russian Federation - Serbia	3	★
EFTA - Montenegro	66	★★★	Singapore - Australia	38	★★
EFTA - Morocco	66	★★★	SADC	7	★
EFTA - Palestinian Authority	10	★	MERCOSUR	3	★
EFTA - Peru	66	★★★	Thailand - Australia	20	★★
EFTA - SACU	13	★	Thailand - New Zealand	26	★★
EFTA - Serbia	66	★★★	Trans-Pacific Strategic Economic Partnership	29	★★
EFTA - Singapore	60	★★★	Turkey - Albania	10	★
EFTA - Tunisia	72	★★★	Turkey - Bosnia and Herzegovina	10	★
EFTA - Turkey	66	★★★	Turkey - Chile	13	★
EFTA - Ukraine	66	★★★	Turkey - FYRM	7	★
Egypt - Turkey	13	★	Turkey - Georgia	10	★
EU - Albania	84	★★★	Turkey - Israel	7	★
EU - Algeria	29	★★	Turkey - Jordan	10	★
EU - Bosnia and Herzegovina	84	★★★	Turkey - Mauritius	10	★
EU - Cameroon	10	★	Turkey - Montenegro	10	★
EU - CARIFORUM States EPA	44	★★	Turkey - Morocco	10	★
EU - Central America	48	★★	Turkey - Palestinian Authority	10	★
EU - Chile	35	★★	Turkey - Serbia	10	★
EU - Colombia and Peru	60	★★★	Turkey - Syria	7	★
EU - Côte d'Ivoire	7	★	Turkey - Tunisia	10	★
EU - ESASI EPA	3	★	Ukraine - FYRM	17	★
EU - Egypt	25	★★	Ukraine - Moldova	13	★
EU - FYRM	81	★★★	US - Australia	91	★★★
EU - Israel	22	★★	US - Bahrain	68	★★★
EU - Jordan	25	★★	US - Chile	82	★★★
EU - Korea, Republic of	63	★★★	US - Colombia	88	★★★
EU - Lebanon	25	★★	US - Israel	3	★
EU - Mexico	25	★★	US - Jordan	56	★★
EU - Montenegro	84	★★★	US - Morocco	78	★★★
EU - Morocco	22	★★	US - Oman	75	★★★
EU - Palestinian Authority	10	★	US - Panama	78	★★★
EU - San Marino	3	★	US - Peru	82	★★★
EU - Serbia	84	★★★	US - Singapore	82	★★★

(a) Only RTAs with an overall score greater than zero are listed, i.e., RTAs that include at least one IP provision.

(b) Weighted average of pharmaceutical, specific and general provisions (11/32, 11/32 and 10/32 respectively).

Source: Authors' estimates

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