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Cross-Retaliation in TRIPS: Options for Developing Countries

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Florida State University College of Law

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ABBREVIATIONS AND ACRONYMS

BITs	Bilateral Investment Treaties
CAFTA	Dominican Republic–Central America–United States Free Trade Agreement
DRM	Digital Rights Management
DSB	Dispute Settlement Body
DSU	Dispute Settlement Understanding
EC	European Communities
EU	European Union
FTA	Free Trade Agreement
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GIs	Geographic Indications
IC	Integrated Circuit
ICJ	International Court of Justice
IP	Intellectual Property
IPRs	Intellectual Property Rights
ICSID	International Centre for Settlement of Investment Disputes
MFN	Most-Favoured-Nation
NAFTA	North American Free Trade Agreement
OECD	Organisation for Economic Co-operation and Development
PVP	Plant Variety Protection
R&D	Research and Development
TPMs	Technological Protection Measures
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
UNCITRAL	United Nations Commission on International Trade Law
UPOV	International Union for the Protection of New Varieties of Plants
US	United States
VCLT	Vienna Convention on the Law of Treaties
WCT	WIPO Copyright Treaty
WIPO	World Intellectual Property Organisation
WPPT	WIPO Performances and Phonograms Treaty
WTO	World Trade Organisation

FOREWORD

The creation of the WTO dispute settlement system has been called a major achievement by observers and its importance has been echoed from all sides of the multilateral trading system. The Dispute Settlement Understanding (DSU), the agreement that governs the WTO dispute settlement mechanism, seeks to ensure an improved prospect of compliance, given its provisions on compensation and retaliation, and thus constitutes a central element in providing security and predictability to the multilateral trade system. With more constraining procedures, and a fast-growing jurisprudence, the dispute settlement system has, however, become significantly more legalized and consequently more complex. This, in turn, has raised the demands on the capacity of Member countries interested in engaging the system to advance their trade rights and objectives. While developing countries' participation in trade disputes has increased tremendously since the time of the GATT, most disputes are still confined to a small number of 'usual suspects' – countries such as the US, the EC, Canada, Brazil, India, Mexico, Korea, Japan, Thailand and Argentina. So far, 76 percent of all WTO disputes have been launched among this group of Members. This begs the question of engagement of other Members, and in particular of the majority of developing countries which may be facing undue trade restrictions.

Various reasons have been propounded for this lack of active engagement for the majority of the Membership. These include, a lack of awareness of WTO rights and obligations; inadequate coordination between government and private sector; capacity constraints in monitoring export trends, and feasibility of legal challenge; financial and human resources constraints in lodging disputes, and often a lack of political will - the 'fear factor' - i.e., that trade preferences or other forms of assistance will be withdrawn.

Many of these reasons also explain why so few developing countries have resorted to a WTO dispute settlement remedy commonly known as "cross-retaliation" i.e. the suspension of concessions in a sector of trade different than the sector in which the trade injury is suffered, including under a different WTO covered agreement.

This paper focuses on cross-retaliation using the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS) to redress an injury suffered with respect to trade in goods or in services, an issue which has been gaining increasing attention in recent years. WTO arbitrators have so far approved TRIPS cross-retaliation on two occasions; in favor of Ecuador (against the EC) and most recently in favor of Antigua (against the United States).

The rationale for such cross-retaliation is evident: developed WTO Members are not likely to be harmed by suspension of trade concessions in goods or services by substantially less economically powerful Members. Equally important, the types of suspension that may be used in these fields may cause economic harm to the less powerful Members using them.

Nevertheless, implementing cross-retaliation in the case of intellectual property rights (IPRs) raises several complex legal and policy questions. This paper by Professor Frederick M. Abbott (Florida State University College of Law) addresses many of these questions and seeks to provide a number of answers. It focuses, in particular, on potential conflicts with international and national obligations as well as on the practical problems posed by the possible suspension of different types of IPRs.

With regard to international obligations, the author argues that WIPO Conventions referenced in the TRIPS Agreement do not provide an independent basis for IPRs holders to challenge cross-retaliation. On the other hand, bilateral and regional trade agreements that include 'TRIPS-plus' commitments in their intellectual property (IP) and investment chapters may pose more serious challenges, which can, nevertheless, be overcome by tailoring suspension regimes to be coextensive with TRIPS commitments.

At the domestic level, the author points that national legislations may discourage uncompensated “takings” of property, including IP. However, cross-retaliation can be designed to avoid potential characterization as takings of property. Suspension of rights may be limited in time, may affect only a portion of the “basket of rights” characterizing IPRs, and may allow continued use of the subject matter by IPRs holders.

The paper also examines each major type of IPR to suggest practical approaches to its suspension (or non suspension), taking into consideration that the various forms of IPRs -- copyright, patent, trademark, etc. -- serve different social and industrial policy functions and have their own unique characteristics. It underscores that a suspension regime need also not affect all of the rights of the IPRs holder. For example, a copyright suspension regime might authorize the reproduction and sale of DVDs, but leave the copyright holder with television broadcast rights.

The difficulty in valuing IPRs is often mentioned as a significant obstacle to TRIPS cross-retaliation. However, in reality, businesses and investment analysts value IP assets routinely and in fairly precise ways. Thus, the author emphasizes that valuing the suspension of concessions in IP is not an obstacle to implementing cross-retaliation in a successful manner.

Beyond these legal and practical problems, the paper underlines that the main obstacle facing the less powerful WTO Members in seeking to implement cross-retaliation in TRIPS is likely to be political in nature, in the form of pressures from industry groups and governments of more powerful Members. They must be prepared to deal with such pressures. WTO Members contemplating cross-retaliation in TRIPS should be aware that this will be no easy task.

This paper is produced jointly under ICTSD’s Programme on Dispute Settlement and Legal Aspects of International Trade and the Programme on IPRs and Sustainable Development. While the former aims to explore realistic strategies to maximize developing countries’ capability to engage international dispute settlement systems to defend their trade interest and sustainable development objectives, the latter seeks to achieve a more development oriented IP system and to identity options for developing countries to ensure that IP norms are supportive of their public policy objectives.

We hope you will find this study a useful contribution to the debate on cross-retaliation using the TRIPS Agreement and the challenges it raises. We are equally hopeful that it will be of assistance to policy makers and trade lawyers, particularly from developing countries, who might envisage the use of such option in a trade dispute involving their country under the WTO’s dispute settlement system.

Ricardo Meléndez-Ortiz
Chief Executive, ICTSD

EXECUTIVE SUMMARY

This paper addresses a World Trade Organisation (WTO) dispute settlement remedy commonly known as “cross-retaliation”, and specifically the mechanism by which a WTO Member can suspend concessions in the field of trade-related intellectual property rights (TRIPS) to redress an injury suffered with respect to trade in goods or services.

A WTO Member enforces compliance with a ruling by the Dispute Settlement Body (DSB) by suspending trade concessions enjoyed by the non-compliant Member. This might involve raising tariffs on products imported from the non-compliant Member. Economically powerful WTO Members are not likely to be harmed by the suspension of trade concessions in goods or services by substantially less powerful Members. The trade impact will be too small to “induce compliance” and, equally important, the types of suspension that may be used in the fields of goods and services may cause economic harm to the less powerful Members using them. The WTO dispute settlement process strongly favours economically powerful countries, leaving most developing and least developed Members with few options for inducing compliance.

Attention is increasingly being focused on the possibility for developing Members to suspend concessions relating to intellectual property rights (IPRs) as a means of inducing compliance by developed Members. Cross-retaliation is expressly contemplated by the WTO Dispute Settlement Understanding (DSU). WTO arbitrators have so far approved TRIPS cross-retaliation on two occasions: in favour of Ecuador (against the European Communities (EC)) and Antigua (against the United States (US)).

Constructing and implementing a cross-retaliation programme involving IPRs raises a substantial number of complex legal questions. The DSU establishes principles and procedures that must be respected. The various forms of IPR – copyright, patent, trademark, etc. – serve different social and industrial policy functions and have their own unique characteristics. There are multilateral and bilateral agreements and rules outside the WTO context that may influence the shaping of a cross-retaliation programme. National constitutions and rules relating to property rights need to be addressed.

This paper anticipates many legal questions raised by cross-retaliation in TRIPS and seeks to provide answers to them. It analyses the cross-cutting issues raised by external commitments and national IPRs-related rules, and looks at each major forms of IPR to suggest practical approaches to suspending (or not suspending) those forms.

It is sometimes suggested that difficulty in valuing IPRs presents a significant obstacle to TRIPS cross-retaliation. It is true that predicting how general changes to IPRs legislation will affect a national economy is very difficult. But, establishing the value of TRIPS cross-retaliation is a different exercise involving the valuation of “IP assets” (and the economic effect of withdrawing IP protection). In fact, businesses and investment analysts value IP assets routinely and in fairly precise ways. Valuing the suspension of concessions in IP is not an obstacle to building a successful cross-retaliation programme.

The World Intellectual Property Organisation (WIPO) Conventions referenced in the TRIPS Agreement will not provide an independent basis for IPR holders to challenge cross-retaliation in the International Court of Justice (or elsewhere). Nor will the more recent WIPO Copyright Treaty (WCT) or WIPO Performances and Phonograms Treaty (WPPT) provide such an independent basis. Bilateral and regional trade agreements that include TRIPS-plus commitments in their IP and investment chapters may pose challenges, but these can be overcome by tailoring suspension regimes to be coextensive with TRIPS commitments.

National constitutions and legislation may discourage uncompensated "takings" of property, including intellectual property. However, cross-retaliation programmes can be designed to avoid their potential characterisation as takings of property. Suspension programmes may be limited in time, may affect only a portion of the "basket of rights" characterising IPRs, and may allow continued use of the subject matter by IPR holders.

There are likely to be contexts in which existing national legislation can be used to implement a suspension regime. For example, with respect to patents, existing compulsory licensing and government use legislation can be invoked to suspend concessions. A determination of adequate remuneration will reflect the circumstances of the case, namely, that of inducing compliance with the decision of the WTO DSB. There may be no royalty, or a limited one.

The digital format of many copyrighted works provides both opportunities and challenges for the suspension of concessions. By using a metered download distribution system, a WTO Member can control the extent of distribution and adjust the level of suspension. By the same token, it will be important to consider digital rights management and technical means of protection to prevent unauthorised re-distribution.

A suspension regime need not affect all of the rights in the basket of the IPR holder. For instance, a copyright suspension regime might authorise the reproduction and sale of DVDs but leave the copyright holder with television broadcast rights.

One of the difficult challenges less powerful WTO Members face in seeking to implement cross-retaliation in TRIPS is political pressure from industry groups as well as the governments of more powerful Members. While exporters of goods have not persuaded international media outlets that the suspension of tariff concessions is "piracy of trade rights", IP-dependent industry groups use sophisticated and expensive propaganda campaigns that result in media portrayal of IPR suspension as "piracy" and "theft". WTO Members must be prepared to deal with industry-induced media pressure. Of course, it will be wise to prepare press releases, but there may be no better answer than a "tough skin". WTO Members contemplating cross-retaliation in TRIPS should not be under the illusion that it will be easy.

INTRODUCTION

This paper addresses a World Trade Organisation (WTO) dispute settlement remedy commonly known as “cross-retaliation” with specific focus on trade-related aspects of intellectual property rights (TRIPS).[1]

A WTO Member that prevails in dispute settlement expects the losing Member to remove or modify WTO measures found to be inconsistent with its obligations. However, the non-compliant Member may delay or refuse to bring its measures into conformity with the ruling adopted by the WTO Dispute Settlement Body (DSB). This entitles the prevailing Member to suspend trade concessions from the non-compliant Member as a way to encourage compliance and restore the balance of concessions previously bargained for in WTO negotiations. “Cross-retaliation” refers to the suspension of concessions in a sector of trade different than the sector in which the trade injury is suffered, including under a different WTO “covered agreement”. This paper is primarily concerned with the mechanism by which a WTO Member can suspend concessions in the field of TRIPS to redress an injury suffered with respect to trade in goods or trade in services.

The paper begins with an introduction to the WTO agreements primarily relevant to cross-retaliation, including the Dispute Settlement Understanding (DSU).[2] This is followed by a review of prior arbitrator decisions addressing cross-retaliation requests by Ecuador and Antigua (and also describing Brazil’s suspended authorisation request). The paper discusses the economic grounds underlying cross-retaliation in TRIPS and the unique legal characteristics of TRIPS suspension. It analyses whether cross-retaliation may conflict with rules of multilateral and regional agreements outside the WTO. Potential use of each category of intellectual property (IP) covered by the TRIPS Agreement as the subject of cross-retaliation is addressed. The paper concludes with concrete suggestions for WTO Members considering the option of cross-retaliation under the TRIPS Agreement.

a. The GATT 1947 Era

The objective of the General Agreement on Tariffs and Trade (GATT) 1947 was gradual elimination of barriers to trade in goods in order to promote economic growth, development and employment. From 1947 until 1994, GATT Contracting Parties were principally concerned with reducing tariffs, quotas and related measures affecting trade in goods.[3] Under the GATT 1947 dispute settlement system, the potential for suspension or withdrawal of trade concessions was relatively straightforward. Because the GATT 1947 concerned only trade in “goods”, the withdrawal of trade concessions (such as by raising tariffs) involved trade instruments that were relatively well understood from an economic standpoint. The GATT 1947 dispute settlement system had modest experience with authorising the suspension of trade concessions. The Contracting Parties authorised a suspension only once, and on that occasion the authorised Contracting Party did not implement the suspension.[4]

During the GATT 1947 era (1947-94), Contracting Parties “unilaterally” threatened and imposed trade sanctions upon one another.[5] This was not, however, authorised by the GATT, and was the subject of significant controversy.[6]

b. The Uruguay Round Negotiations (1986–93)

i. New area agreements

The Uruguay Round of trade negotiations that brought about the establishment of the WTO on January 1, 1995 introduced two “new area” agreements to complement the GATT. These are the General Agreement on Trade in Services (GATS) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). The introduction of the GATS and the TRIPS Agreement made the calculation of overall trade concessions (and the attendant balance of rights and obligations) among WTO Members more complex than under the GATT 1947 regime,[7] and similarly complicated the potential suspension of trade concessions in the context of dispute settlement.

The adoption of the GATS was a response to the increasing share of world trade comprised of services. GATS established the principle of most-favoured-nation (MFN) treatment with respect to services regulation, as well as principles of transparency and other general rules. Market access for different services sectors is established through individualised commitments by WTO Members recorded in GATS schedules. A Member making a commitment in a specific sector undertakes to avoid certain types of market access restrictions, and to provide national treatment to foreign services and service providers subject to scheduled limitations.[8]

By the late 1970s, it was apparent that technology would play an increasingly important role as a determinant of competitiveness and comparative advantage among GATT Contracting Parties. The World Intellectual Property Organisation (WIPO) system of treaties regulating international IP protection did not provide, in the view of proponents of TRIPS negotiations, sufficiently comprehensive substantive rules, nor adequate mechanisms to enforce IPRs on an international basis. When the Uruguay Round negotiations concluded in 1993, the TRIPS Agreement was a basic component of the "single undertaking" that comprised the establishment of the WTO.

The TRIPS Agreement established baseline substantive standards of IPR protection for all Members of the WTO. Obligations to implement those standards were phased in over various transition periods depending upon whether Members were developed, developing or least developed countries. The TRIPS Agreement established minimum obligations for the enforcement of IPRs, generally requiring that private IPR holders be accorded adequate and effective opportunities to protect their rights in judicial or administrative proceedings. Members were obligated to implement baseline substantive standards and minimum enforcement obligations in their respective national legal systems. However, TRIPS did not represent an exercise in detailed legal "harmonisation" of national IP laws. Members of the WTO retained "flexibility" to implement the obligations in accordance with their own legal systems and practice, subject to compliance with the general rules.

ii. Legalisation of dispute settlement

One of the main accomplishments of the Uruguay Round was to enhance the "legalisation" of the GATT dispute settlement system. Legalisation of dispute settlement was considered important by developing country negotiators because this would have the effect of limiting developed country use of so-called "unilateral measures" to address trade concerns. The DSU expressly provides that all disputes concerning interpretation or application of the WTO agreements must be brought to WTO dispute settlement, precluding Members from taking retaliatory action based on their own unilateral assessments.[9]

It had been agreed among Uruguay Round negotiators that overall institutional issues would be addressed only at the Round's conclusion.[10] It was thus at a fairly late stage that the question of how the dispute settlement system might be "integrated" among three main subject matter areas (GATT, GATS and TRIPS)[11] was formally addressed.[12] Yet, despite the relatively late introduction of specific negotiating language in the DSU, the issue of cross-retaliation with respect to the TRIPS Agreement had been considered within the TRIPS Negotiating Group since virtually the inception of negotiations. There was little doubt that cross-retaliation was a key issue requiring resolution.

One of the principal objectives of TRIPS proponents seeking to move intellectual property from the jurisdiction of WIPO to the GATT (and ultimately to the WTO) was to permit countries home to IPR holders to enforce IP rules through the use of legitimised trade sanctions.[13] In this calculation, a country that failed to adequately protect patents, copyrights or trademarks could be threatened with the loss of foreign market access for its agricultural, textile or manufactured products. This type of potential cross-retaliation was one of the principal motivating factors for the Uruguay Round TRIPS negotiations: trade-in-goods sanctions might be used as a lever to ensure the protection of IPRs.

A number of developing countries were concerned that they might face retaliation against their key exports, including textiles, agricultural products and manufactured products, if they were found to have IPR-related deficiencies.[14] These countries sought limits on the potential scope of TRIPS dispute settlement, including cross-retaliation.[15] Nonetheless, it is also clear that using cross-retaliation under TRIPS to redress noncompliance under the GATT was contemplated as part of the overall package.[16]

Dispute settlement under the TRIPS Agreement is undertaken pursuant to the DSU.[17] If a Member is found to have acted inconsistently with its WTO obligations, and if it fails to adequately implement the recommendations of the DSB, it is subject to the suspension of trade concessions by the Member that prevailed in dispute settlement. It is here that the question of cross-retaliation arises.

There are a substantial number of complex technical legal issues – such as how various WTO dispute settlement procedures are sequenced – that arise in the interpretation and application of Article 22 of the DSU that governs the suspension of concessions, including cross-retaliation. In order to preserve the “readability” of this paper, those legal issues are addressed in an Annex (attached hereto). To briefly summarise, when the complained-against Member in a WTO dispute has failed to properly implement a recommendation to conform its measures, the complaining Member will be authorised by the DSB to suspend concessions equivalent to the level of nullification or impairment. As a matter of principle, the complaining Member should seek to suspend concessions in the same sector as the area of non-compliance. However, should the complaining Member determine that suspension in the same sector, or alternatively under the same covered agreement, will not be practicable or effective and the matter is serious enough, that complaining Member may suspend concessions under another covered agreement. The complained-against Member may demand arbitration regarding whether the complaining Member has followed the prescribed principles and procedures for making its determination, including whether the level of concessions it intends to suspend are equivalent to the level of the nullification or impairment. Once the arbitrators render their determination, and assuming that some level of suspension is authorised, the complaining Member may then secure formal authorisation for the suspension from the DSB. This DSB authorisation is essentially “automatic” if requested by the complaining Member.

In sum, the main issues likely to be examined by arbitrators in the context of cross-retaliation are whether the complaining Member has adequately followed the prescribed principles and procedures of Article 22, whether the difficulties facing the complaining Member warrant cross-retaliation, and what level of suspension is appropriate. The arbitrators are not authorised to examine the “nature” of the obligations to be suspended by the complaining Member.

There is a unique aspect to TRIPS dispute settlement that remains in effect in 2009. During the Uruguay Round, Members could not agree on whether so-called “non-violation nullification or impairment” complaints should be permitted under the TRIPS Agreement.[18] A compromise was adopted which provided for a five-year moratorium on such non-violation complaints,[19] during which time Members were to negotiate on the “scope and modalities” of such causes of action. Any agreement on scope and modalities, or on extension of the moratorium, would need to be adopted by consensus.[20] The five-year period passed with no action having been taken. At the Doha and subsequent Ministerial meetings (in Cancun and Hong Kong), Members agreed to extend the moratorium at least until the next Ministerial Conference following the Hong Kong Ministerial (which took place at the end of 2005).

2. WTO JURISPRUDENCE AND EXPERIENCE IN TRIPS CROSS-RETALIATION

Cross-retaliation under the TRIPS Agreement has twice been approved by WTO dispute settlement arbitrators. Ecuador followed-up on arbitrator approval by requesting and gaining DSB authorisation for TRIPS cross-retaliation against the European Communities (EC). Cross-retaliation under TRIPS has not yet been implemented by any authorised country. There has been an additional cross-retaliation request by Brazil against the United States (US) but arbitration of that request is presently suspended by agreement of the parties to the dispute.

a. EC – Bananas III – Article 22.6 DSU Arbitration with Ecuador

The first proceeding under the DSU in which a WTO Member requested DSB authorisation to suspend concessions under the TRIPS Agreement, which was also the first proceeding in which TRIPS suspension was requested as a matter of "cross-retaliation", involved Ecuador's claim against the EC in respect to the latter's banana trading regime.[21] Ecuador requested authorisation pursuant to Article 22.2 of the DSU to suspend concessions or other obligations under the TRIPS Agreement, GATT and GATS, with respect to findings of inconsistencies regarding the EC's banana regime under the GATT and GATS. The EC thereupon requested arbitration pursuant to Article 22.6 of the DSU.

In the *EC – Bananas III* arbitration, Ecuador's initial request for suspension indicated the amount of its proposed suspension, and the sectors and covered agreements under which it intended to suspend concessions. Despite EC objection, the arbitrators found that this met the minimum requirements for the information needed in a request for suspension.[22] The arbitrators indicated that Ecuador might well be required to submit additional methodological information in response to a challenge by the EC.

The arbitrators found that the EC carried the burden of proof in establishing that Ecuador was *not* justified in its request for suspension authorisation. As in other DSU proceedings, once the EC had established a *prima facie* case of inconsistency, Ecuador would be required to present evidence to rebut that *prima facie* case.[23]

The arbitrators determined that the TRIPS Agreement does not preclude the suspension of concessions, including in light of Articles 22.3(f) (iii) and 22.3(g)(iii) that define "sector" and "covered agreement" in relation to TRIPS.[24]

The Panel determined that although Ecuador had a certain margin of appreciation in determining whether suspension of concessions in the same sector as where the injury occurred would be practicable or effective, its discretion was limited by the requirements of Article 22.3(b)-(d) with respect to the principles and procedures for making its determinations. The arbitrators are authorised to review compliance with the applicable principles and procedures.[25] The arbitrators concluded that:

> In our view, the margin of review by the Arbitrators implies the authority to broadly judge whether the complaining party in question has considered the necessary facts objectively and whether, on the basis of these facts, it could plausibly arrive at the conclusion that it was not practicable or effective to seek suspension within the same sector under the same agreements, or only under another agreement provided that the circumstances were serious enough.[26]

The arbitrators observed that the objective of suspending concessions is to induce the complained-against party to fulfil its obligations, and that as a practical matter this may be extremely difficult in cases where there is a great imbalance in terms of trade volume and economic power between the country seeking to suspend concessions and the complained-against country.[27] Particularly in respect to "primary goods" and "investment goods" (referring to inputs and capital equipment), it may well be counterproductive to suspend concessions (i.e. to increase tariffs) because this will increase costs for local manufacturers.[28] Effects on consumer goods may be less important from the standpoint of establishing the practicability or effectiveness of suspension.[29] Because Ecuador's banana sector formed a major part of its economic activity, and because the EC's failure to implement the decision adopted by the DSB plausibly contributed to a severe disruption of Ecuador's economy, Ecuador clearly demonstrated that circumstances were "serious enough" to seek suspension of concessions under a covered agreement (i.e. under the TRIPS Agreement) other than where the violation was found.[30]

The arbitrators said that although Article 22 of the DSU does not expressly direct the arbitrators to make suggestions regarding how to implement their decision, in light of this being the first decision to address suspension under the TRIPS Agreement and Ecuador's expressed interest in hearing the arbitrators' views, there is nothing to prevent the arbitrators from making suggestions regarding implementation of the suspension.[31]

The arbitrators noted that Ecuador should take care that suspension of IPRs affects only nationals of Members subject to the suspension. In some circumstances it may be difficult to determine the nationality of right holders.[32]

The arbitrators favourably noted Ecuador's stated intention to implement the suspension by a government-sanctioned licensing system for the reproduction of certain copyrighted works (i.e. phonograms), as well as geographic indications (GIs) and industrial designs, suggesting this was perhaps a better approach than "simply abolish[ing]" IP rights and placing materials in the public domain. This licensing system would permit Ecuador to monitor the level of suspended concessions and terminate the suspension when appropriate.[33] The panel also noted that economic operators in Ecuador should be cautious about reliance on a transitory suspension regime for investments "which might not prove viable in the longer term".[34]

The arbitrators said that authorisation of the suspension of TRIPS obligations within Ecuador does not affect IPRs in other WTO Members. In considering exports of phonograms produced under a suspension regime, the arbitrators said that Ecuador should consider footnotes 13 and 14 to Article 51 of the TRIPS Agreement. While footnote 13 provides that a Member is not under obligation to block imports of goods put on the market in another Member by or with the consent of the copyright holder, phonogram copies authorised under a suspension regime would not be put on the market with consent. Members would remain obligated to apply Article 51 border measures with respect to goods produced without consent.[35] The panel stated:

> Distortions in third-country markets could be avoided if Ecuador would suspend the [IPRs] in question only for the purposes of supply destined for the domestic market. An authorisation of a suspension requested by Ecuador does of course not entitle other WTO Members to derogate from any of their obligations under the TRIPS Agreement. Consequently, such DSB authorisation to Ecuador cannot be construed by other WTO Members to reduce their obligations under Part III of the TRIPS Agreement in regard to imports entering their customs territories.[36]

The arbitrators took note that implementation of the suspension of TRIPS obligations "may give rise to legal difficulties or conflicts within the domestic legal system of the Member so authorised (and perhaps even of the Member(s) affected by such suspension)". They further noted that this is a matter entirely within the prerogative of the suspending Members, and that their domestic legal situation may be influenced by the specific measures used to implement the suspension.[37]

In the *EC – Bananas III* arbitration, the arbitrators said it is not for WTO arbitrators to pass judgment on whether Ecuador, once authorised by the DSB to suspend TRIPS commitments, might act inconsistently with obligations under relevant WIPO Conventions. This is for Ecuador and the other parties to such treaties to consider.[38]

The arbitrators authorised Ecuador to request suspension of concessions under the TRIPS Agreement from the DSB. The DSB authorised the suspension.[39] However, following successful negotiation of a settlement with the EC, Ecuador did not implement the suspension.

One study of the Ecuadorian experience concludes that the threat of suspension of TRIPS concessions induced the EC to reach substantially more favourable settlement terms of market access for Ecuadorian-origin bananas than would have occurred in the absence of that threat.[40] The same study suggests that the threat of suspension of TRIPS concessions may have assisted in Ecuador's renegotiation of external debt. The study's author considers that Ecuador would have had very limited negotiating power had potential retaliation been available only with respect to goods or services for reasons similar to those identified by the arbitrators in *EC – Bananas III*; namely, that asymmetry in economic and trade weight and the potentially damaging domestic consequences of raising trade barriers leaves many developing countries without a realistic prospect of inducing compliance by major developed country actors.

b. US – Gambling – Article 22.6 DSU Arbitration with Antigua and Barbuda[41]

The second arbitration involving a request to suspend concessions under the TRIPS Agreement was initiated by the US in response to a request for authorisation by Antigua and Barbuda (hereinafter "Antigua"). Antigua had prevailed against the United States on its claim that US restrictions on cross-border gambling services were inconsistent with US commitments under the GATS, and the US was determined by a panel pursuant to Article 21.5 of the DSU to have failed to implement the decision adopted by the DSB. Antigua thereupon requested authorisation to suspend concessions under the GATS and TRIPS Agreement.[42] Before the arbitration, Antigua dropped its request to suspend concessions under the GATS and pursued suspension only under the TRIPS Agreement.[43]

The US challenged Antigua on the grounds that it had failed to follow the principles and procedures established in Article 22.3 of the DSU. The arbitrators in this proceeding largely followed the line of analysis and assessment used by the arbitrators in the *EC – Bananas III* arbitration, discussed above.

The preponderance of the decision rendered by the arbitrators in the Article 22.6 DSU proceeding concerned determination of the level of nullification or impairment suffered by Antigua and therefore to be subject to suspension of concessions. A wide gulf separated Antigua (which requested a level of US$ 3.443 billion) and the US (which proposed an alternative of approximately US$ 500,000). The disparity reflected, among other things, difference between the parties over what would reasonably constitute compliance with the DSB ruling by the US. A majority of the arbitrators ultimately supported the US position on its reasonably foreseeable method of implementation, though adopting a nullification or impairment value above that proposed by the US (i.e. at a level not to exceed US$ 21 million annually).

The arbitrators accepted that Antigua's relative economic and trade position compared with the US made it exceedingly difficult to suspend concessions in a way that would induce compliance because (a) the relative size of Antigua's services import market meant that suspending concessions in services would have a negligible impact on the US; and (b) that suspension of concessions in the services sector would impose additional costs on Antigua's consumers, as well as adversely affect its travel, tourism and other services industries.[44] In this regard, the arbitrators in the *US – Gambling* arbitration were more receptive to argumentation concerning impact on consumers in the suspending country than were the arbitrators in the *EC – Bananas III* arbitration.

On the question of whether circumstances were sufficiently serious (i.e. "serious enough") to justify cross-retaliation among covered agreements, the arbitrators had little difficulty accepting Antigua's position based upon (i) serious disparity in national economic circumstances; (ii) dependency on services trade leading to vulnerability to external factors; and (iii) the need for Antigua to diversify its economy.[45] After stating its acceptance of Antigua's position, the arbitrators said:

> We note in this respect that the extremely unbalanced nature of the trading relations between the parties makes it all the more difficult for Antigua to find a way of ensuring the effectiveness of a suspension of concessions or other obligations against the United States under the same agreement. We also note that the heavy reliance of Antigua's economy on the very sectors that would be candidates for retaliation under the GATS increases the likelihood that an adverse impact would arise for Antigua itself, including for low-wage workers.[46]

Antigua had indicated its intention to suspend concessions under TRIPS "Section 1: Copyright and related rights, Section 2: Trademarks, Section 4: Industrial designs, Section 5: Patents and Section 7: Protection of undisclosed information".[47] In contrast to Ecuador in *EC – Bananas III*, Antigua did not provide further details regarding its plans to implement the TRIPS suspension. The US argued that the arbitrators should require Antigua to provide such information because otherwise it would not be possible for the arbitrators to determine the level of suspension intended by Antigua. The US sought to support its argument by arguing that Antigua had turned a blind eye to (i.e. failed to regulate) activities taking place in Antigua that violated US criminal law. In the US view, because Antigua had not indicated how it would supervise the suspension of TRIPS concessions, its failure to regulate may "encourage rampant and uncontrolled IPR piracy".[48]

The arbitrators rejected the US demand for a specific plan of implementation. While regretting that Antigua had not provided explanations as to how it proposed to implement the TRIPS suspension, the arbitrators found that they did not have a mandate to consider the "nature" of the obligations to be suspended and could not question the complaining party's choice of specific obligations to be suspended. The panel said:

> At the same time, it is important that the form that is chosen in order to enact the suspension is such as to ensure that equivalence can and will be respected in the application of the suspension, once authorised. The form should also be transparent, so as to allow an assessment of whether the level of suspension does not exceed the level of nullification. We also note that the suspension of obligations under the TRIPS Agreement may involve more complex means of implementation than, for example, the imposition of higher import duties on goods, and that the exact assessment of the value of the rights affected by the suspension is also likely to be more complex.[49]

The arbitrators favourably invoked the decision in *EC – Bananas III* and indicated that the same considerations would apply with respect to Antigua's suspension regime.[50]

The arbitrators authorised Antigua to request suspension of concessions under the TRIPS Agreement. Antigua has not yet requested authorisation from the DSB to proceed with this suspension.[51]

Antigua and the United States have not yet reached an accommodation regarding compliance in the *US – Gambling* case. Given the tremendous asymmetry between the economic situation of the two countries, it is doubtful that Antigua would have any meaningful compliance leverage vis-à-vis the US, absent a threat that causes the US to be concerned about the "precedent" of TRIPS cross-retaliation more than the direct economic consequences. It is not known whether the threat of suspension of TRIPS concessions will, in fact, promote a more favourable settlement for Antigua.

c. Brazil's Suspension Request

On 6 October 2005, Brazil requested authorisation to suspend concessions under the TRIPS Agreement in response to the failure by the US to implement the decision of the DSB in the *US – Upland Cotton* case.[52] The request for suspension preceded a panel decision under Article 21.5 of the DSU that the US had not fully implemented the underlying decision.[53] Pursuant to an Agreed Procedure between the parties, the US submitted a request for arbitration in accordance with Article 22.6, but requested suspension of the proceeding. Brazil suspended its request for authorisation pursuant to an understanding with the US pending negotiations on a satisfactory resolution of this dispute.[54]

Brazil is reported to have requested suspension in the sectors of copyright, trademarks, industrial designs, patents and the protection of undisclosed information. It also provided information concerning its justification for seeking cross-retaliation, including that tariffs on imports from the US would affect the cost of inputs and capital goods, making Brazilian industry less competitive. It added that additional duties would have a greater negative impact on Brazil than on the US.[55]

The US will take Brazil's threatened suspension of TRIPS concessions seriously because, in this case, the actual economic cost of suspension may be substantial, in addition to the risk of adverse precedent. Intellectual property-dependent constituencies in the US, particularly the copyright/entertainment and pharmaceutical industries, will doubtless place considerable pressure on the US government to avoid suspension of TRIPS concessions (presumably by reaching a suitable negotiated settlement with Brazil).

3. THE ECONOMIC RATIONALE FOR CROSS-RETALIATION UNDER THE TRIPS AGREEMENT

a. Imbalance in Trade Flows between Developed and Developing Economies

As a practical matter, developing countries are not often in a position to effectively enforce compliance with DSB decisions because the domestic markets of those countries are not sufficiently large that restricting access to a developed country will significantly affect the economy of the developed country.[56] This is not always the case. A number of the larger economy developing countries – such as Brazil, China and India – do have domestic markets sufficiently large that market access restrictions may have a material impact on developed country exporters and investors.[57] But, for smaller economy developing countries, and least developed countries, it is very unlikely that market access restrictions will materially impact the developed country economy.

The imbalance in the compliance-enforcement capacity of developed and developing countries is a long-standing and well-known critique of the WTO legal system. Starting in the GATT 1947 era, proposals were made that would require some form of compensation from developed to developing countries as a means to induce compliance, or at least to penalise "bad behaviour", because otherwise developing countries would perpetually lack any effective recourse for developed country failures to abide by their commitments. As yet, such proposals have not been seriously taken up, which has led to the current interest in cross-retaliation in TRIPS as a means of providing developing countries with some leverage in dispute settlement.

One strong indicator of the degree to which the threat of TRIPS retaliation stimulates political pressure from potentially-affected constituencies is the hyperbolic language used by those constituencies and/or their proxies when the possibility of TRIPS suspension is raised. Members threatening suspension are referred to as "pirates",[58] and threats are made that suspension will lead to a reduction in foreign direct investment. By contrast, such language is not deployed when a WTO Member threatens to suspend tariff concessions on imported goods. This reflects the successful deployment of propaganda by IPR-dependent industries. Based upon the degree of caution with which government officials approach the possibility of cross-retaliation in TRIPS, this propaganda appears to have some influence. Lawfully adopted measures limiting monopoly positions are transformed into the equivalent of "criminal theft", while lawfully adopted measures aimed at raising prices on imported goods are treated as normal regulatory activities.

The inability of a developing country to induce compliance with a DSB ruling because of a lack of sufficient domestic market size should be sufficient to constitute grounds of ineffectiveness or impracticability in the suspension of concessions under the GATT or GATS. It also seems reasonable to suggest that very few developing countries choose to initiate dispute settlement proceedings against developed countries in circumstances that are "not serious" due to the diplomatic discomfort that is virtually certain to be generated for those developing countries.

b. The Self-Destructive Impact of Raising Tariffs and Services Barriers

If the traditional international trade theory of Adam Smith and David Ricardo is valid, the economy of a country rarely benefits from raising trade barriers. Most international trade economists would argue that the removal of trade barriers, even in the absence of reciprocal concessions, is good national policy because of expected efficiency gains. If traditional trade theory is accepted, the suspension of concessions in the form of raising tariffs and/or imposing regulatory barriers to market access will typically harm a WTO Member. Whether a country is developed or developing, or the economy is large or small, suspension of concessions will be counterproductive.

The theory behind authorising a suspension of concessions is that, at least in the short term, political constituencies (i.e. private operators) in the country against which trade barriers are imposed will exercise their influence on the government to bring trade measures into conformity in order to avoid bringing harm to themselves. A complaining Member planning its suspension strategy may well seek to target goods or services in the complained-against Member owned by the strongest political voice, such that pressure on the government towards compliance is maximised. The complaining Member may well seek to avoid harm to its own economy by suspending in areas that are not vital to its interests, but in almost all cases there is likely to be some careful assessment of the potential harm caused to the complained-against Member as compared with the potential harm to be suffered by the complaining Member.

For many developing countries, the economic harm caused to manufacturers, service providers and consumers from suspending concessions (i.e. raising trade barriers) will outweigh the economic harm inflicted on a complained-against developed country. For manufacturers, raising tariffs may increase the cost of inputs that will raise the price of their end products destined for domestic and international markets. This will hurt the manufacturers. There may be some manufacturers that will benefit from operating behind a higher tariff wall because they will be able to raise domestic prices and/or increase local market share. But it may be difficult for manufacturers to raise domestic prices without raising export prices as well, potentially causing a loss of exports sales.

Local service providers may benefit from the regulatory barriers imposed on service providers from the complained-against Member. Local service providers may enjoy increased pricing power. This pricing power will affect consumers who will pay more for services. Major questions for most developing countries seeking to withdraw concessions in the field of services will be whether the domestic services market is sufficiently large that restricting it will significantly affect a developed country, and how consumers will react to higher prices.

The legal and practical obstacles to the suspension of concessions in the services area are not to be underestimated. Complex legislative amendments may be needed to make adjustments in the services sector. Governments may be party to agreements regulating services trade outside the context of the WTO. Issues raised by the suspension of concessions in the area of services are not, however, the focus of this paper.

Consumers may lose in most situations where concessions are suspended in trade in goods or services. The predictable outcome in most cases is higher prices and/or reduced availability of supply. While this may be acceptable in a larger economy developing country, or a developed country, the impact on consumers in a smaller economy developing country may be the most serious issue the government addresses in considering where to suspend concessions.

In summary, many developing countries may find that authorising the suspension of concessions in goods or services leads to as much or more economic harm as economic benefit. This fact will strongly undercut the ability of these countries to "induce compliance". As described in Section 2 *supra*, WTO arbitrators have been receptive to this premise.

c. The Basic Economic Distinction of TRIPS Concessions

Intellectual property rights typically entitle the right holder to exclude third parties from the market. These rights are granted based on different considerations, including the promotion of innovation and investment in innovation (by patent and trade secret), promotion of creative expression (by copyright and industrial design) and to provide means to identify the goods and services of particular enterprises and regions (by trademark and geographical indication (GI)). To different extents, and depending on characteristics of the relevant market, IPRs enable producers to obtain a premium price for their products based on the right to exclude others. Economists refer to the economic return from IPRs as "rents" or "royalties" that may be imputed in the price of goods or services, or may be collected separately as licensing fees.

As a general proposition, the suspension of IPRs should not have the same negative impact on the country undertaking the suspension as would imposing increased tariffs on goods or restricting access to the services market. Rents or royalties paid to foreign holders of IPRs typically represent payment outflows from a host country to a home country.[59] Suspending rent or royalty outflows based on the suspension of TRIPS concessions should not generate the same type of adverse impact as raising tariffs on goods or restricting services. Local producers should not face increased costs for inputs and consumers should not pay higher prices for consumer goods. The suspension should mainly affect foreign IPR holders, whose rent income is reduced, curtailing outflows to the country against which the suspension is imposed.

This observation should, however, be qualified. A country authorising the suspension of IPRs under the TRIPS Agreement needs to consider the potential for disrupting ongoing business relations between enterprises in the suspending and suspended-against country. Some such relationships may depend upon local recognition of IPRs, and thus their suspension could trigger contractual problems. Some suppliers of IPR-protected products from the suspended-against country may decide to curtail exports during the period of suspension, and alternative sources of supply may be limited. Some foreign investors could alter their view of the investment environment within the suspending country depending upon the characteristics of the suspension. It could also be argued that suspension of IPRs will adversely affect the local research and development (R&D) environment, thereby having a "net negative" impact on global R&D and limiting the emergence of new technologies worldwide.[60]

All else being equal, a WTO Member suspending IPRs should be reducing its costs and payment outflows during the period of suspension, without raising prices for consumers or on inputs for local producers. This is preferable from an economic standpoint to raising tariffs on goods or restricting access to the services market. And it may be the only viable mechanism for placing economic pressure on the suspended-against country.

d. Conceptual Distinction between IPRs and Traditional Trade Regulation Subject Matter

Concessions under the TRIPS Agreement are of a different character and nature to those under the GATT or GATS. The differences raise novel legal issues when assessing the suspension of concessions under TRIPS.

The TRIPS Agreement evidences several basic features. It incorporates basic principles, such as national and MFN treatment, which are largely common across international trade law. The principal feature of the TRIPS Agreement is minimum substantive standards applicable to different fields of intellectual property: copyright, trademark, GI, design protection, integrated circuit (IC) layout protection, patent, and undisclosed information. A novel feature of the TRIPS Agreement from an international economic law standpoint is the introduction of minimum standards of enforcement. The Agreement also includes various transition arrangements and institutional mechanisms.

From a "suspension of concessions" standpoint, an important aspect of TRIPS is reflected in the preamble that "*Recognis[es]* that intellectual property rights are private rights". This provision was introduced during the Uruguay Round negotiations to clarify that private right holders are expected to enforce IPRs through civil litigation, and that the Agreement does not impose an obligation on governments to undertake general enforcement activity.[61] Yet this provision points to a key distinction from other WTO agreements. Generally speaking, trade instruments and measures address classes of economic operators. A tariff is adopted with respect to a class of goods and when implemented it applies to imports (or exports) by all economic operators dealing with that class of goods. A service regulation (such as a banking or tourist industry regulation) is adopted to affect a class or category of service providers. As a general rule, no particular enterprise or operator has a "property interest" in, or a specific legal entitlement to, tariff, quota system, service regulation or other forms of trade regulation.

An IPR holder takes advantage of a generally applicable system of regulation (that is, the laws and regulations under which IPRs are granted) but is understood to have a specific legal entitlement to the IPR that is granted to it. There is substantial theoretical debate as to whether an IPR is genuinely a form of "property" in the sense of real property or movable personal property. Because an IPR is typically (though not exclusively) granted for a limited period, with effects closely determined by government industrial policy regulation, it is of a different character to perpetual ownership of land or entitlement to specific personal property. Some courts and government regulations have elected to treat IPRs much as other forms of "property", and we will revert to this discussion in Section 7. But, whether or not an IPR is considered "property" as such, the right accorded to the owner or "right holder" is specific to that holder (though it may well be transferable).

When a government suspends concessions or IPRs previously granted in favour of foreign IPR holders, it will be suspending or affecting specific legal entitlements held by private operators. This is different to suspending tariff concessions (i.e. by imposing higher tariff rates) because importers and manufacturers generally are not understood to have specific legal entitlements to tariff rates.

Private operators have attempted to enforce claimed entitlements to tariff, quota and service regulations. Perhaps the best-known example of such attempts involved the efforts by German importers and distributors of bananas to prevent the European Council and Commission from adopting and enforcing changes to tariffs, quotas and service regulations on the basis of property rights or legitimate expectations. The European Court of Justice rejected these efforts.[62] While a complete canvassing of national court decisions regarding changes to tariff, quota and services regulation is beyond the scope of this paper, there is substantial evidence that most governments and courts do not consider private operators to have specific entitlements to particular trade measures. National (and regional) legislatures change such rules with regularity, and it would be problematic if such rule changes gave private operators grounds for legal challenges. An analogy would be allowing individual taxpayers to challenge changes to tax codes on the grounds that taxpayers have a specific legal entitlement to particular tax rates and/or rules. Such challenges are not generally permitted before national courts.

Governments can and do change IP rules, and with some degree of frequency. Furthermore, private IPR holders generally cannot assert claims against the government arguing that changes to those rules have adversely affected their "specific entitlement". But, if a government interferes with a specific IP interest of a private right holder, there may under certain circumstances be a requirement to award compensation to that right holder, such as awarding a royalty when a compulsory license is granted in the ordinary course of commercial use.

Specific IPR holders might seek to challenge the suspension of concessions under TRIPS claiming interference with existing rights in property. Because the concept of a general suspension of IP rights to enforce compliance with a trade agreement is new to the post-1995 WTO era, and has not previously been done, national (and regional) courts would face a new situation. As a matter of general principle, because governments have historically modified IP rules in ways that affect the pre-existing specific entitlements of private operators, for example by modifying exhaustion doctrines, there is substantial precedent to support the conclusion that suspension of TRIPS-based IPRs would be treated as other forms of regulatory change, such as changes in tariff rates. Nonetheless, it is important to be aware of the possibility of challenge based on claims of government taking of specific property interests.[63]

4. MULTILATERAL, REGIONAL AND BILATERAL COMMITMENTS

a. Multilateral Commitments

The TRIPS Agreement incorporates, by reference, the provisions of certain multilateral agreements, including most notably the Paris Convention on the Protection of Industrial Property and the Berne Convention on the Protection of Literary and Artistic Works.

The relationship between TRIPS and the Paris Convention is principally defined in Article 2.1 of the TRIPS Agreement which provides that: "In respect of Parts II, III and IV of this Agreement, Members shall comply with Articles 1 through 12, and Article 19, of the Paris Convention (1967)".

Provisions of the Berne Convention are specifically cross-referenced in Article 9.1 of the TRIPS Agreement, providing that:

> Members shall comply with Articles 1 through 21 of the Berne Convention (1971) and the Appendix thereto. However, Members shall not have rights or obligations under this Agreement in respect of the rights conferred under Article 6bis of that Convention or of the rights derived therefrom.

The Paris and Berne Conventions, with other relevant multilateral agreements of more limited membership, are further addressed in Article 2.2 of the TRIPS Agreement, which states:

> "Nothing in Parts I to IV of this Agreement shall derogate from existing obligations that Members may have to each other under the Paris Convention, the Berne Convention, the Rome Convention and the Treaty on Intellectual Property in Respect of Integrated Circuits."

Article 2.1 and 2.2 as applicable to the Paris Convention each refer to Parts I to IV of the TRIPS Agreement. The Agreement incorporates the WTO Dispute Settlement Understanding as its dispute settlement mechanism in Part V, Article 64.1. Accordingly, the provisions of the TRIPS Agreement providing for non-derogation with respect to the Paris Convention do not apply with respect to the WTO dispute settlement mechanism, pursuant to which suspension of obligations (or concessions) may be authorised.

The Berne Convention compliance requirement of Article 9.1 of the TRIPS Agreement does not specifically cross-reference Parts I–IV of the TRIPS Agreement. The non-derogation provision of Article 2.2 of the TRIPS Agreement, referring to the Berne Convention, includes such a cross-reference. The limited (i.e. Articles 1–21) incorporation of the Berne Convention at Article 9.1 of the TRIPS Agreement does not extend to the dispute settlement provisions of the Berne Convention. Because TRIPS disputes are expressly subject to WTO dispute settlement, and this inherently includes those disputes that involve rules incorporated by reference to the Berne Convention, it is reasonable to conclude that the Berne Convention obligations incorporated in the TRIPS Agreement may be suspended just as other TRIPS obligations.

While the TRIPS Agreement and DSU contemplate the suspension of obligations under the Paris and Berne Conventions, the question remains as to whether such a suspension of concessions or obligations may nonetheless constitute an independent breach by the suspending WTO Member of obligations under the associated Conventions. In other words, assuming that a WTO Member is not breaching WTO obligations by suspending TRIPS concessions that refer to the Paris or Berne Convention, might the complained-against Member successfully pursue a separate dispute settlement claim under the Paris or Berne Convention?

It is important to examine the relevant rules of the Vienna Convention on the Law of Treaties (VCLT) with respect to the application of successive treaties between the same parties.[64] Article 30 of the VCLT does not clearly prescribe a rule that accounts for the relationship between the TRIPS Agreement, the DSU and the Paris and Berne Conventions in the context of suspension.

The TRIPS Agreement was adopted subsequent to the Paris and Berne Conventions. Article 2.1 of the TRIPS Agreement provides that WTO Members should “comply” with certain provisions of the Paris Convention, but (a) does not state that TRIPS Agreement rules are “subject to” the Paris Convention rules, and (b) expressly omits the TRIPS provisions relating to dispute settlement. Article 9.1 of the TRIPS Agreement provides that WTO Members should “comply” with certain provisions of the Berne Convention. But the provision on non-derogation from existing obligations applying both to the Paris and Berne Convention does not incorporate WTO dispute settlement.

As of April 2009, the Paris Convention had 173 state parties and the Berne Convention had 164. Virtually all WTO Members are also party to the Paris and Berne Conventions. The Conventions permit state parties to initiate dispute settlement before the International Court of Justice (ICJ). Such dispute settlement under the Paris or Berne Convention is unlikely to be successful based upon suspension of concessions under the WTO DSU and TRIPS Agreement. This is not because the ICJ would necessarily find that WTO agreements take precedence over the WIPO Conventions as a matter of applying Article 30 of the VCLT and the rules regarding successor agreements – though it might. Instead, in examining the two sets of obligations (WTO and WIPO), the ICJ would find that the complaining and responding states had each expressly accepted the suspension regime prescribed by WTO DSU rules. A state party to the Paris or Berne Convention would be objecting to application of a rule of enforcement it had clearly accepted under WTO rules. By accepting the WTO suspension rule, a state party would appear to have waived the right to independently enforce a complementary substantive obligation under the cross-referenced Paris or Berne regimes that would effectively nullify the suspension. Put another way, a WTO Member would be *equitably estopped* from attempting to independently enforce an obligation under a WIPO Convention as a means of preventing effective enforcement of its WTO obligation.[65]

A result that authorised a WTO Member to challenge a suspension of concessions by seeking an independent judgment from the ICJ on the same subject matter would undermine the effectiveness of the WTO dispute settlement system. Such an action would appear to be inconsistent with Article 23.1 of the DSU, which provides that:

> When Members seek the redress of a violation of obligations or other nullification or impairment of benefits under the covered agreements or an impediment to the attainment of any objective of the covered agreements, they shall have recourse to, and abide by, the rules and procedures of this Understanding.

The initiation of a dispute before the ICJ under the Paris or Berne Convention might also be viewed as a breach of obligation to implement the WTO agreements in good faith. A WTO Member that initiated such a claim would essentially be attempting to nullify its obligations under the WTO agreements by recourse to an alternative forum. Particularly in light of the fact that WTO Members accepted their TRIPS obligations in full knowledge of their corresponding equivalent Paris and Berne Convention obligations, it would be difficult for them to argue that they reserved the right to block effective operation of the WTO dispute settlement system through parallel treaties. It seems doubtful that the ICJ would interpret the WTO Agreements as contemplating a result that defeated the purpose of the DSU suspension system.

An argument has been made that Article 20 of the Berne Convention authorises state parties of that Convention only to enter into separate agreements establishing more favourable terms of copyright protection, or that contain other provisions not contrary to the Convention.[66] The presumed line of argument is that the WTO Dispute Settlement Understanding, by incorporating the suspension regime, cannot validly affect rights under the Berne Convention. The strength of this line of argument is dependent upon a finding by the ICJ or WTO DSB that the Berne Convention was intended to take priority over the TRIPS Agreement and DSU, which seems unlikely in light of the foregoing analysis. It also seems doubtful that the WTO agreements would be considered “special agreements” on the subject of intellectual property.

The WIPO Copyright (WCT) and Performances and Phonograms Treaties (WPPT) were adopted subsequent to the WTO agreements, including the DSU and the TRIPS Agreement. The WCT and WPPT are not incorporated by reference or otherwise in the TRIPS Agreement. In April 2009, the WCT had 70 member states and the WPPT had 68. Each treaty contains provisions that obligate the members to provide remedies against the circumvention of effective measures of technological protection (TPMs) and interference with digital rights management (DRM) information.[67] However, in each case the obligation is qualified only to require remedies where the relevant act is not “permitted by law” or is undertaken “without authority”. If a WTO Member that is also a party to the WCT or WPPT acts to suspend copyright and to authorise the use of copyright subject matter, actions by the government or third parties to circumvent TPMs or interfere with DRM information would be “permitted by law” and undertaken with “authority”. Both the WCT and WPPT permit member states to adopt limited exceptions to the protections otherwise afforded under the agreements, at Articles 10 and 16 respectively, and such provisions would permit the member states to fulfil their commitments under the WTO DSU.

Human rights instruments, such as the Universal Declaration of Human Rights (at Article 27(2)) and the International Convention on Economic, Social and Cultural Rights (at Article 15), reference the right of everyone to benefit from the moral and material interests resulting from the scientific, literary or artistic productions of which they are author. These treaty references are not sufficiently specific to constitute an obstacle to the temporary suspension of IPRs under the TRIPS Agreement. In any case, the WTO agreements were adopted subsequent to the relevant human rights instruments. Unless the provisions of the human rights conventions referred to above were considered peremptory norms (or core human rights, at minimum), and that is not the case, WTO Members accepted the potential suspension of those rights under the operation of the DSU. A suspended-against Member should be precluded from asserting a claim based upon a suspension procedure it has accepted.

Just as governments may have implemented Paris and Berne Convention obligations in national law through provisions that are effectively independent of those treaties, so may governments have implemented human rights obligations in national law through provisions that are effectively independent of corresponding international obligations. Human rights are not infrequently protected under national constitutions. To the extent that the suspension of an IPR may be argued to contravene a constitutional right that reflects an international human rights obligation, the relevant issues are addressed below in the context of potential claims involving the taking of property.

b. Regional and Bilateral Commitments

From both a conceptual and practical standpoint, Members' bilateral and regional commitments may be more likely to present difficulties in the context of suspension of concessions than the multilateral WIPO Conventions. The TRIPS Agreement and the DSU were negotiated subsequent to the Paris and Berne Conventions, and the latter are integrated in the text of the TRIPS Agreement. Each of the aforementioned agreements is broadly applicable to the same treaty parties. Coherence between the two systems of IPR regulation was anticipated.

The negotiating environment and the object and purpose of many of the recently concluded bilateral and regional trade agreements is different as far as IPRs are concerned. Most, though not all, of these agreements were negotiated subsequent to the conclusion of the TRIPS Agreement. The set of bilateral and regional free trade agreements (FTAs) between the US and various developed and developing countries are specifically intended to enhance the scope and enforceability of IPRs, and to reduce the flexibilities available to party governments. While the FTAs address their relationship with WTO agreements, they do so in a way that leaves many questions unanswered. Among those questions is how the suspension of concessions pursuant to WTO DSB authorisation would be treated under the FTAs. It is important to note at the outset that, unlike the WTO agreements, the FTAs include chapters on the protection of investment that provide third-party dispute settlement rights to private investors. Those chapters are largely untested as far as they may address IPR. In addition, there is a significant number of earlier bilateral investment treaties (BITs) negotiated by the US in addition to the FTAs, which do not detail substantive IPR commitments but which do include IP subject matter within the scope of investment protection subject to dispute settlement, including third-party investor-to-state dispute resolution.[68]

There are many regional and bilateral agreements that provide for the protection of investment beyond those concluded by or with the US. The trend towards bilateral and regional arrangements is a worldwide phenomenon.[69] The US-model agreements are used here to illustrate a phenomenon, recognising that similar issues will arise in non-US contexts.

The provisions of the Dominican Republic–Central America–United States Free Trade Agreement (CAFTA) will be used to illustrate the issues raised. There are variations among specific terms in the US-negotiated FTAs but the CAFTA is broadly representative of those agreements.

The relationship between the CAFTA and the WTO Agreement is generally defined in Article 1.3(1) which provides that: "The Parties affirm their existing rights and obligations with respect to each other under the WTO Agreement and other agreements to which such Parties are party".

This principle is re-articulated in Chapter 15 on Intellectual Property, which provides at Article 15.1(7):

> Further to Article 1.3 (Relation to Other Agreements), the Parties affirm their existing rights and obligations under the TRIPS Agreement and intellectual property

agreements concluded or administered under the auspices of [WIPO] and to which they are party.

Chapter 15 on Intellectual Property, as similar IP chapters in other US-negotiated FTAs, incorporates a wide range of substantive and enforcement-related obligations. A substantial number of these obligations duplicate obligations established by the TRIPS Agreement. However, a number of such obligations are "TRIPS-plus", meaning that they establish IP-protection obligations higher and/or more restrictive than those established by TRIPS. A number of research papers have described the TRIPS-plus obligations established by the US-negotiated FTAs; that analysis is not repeated here.[70] By way of illustration, however, the pharmaceutical regulatory data protection provisions of the FTAs are substantially more restrictive (i.e. protective of right-holder interests) than Article 39.3 of the TRIPS Agreement. A state party to the CAFTA might breach its obligations under Article 15.10: Measures Related to Certain Regulated Products, without breaching the TRIPS Agreement.

Chapter 20 of CAFTA on Dispute Settlement provides:[71]

Article 20.3: Choice of Forum

1. Where a dispute regarding any matter arises under this Agreement and under another free trade agreement to which the disputing Parties are party or the WTO Agreement, the complaining Party may select the forum in which to settle the dispute.

2. Once the complaining Party has requested a panel under an agreement referred to in paragraph 1, the forum selected shall be used to the exclusion of the others.

The CAFTA dispute settlement mechanism includes provisions for the suspension of benefits if a panel recommendation is not implemented. The suspension provision provides, inter alia:

Article 20.16: Non-Implementation − Suspension of Benefits:

5. In considering what benefits to suspend pursuant to paragraph 2:

(a) the complaining Party should first seek to suspend benefits in the same sector or sectors as that affected by the measure or other matter that the panel has found to be inconsistent with the obligations of this Agreement or to have caused nullification or impairment in the sense of Annex 20.2; and

(b) if the complaining Party considers that it is not practicable or effective to suspend benefits in the same sector or sectors, it may suspend benefits in other sectors.

Article 10.28: Definitions, of Chapter 10 on Investment, defines "investment" to include:

(f) intellectual property rights;

(g) licenses, authorisations, permits, and similar rights conferred pursuant to domestic law;

The investment chapter incorporates national treatment[72] and MFN obligations,[73] and provides for fair and equitable treatment, and full security,[74] according to public international law standards, as well as protecting against expropriation without adequate compensation.[75]

Article 10.7 regarding expropriation and compensation provides:

(c) This Article does not apply to the issuance of compulsory licenses granted in relation to intellectual property rights in accordance with the TRIPS Agreement, or to the revocation, limitation, or creation of intellectual property rights, to the extent that such issuance, revocation, limitation, or creation is consistent with Chapter Fifteen (Intellectual Property Rights).

[Fn 4] For greater certainty, the reference to "the TRIPS Agreement" in paragraph 5 includes any waiver in force between the Parties of any provision of that Agreement

> granted by WTO Members in accordance with the WTO Agreement.[76]

Disputes between state parties are generally subject to the provisions of Chapter 20 on Dispute Settlement. In Chapter 10 on Investment, pursuant to Section B: Investor-State Dispute Settlement, private investors of state parties may initiate third-party arbitration of investment claims using the facilities of the International Centre for Settlement of Investment Disputes (ICSID) or under United Nations Commission on International Trade Law (UNCITRAL) rules. Comparable third-party arbitration facilities provided for in the North American Free Trade Agreement (NAFTA) have been used fairly extensively, and there is no reason to expect that CAFTA investors in the field of IP would be reluctant to use the relevant provisions.

The question presented is whether a CAFTA state party that prevailed in a WTO dispute settlement proceeding, and thereafter suspended commitments under the TRIPS Agreement, might independently breach its obligations under the CAFTA IP or Investment Chapter, and with what consequences.

To the extent that a CAFTA state party suspends TRIPS obligations that are coextensive with CAFTA IP obligations, there is probably no independent basis for claiming a violation of the CAFTA. As between the state parties, suspension of WTO obligations implies that the initial dispute settlement claim was brought under the WTO DSU, and the CAFTA provides that the initial choice of forum is determinative and exclusive. A second claim on the same subject matter could not be brought to CAFTA dispute settlement.

Similarly with respect to coextensive claims, it is difficult to conclude that a private investor could prevail in third-party arbitration on the grounds that a CAFTA state party acting pursuant to authorisation by the DSB had breached an investment protection obligation. This is principally because an unlawful taking of IP property presupposes contravention of customary international law standards regarding protection of the property of aliens (see CAFTA, Article 10.5(2)). And it is doubtful that a temporary suspension of rights pursuant to DSB authorisation would be considered an expropriation or nationalisation due to its transitory nature and the fact that it is authorised under international law.

A more difficult set of issues would arise for both state parties and private investors if pursuant to a suspension authorised by the DSB, the suspending country addressed IP subject matter that is not regulated by the TRIPS Agreement, and thus not technically covered by the authorisation. For that subject matter, the DSB would not be providing the international legal authorisation for suspension because TRIPS concessions would not be involved. In that context, claims under CAFTA and the WTO agreements would not be coextensive, and independent claims under CAFTA might be foreseen.

Because independent claims might arise under the terms of the CAFTA and other FTAs, a country that is party to an FTA with the US and that is preparing to suspend obligations pursuant to WTO DSB authorisation may avoid difficulties by selecting TRIPS commitments that are effectively coextensive under both agreements.

5. BROAD LEVEL OF SUSPENSION ISSUES UNDER THE TRIPS AGREEMENT

a. Generally

Article 22 of the DSU refers to a suspension of “concessions or other obligations” with respect to “sectors” under “covered agreements”. With respect to the TRIPS Agreement, “sector” is defined to mean each of the categories of IP specified in Part II, as well as Part III and Part IV. Each of these IP sectors raises specific legal issues regarding the potential suspension of concessions or other obligations. This is largely because different forms of IP serve different industrial policy functions and have different legal characteristics. They are used by private operators and consumers in different ways. The issue of valuing the level of concessions suspended with respect to the various IP sectors is addressed separately in Section 6.

The "level of nullification or impairment" is a difficult concept in the framework of suspension of concessions. A finding of nullification or impairment by a panel or the Appellate Body typically involves a finding that a legal rule has been breached. It is presumed that the breach adversely affects the trading interests of the complaining party. Otherwise, generally speaking, the complaining party would not have initiated a proceeding. However, the panel or Appellate Body does not as a rule seek to determine an objective measure of the trade harm done to the complaining party.

In some instances, determining the impact of an "unlawful" trade measure may be relatively straightforward. If, as a consequence of misapplication of antidumping rules a Member collects antidumping duties, the amount of the duties collected are subject to an objective calculation. In addition, by examining the level of imports in the complained-against Member prior to and following the imposition of the antidumping duties, it should be possible to determine with reasonable accuracy the adverse impact on exports from the complaining Member. By looking to the amount of collected duties and the reduction in trade flows, the complaining Member should be able to calculate with some reasonable accuracy the injury it has suffered as a consequence of unlawful measures. By further examining the level of imports from the complained-against Member, the complaining member should be able to determine with some reasonable accuracy the level of the added tariffs or the quotas that would effectively reduce imports to rebalance the level of concessions.

Calculation of the level of nullification and impairment and the means for rebalancing concessions becomes more difficult in the fields of services and IPRs. With respect to trade in services, the difficulties in assessing the value of concessions was the subject of considerable discussion during the Uruguay Round negotiations.[77] There were at least two major problems identified. First, data on trade in services was rather limited, and the reliability of such data was questioned. Second, as a general matter, the economic impact of changes in the types of local regulation to which industries are subjected is much less well understood – and less predictable – than are changes in border measures, such as tariffs and quotas. Although data collection regarding trade in services has doubtless improved since the early 1990s, recent WTO arbitration concerning the level of nullification or impairment in the services sector highlights that the availability and reliability of data remains a major hurdle.[78]

b. Valuing Changes in IP Legislation Generally

The absence of reliable data and economic models with respect to the economic impact of changes in IP regulation is a matter of distinguished pedigree. Seminal studies of the US patent system from the 1940s and 1950s stressed the limitations faced by economists in assessing the economic impact of the patent system.[79] From the outset of the Uruguay Round, a lack of reliable data regarding the prevalence, distribution and economic impact of IPRs was in evidence. Studies relied upon by developed country governments to promote the TRIPS Agreement were deeply and transparently flawed.[80] The few economic analyses brought out to support demands for stronger IP protection were generated by industry trade associations[81] or were tentative abstract exercises.[82] This does not mean that developed country industry groups demanding stronger international IP protection were not confronting a problem in IP-rent collection. These groups are run by serious-minded people who perceived a business problem and sought to address it. But it does highlight that there was virtually no serious *ex ante* assessment of the value of concessions in the field of TRIPS. And, although there has been some improvement over the past two decades in the collection of data regarding IPRs and in the capacity for reliable economic modelling of the impact of changes in rules, the improvements should not be exaggerated.[83] The most sophisticated studies of the economic impact of changes in IP rules do as much to highlight incomplete understanding of this complex area as they do to enhance the reliability of assessment and prediction.[84]

The extent to which IPRs induce invention and/or creative activity is not well established. Because this correlation is not well understood, it is difficult to predict how changes in IP rules will promote or retard innovation and, by definition, what will be the impact. Second, IPRs function within complex political and regulatory frameworks that help to determine the direction of economic activity.[85] In order to understand the impact of changes to IP laws it is necessary to determine the impact of the external regulatory regime. In other words, changes to IP regimes are difficult to study in isolation. Third, technologies are constantly changing and it is difficult to predict the impact of new technologies on economic activity. Fourth, changes in IP regimes may have different implications for different stakeholder groups, including producer and consumer groups. In assessing changes in IP regimes, it is also necessary to ask, "changes for whom"?

c. Valuing IP Assets Distinguished

An important distinction must be drawn between the problem of valuing or predicting changes in general IPR regulation, such as changing the criteria of patentability, and the problem of valuing IP assets and suspending rights in those assets.

It is *not* unusually difficult to determine the value of a particular IP asset in isolation and on a static basis.[86] For example, once the popularity of a particular film has been determined by the marketplace, it will have a future value to its owner based upon a reasonably predictable flow of royalties and/or sales. The value is largely based upon copyright protection since that is what prevents free copying, even if imperfectly. Removing copyright protection from the film will reduce its future value. By aggregating a group of films and removing copyright protection from them it would be possible to establish a value of nullification or impairment of rights in the particular case. Similarly, when patent protection on a pharmaceutical product expires and generic producers enter the market there is a reasonably predictable falloff in earnings from the pharmaceutical product. Stock market analysts are familiar with valuing the transition from patented to generic products in particular cases. In selecting a group of patented pharmaceutical products for the suspension of patent protection, the value of the nullification or impairment in the specific case could be reasonably predicted.

A TRIPS suspension regime would be intended to affect existing "IP assets", not the future development of inventive or creative works. Existing IP assets can be fairly accurately valued in a process that, as a practical matter, is routinely undertaken by business enterprises and government regulators. A number of market-making institutions are reported to be working on public listing of IP-related financial products, and standardisation projects for the valuation of IP assets are underway.[87] The acquisition by one technology dependent business of another depends upon the valuation of a "patent portfolio". The purchase, sale or merger of an originator pharmaceutical company involves the valuation of the medicines patent portfolio. Mergers and acquisitions among entertainment industry enterprises involve evaluation of future revenue streams from existing copyrighted works. Portfolios of copyrighted music have recently been subject to securitisation for purposes of establishing loan collateral. Competition and antitrust authorities examine present and future market values based upon IPR holdings in technology dependent industries. Investment banking firms following the pharmaceutical sector generate fairly comprehensive predictive reports concerning the economic impact of patent expirations in various markets. The types of analysis used in those reports could be applied to a pharmaceutical patent suspension regime, where suspension is a proxy for patent expiration. Valuation of IP assets is not especially mysterious. Valuing the suspension of rights in IP assets should not be especially mysterious.

This is not to suggest that data will be readily or equally available in all IPR-dependent industry sectors. The Article 25 DSU arbitration in the *US – Copyright* case regarding the level of nullification or impairment of TRIPS obligations illustrates some of the potential difficulties in obtaining robust information even within certain industry segments in highly developed economies.[88] These difficulties include issues of confidentiality with respect to royalty data. Nonetheless, operating in conditions of imperfect information, arbitrators in the *US – Copyright* case were able to establish a value for the nullification or impairment of rights in a discrete copyright subject matter setting.

d. Nationality

For all categories of intellectual property, it will be necessary for the suspending country to develop a methodology for determining the nationality of IPR holders. Following the panel decision in the *US – Copyright Act* case, the European Union and US agreed to arbitrate under Article 25 of the DSU the question of the level of nullification and impairment suffered by the EU as a consequence of the US failure to implement its TRIPS obligations. This required the arbitrators to determine the value of the US failure to enforce copyright in favour of EU right holders. The question of the nationality of right holders in this arbitration was simplified by the existence of collective management organisations that paid royalties to artists rights societies, which in turn distributed the royalties to identified right holders.[89]

In the *EC – Geographical Indications* case, the panel observed that there are no explicit rules governing this issue in the TRIPS Agreement.[90] The panel looked to the practice for determining nationality within the EU, which the US accepted. According to the panel, "[t]he criteria used by the EC member States to determine the nationality of a legal person may vary and include criteria such as the place of incorporation and the place of the seat of the company or a combination of such criteria".[91]

As a practical matter, for IPRs that are registered, such as patents, trademarks and GIs, and in some cases for industrial designs and copyrights, determining the nationality of the right holder by the address provided in the registration will greatly facilitate determining the right holders against whom a suspension will be effective. This will not provide a clear result in all cases as registrations may be held by locally addressed affiliate enterprises that are controlled from the suspended-against Member. A suspension should be directed against the beneficial owner of the IPR on the basis of the nationality of that beneficial owner.

6. SUBJECT MATTER SPECIFIC LEVEL OF SUSPENSION ISSUES

a. Categories

Each of the "categories" of intellectual property rights specified in Sections 1 through 7 of Part II of the TRIPS Agreement are defined as a separate sector. The seven category headings are, in respective order: (1) Copyright and Related Rights, (2) Trademarks, (3) Geographical Indications, (4) Industrial Designs, (5) Patents, (6) Layout-Designs (Topographies) of Integrated Circuits and (7) Protection of Undisclosed Information. Section 8 of Part II, Control of Anti-Competitive Practices in Contractual Licences, is not referenced as a sector.

It is apparent from the text of the TRIPS Agreement, as now confirmed by the Appellate Body in the *US – Havana Club* decision,[92] that the topic headings of Part II do not limit each category to a single form of IP. Section 5 on Patents, for example, also addresses *sui generis* forms of plant variety protection (PVP), implicitly including the forms of protection regulated by the International Union for the Protection of New Varieties of Plants (UPOV). Section 4 on Industrial Designs allows members to use various forms of IP protection, including (but not limited to) copyright, trade dress and *sui generis* industrial design protection. By incorporating Article 8 of the Paris Convention (in Article 2.1 of the TRIPS Agreement), Section 2 on Trademarks implicitly regulates trade names. Protection of Undisclosed Information can be undertaken through a variety of legal mechanisms or forms of IP.

Part III, Enforcement of Intellectual Property Rights, and Part IV, Acquisition and Maintenance of Intellectual Property Rights and Related *Inter Partes* Procedures, are also established as separate sectors under the TRIPS Agreement. An obligation to enforce IPRs is not a classical trade "concession" in the sense of reducing a tariff barrier or eliminating a quota, and raises valuation issues.

The list of sectors in Article 22.3(f)(iii) of the DSU does not cover all of the concessions or other obligations in the TRIPS Agreement, such as the national treatment and MFN treatment obligations, which are elaborated in Part I. This presumably means that such other obligations are not considered separate sectors for the purpose of assessing suspension of concessions, but does not appear to mean that those concessions or other obligations cannot be suspended because, *inter alia*, subparagraph (c) refers to suspension of concessions under another "covered agreement", and subparagraph (d)(i) refers to trade "under the agreement" in which a violation has been found. Although the matter is not free of doubt, the definition of "sector" does not appear to limit the suspension of concessions or other obligations only to enumerated sectors, but may extend to other obligations under a "covered agreement". Virtually by definition, suspension of IPRs against the nationals of one WTO Member will require a limited waiver of the national and MFN treatment principles, which must be contemplated by the suspension system.

b. Copyright

Copyright protects the expression of authors and artists, including those involved in business applications such as writing computer software. Obtaining copyright protection is not subject to legal formalities. Protection attaches automatically upon the creation of the expressive work. Copyright protection gives the holder the right to prevent others from reproducing, distributing, broadcasting, translating or adapting the copyrighted work. Copyright has a long duration: the author's life plus 50 years, or 50 years from the date of publication for works created by legal persons.[93] Performers, producers and broadcasters enjoy certain protection under the TRIPS Agreement. Pursuant to the terms of the TRIPS Agreement and incorporated provisions of the Berne Convention, copyright protection is subject to exceptions in certain special cases as determined by the national copyright regime. Incorporated provisions of the Berne Convention authorises the compulsory licensing of broadcasts and musical composition at Articles 11*bis*(2) and 13(1), respectively, subject to equitable remuneration.

In the copyright context, music collection societies have operated for a long time in Europe, the US and elsewhere. These collection societies place a value on the performance of musical compositions in order to calculate and distribute royalties. The film industry gathers and disseminates information concerning the revenues received on the showing of movies, and reports in some detail on the volume of sales of DVDs. A typical free-based MP3 file download website (e.g. Apple's iTunes) should be able to provide fairly accurate data (subject to confidentiality considerations) regarding the demand for copyrighted performances. The computer software industry prepares reports that indicate the number of units of software legally licensed for different geographic areas.[94]

Each of the aforementioned data sources has its limitations. Companies or industry groups based in Organisation for Economic Co-operation and Development (OECD) countries compile the referenced data sources. These companies and groups may have an incentive to overstate or understate sales of or revenues from the materials on which they are reporting. It will certainly be useful to improve data collection by and for developing country governments and enterprises. Nonetheless, if arbitrators understand the limitations of the data sources, they should be able to establish some reasonable approximation of the value of copyrighted works in particular national markets. The level of suspension of copyright should thus be capable of reasonable approximation.

Suspension of copyright protection could take a variety of forms. A suspension need not authorise acts that would otherwise infringe each of the rights to exclude, but could be limited to certain types of act.[95] For example, suspension might authorise the reproduction of film DVDs, but not the broadcast of films on television or their public showing in theaters. The various rights to exclude have their own economic value, though permitting some forms of use is likely to influence the demand for other forms of use.

The suspension of copyright could also take the form of a limitation on the distribution of royalties that would otherwise be received from licensees of copyrighted works, without affecting the basic right of the copyright holders to exclude others from the use of their works. Such a mechanism of suspension is suggested by the arbitration under Article 25 of the DSU that determined the level of nullification or impairment suffered by the EC as a consequence of US failure to protect EU copyright holders.[96] In that arbitration, the level of nullification or impairment was determined by examining the level of royalty payments that would (and should) have been paid to EU copyright holders based upon the collection of fees from relevant business establishments in the US by collective management organisations.[97]

Assume that royalties were in fact being collected by collective management organisations in the suspending country and paid to relevant artists rights societies for the suspended against country. In such circumstances, a WTO Member could give effect to suspension of copyright by diverting such royalties into a fund reflecting the level of the suspension. The fund could be used for a purpose deemed appropriate by the suspending Member. The use of this particular type of suspension system depends upon the existence of a collection organisation and appropriate identification of the nationality of recipients/copyright holders.[98] Such factors may not be present in many cases. Nevertheless, the basic outline of this model could be used to fashion various royalty "diversion" methodologies.

Given the duration of the copyright term, suspension of copyright protection would not ordinarily be expected to last for the full remaining term. In this regard, "suspension" of copyright protection would not seem to anticipate that the underlying copyrighted work would fall into the "public domain" upon suspension. The restoration of complete protection would presumably be envisioned at some point. Rules regarding restoration would need to exempt acts undertaken during the period of suspension from liability.

Because copyrighted works are uniquely susceptible to digitisation, electronic reproduction and transmission, suspension of copyright raises some difficult questions with respect to control over the underlying work in the digital environment. The TRIPS Agreement did not specifically address digital media with respect to copyright, but there is no reason to conclude that the rules of the Berne Convention incorporated by reference do not apply in the electronic environment. Negotiation of the WCT and WPPT was undertaken immediately following the entry into force of the TRIPS Agreement, and these new agreements clarify and extend copyright rules with respect to the digital environment, which includes the addition of obligations regarding technological measures of protection. However, they are not part of the TRIPS Agreement.[99]

The suspension of copyright in a digital or digitally reproduced expressive work may expose that work to extensive retransmission and reproduction on a worldwide basis. Such Internet-based copying may be difficult to control even when copyright protection is present. Technological protection measures or digital rights management may be used to control reproduction and retransmission. For example, the Apple iTunes system used to license movies for personal viewing incorporates a technical termination of access system that appears to make it difficult to circumvent copyright protection.[100]

A second important aspect of DRM and TPMs is that such measures employed by copyright holders may make it technologically infeasible for Members undertaking cross-retaliation to access and make available the relevant digital media content.[101] From a technical standpoint, it may be necessary for Members undertaking cross-retaliation to obtain the technology or access codes necessary to use the underlying media content as authorised by the DSB. This would require the cooperation of the Members against whom cross-retaliation is undertaken to secure the relevant technology or access codes, or would require the Members undertaking cross-retaliation to legally enforce demands within their own territories to obtain the access-enabling technologies from their holders. A requirement to initiate legal proceedings might entail considerable delay. Alternatively, Members undertaking cross-retaliation may need to engage the services of "hackers" with the technical know-how to "break" access restrictions. If the option to break relevant TPMs and to bypass DRM is used, such government action must not be considered inconsistent with any obligations under the WCT or WPPT. This legal issue was discussed in section 4 (a) above.

The issue of digital reproduction and transmission is connected to the issue of the territorial scope of an authorisation to suspend concessions. Copyright is granted on a country-to-country basis and is subject to the principle of independence.[102] The TRIPS Agreement and the DSU do not expressly address the question of whether the suspension of copyright or other IPRs would permit exportation of the subject matter generated by third parties under the terms of the suspension.

Suspension of copyright protection in Country A, pursuant to the principle of independence, will not suspend parallel copyright protection in Country B. Under ordinary circumstances, an importer in Country B could not lawfully sell the local copyright holder's reproduced work from Country A because the copyright in Country B would remain valid and enforceable.

A complexity arises when the doctrine of exhaustion of rights is introduced, and this complexity must consider a certain debated issue in WTO law. That is, whether exhaustion takes place only with respect to goods placed on the market with the "consent" of the IPR holder, or whether lawful government action (such as the issuance of a compulsory license) may also establish the basis for international exhaustion.[103] A number of developed country courts have interpreted exhaustion as a function of "consent",[104] and under the consent theory a copyrighted work placed on the market under a suspension regime would not be free of the copyright holder's parallel IP right in an importing country that has adopted international exhaustion.[105] If an importing country follows the "lawfully placed on the market" theory of exhaustion that does not require the consent of the IP holder, then a parallel IP right in an importing country would be exhausted under a suspension regime. A copyrighted work, for example, put on the market in the suspending country could be imported in a country under international exhaustion without the consent of the parallel copyright holder.

The foregoing discussion of exhaustion doctrine certainly adds a layer of complexity to the suspension of concessions question that may be difficult for national legislatures and courts to navigate. This might be resolved by an explicit provision in the authorisation of suspension addressing whether it is intended to allow exports of the products placed on the market under the suspension regime.

Perhaps more important from the suspending country standpoint, the extent of an open parallel export market would likely be taken into account in determining the "level" of suspension of concessions. This is because the value of the IPR in the suspending country is based on the volume of sales that can be made by the right holder in consequence of its exclusive position. Whether sales are of products that are consumed/used locally or are of products ultimately consumed/used in foreign markets does not appear material to valuing the loss of right holder's exclusive interests. Parallel exports would reduce the market share in importing countries of the affected copyright holder from the complained-against country. Presumably this would be taken into account by an arbitrator assessing the level of suspension.

c. Patent

Patents are granted with respect to specific inventions. A patentable invention must meet certain criteria of patentability, namely novelty, inventive step and utility, as well as being sufficiently enabled. In the context of demonstrating enablement, the patent holder is required to disclose the invention in a manner that will permit a third-party to practice it without undue experimentation. Under the terms of the TRIPS Agreement, patents are granted for a minimum term of 20 years from the date of filing of the patent application. In some countries, the term of the patent may be extended, based, for example, on a period of regulatory review of the subject invention. The patent gives its holder the right to prevent third parties from making, using, offering for sale, selling or importing the invention during the term of the patent; recognising that the right to prevent importation is subject to international exhaustion when recognised by the importing country. Patent rights are subject to important exceptions under the TRIPS Agreement, including such "limited exceptions" as may be adopted by national authorities, and by the possibilities for compulsory patent licensing (including government use licensing).

The level of suspension of patent rights should also be subject to reasonable calculation. The national identity of patent holders is among the information typically gathered by patent offices, and the extent to which patents are relied upon in respect to the sale of goods (or licensing) should also be capable of being approximated. Some countries, such as the US, report data on the collection of technology licensing royalties as part of their trade statistics, implying that such data can be broken down on a country-by-country basis. Such data may be useful in approximating the value of IPRs that may be suspended. As discussed earlier, the valuation of suspension of patent rights in pharmaceutical products for a national market should be a relatively straightforward matter. The price of a medicine under patent in the local market and the level of sales should be available from existing data sources. If generic products are available from a foreign source, prices should be available for these products. Some preliminary assumptions will need to be made about the extent to which demand for generic products can be substituted for patented products. If the government public health system is a purchaser, some fair degree of certainty could be introduced into that process. The estimated lost value of sales of the patented originator product would constitute the level of suspension.

Suspension of patent rights might conceptually take a wide variety of forms. Such a suspension could apply across the entire range of patents that have been granted by the suspending country, or alternatively could apply to specific patents or categories of patents. One advantage of patent right suspension is that the patent holder has presumably already disclosed the invention in a way that will allow third parties to practice the invention. There may nevertheless be additional technical information important to the effective use of the patented technology that has not been disclosed.

May the suspending country identify specific patents or categories of patents for suspension? Because the DSU does not elaborate upon the specific characteristics of suspension, and because Article 22.5(7) expressly provides that the arbitrator "shall not examine the nature of the concessions or other obligations to be suspended", the suspending country appears to have considerable flexibility as to the manner in which patent rights are suspended. The suspension of rights in respect to specific categories of patents would appear to be consistent with suspension practices in the field of goods, in which tariff concessions are suspended with respect to particular classes of products.

The legal argument that might be raised against suspension with respect to specific categories of patents is that Article 27.1 of the TRIPS Agreement prevents "discrimination" with respect to patent fields of technology. The panel in the *Canada – Generics* case decided that Article 27.1 applied to limited exceptions granted under Article 30. However, because Article 22 permits suspension of concessions or other obligations under the TRIPS Agreement, including Part II, Section 5 addressing patents, it seems clear that the obligations otherwise applicable under Article 27.1 are subject to suspension. Moreover, *even if* Article 27.1 remained applicable, and this is doubtful, a suspending country might well justify treating different categories of patents differently under a suspension regime.

In addition, a suspending country may elect to suspend certain rights of the patent holder and not others. For example, rights to prevent importation, local sale (and offering) and use could be suspended without granting third parties the right to make a product in the domestic market.

Because suspension is intended to be temporary, the suspending country will presumably envisage the reintroduction of patent protection when the suspension is terminated. Such reintroduction would need to address issues such as the right to sell off remaining inventories, continued use of patented products sold during suspension, and exemption from infringement claims for activities during the term of suspension.

The suspension of patent rights also raises the question of exportation. Patents are granted on a country-to-country basis and are subject to the principle of independence. Suspension of patent rights in Country A does not suspend patent rights in Countries B, C or D. Therefore, a product manufactured in Country A under a suspension regime could not be imported in Country B if there is a parallel patent in Country B, unless Country B adopts an international exhaustion regime that is not dependent upon the consent of the patent holder in Country A to the placement of the goods on the market in Country A. As with respect to copyright, there is debate in the scholarly literature as to whether parallel importation may be based on the "lawful placement of goods on the market" or only upon "consent".

While copyright protection attaches automatically across a wide range of countries pursuant to the Berne Convention, patents are often applied for and granted for particular inventions in only a relatively few countries. This is somewhat industry dependent as, for example, pharmaceutical enterprises are more likely to patent across a wider geographic scope than most other enterprises. Nevertheless, it is quite likely that for any invention placed on the market in a suspending country there will be a significant number of potential export destinations where parallel patents will not be in force. In such circumstances, there should not be a legal obstacle to exporting otherwise patented products produced or acquired under a suspension regime. Yet the availability of export markets might well be taken into account in determining the "level" of suspension of concessions. If exported products reduce the market share in third countries of patent holders from the complained-against country, this would have an economic impact on the complained-against country.

A complained-against WTO Member may object to the export of products on political grounds that suspension is only intended to be in favour of the country adopting the suspension, and not to provide the basis for a wider marketing of affected products. There is no express legal basis within the TRIPS Agreement or DSU for this position. As noted above, potential exports might be considered in determining the level of the suspension.

There is nothing that would prevent a complaining Member from treating suspension of patent rights under Article 22 in a manner equivalent to issuing a compulsory license, but without providing for the payment of compensation, or reducing compensation, during the period of suspension. When the suspension ended, a local manufacturer might continue production under the terms of the compulsory license but with a royalty added. This might assist with a potential problem faced by local manufacturers under a patent suspension regime, namely that the period of suspension is indeterminate and/or subject to rapid termination.

Plant variety protection falls under the category of patents in Section 5 of Part II of the TRIPS Agreement, specifically referenced in Article 27.3(b). A suspension may therefore involve rights established by plant breeder certificates or other *sui generis* forms of PVP. If seeds or other reproductive materials related to a protected variety are available generically from outside the suspending country, those seeds or other reproductive materials could be imported, distributed, planted, harvested and sold during the period of suspension. Similarly, if plant breeder rights or plant patent rights ordinarily prevent the replanting of seeds (i.e. the exercise of farmers' rights) within the suspending country, replanting and related activities could be authorised during the period of suspension.

Some of the potential uses of patent suspension to accomplish important social objectives is discussed in Section 7(d) below. Practical aspects, including the use of pre-existing compulsory licensing legislation, are considered.

d. Trademark

Trademarks are signs or symbols that distinguish the goods or services of one enterprise from another in commerce. Trademarks are of a potentially indefinite duration, though in many jurisdictions validity is dependent upon continued use in commerce. Trademarks are subject to limited exception, and are subject to fair use by third parties, such as in comparative advertising. In some countries, the grant of trademark rights is based exclusively on registration. In other countries, trademark rights may arise in "common law" from use in commerce, and also be subject to registration. A trademark permits its holder to prevent others from affixing it to goods or services in commerce and from using it in the course of trade.

The suspension of trademark rights might permit the manufacture and sale of goods bearing an unauthorised trademark. By licensing or allocating such rights a country suspending them could determine the extent to which local production (or importation) would be substituting for authorised supply by the affected trademark holders.

Because trademarks serve a consumer protection function by identifying the source, and implicitly the quality or characteristics, of goods and services, it is not obvious that suspension of trademark protection will provide a net benefit to consumers. Consumers that purchase goods or services with an unauthorised trademark may find that these are of inferior quality. This may also lead to long-term damage to the reputation of the trademark holder in the local market.

Conceptually, it may be possible to distinguish between the unauthorised use of trademarks on goods that are essentially identical to those bearing trademarks, and those that are inferior and may deceive and/or harm the consumer. This would require assessment of the local producer market by the government, and presumably some form of active regulatory control.

To explain this further, allowing persons other than the trademark owner to provide goods identified by the trademark carries the risk that local consumers would be purchasing inferior products. In some cases, such products may be dangerous. Because products would not in fact be supplied by the trademark owner consumers would not have recourse against the trademark owner for damages that they may suffer. A WTO Member considering authorisation of third party use of trademarks should carefully consider the types of goods or services for which those marks may be used, as well as whether its consumers would in fact benefit from the arrangement. The government authorising third-party use of trademarks may provoke consumer dissatisfaction. In principle, the government might adopt a quality control and inspection programme that would avoid the potential problems raised above, but this may entail significant government regulatory action.

Nevertheless, a decision on whether to suspend trademark protection may be influenced by whether the suspending country already maintains a significant "counterfeit" market. If it does, and if consumers do not expect to purchase genuine trademarked goods under ordinary circumstances, the risk or harm from suspending trademark protection may be reduced. Moreover, a suspending country could view the suspension of trademarks owned by particular enterprises based in the complained-against country as a particularly strong form of retaliation and consider that the potential injury suffered by those enterprises would create heightened pressure within the complained-against Member to bring its measures into conformity. Many large multinational corporations invest heavily in advertising of their trademarks, and suspension of rights in those trademarks might place considerable pressure on those companies and their home government.

Like copyrights and patents, trademarks are granted on a country-to-country basis and are subject to the rule of independence. Therefore, the suspension of trademark protection within one national (or regional) territory will not suspend such protection in other national territories. Exports of goods or services using unauthorised trademarks would potentially face legal action for infringement in third countries. As with copyright, there would be an issue as to whether the importing country had adopted a rule of international exhaustion and whether that country recognised exhaustion based only on the "consent" of the trademark holder or on the wider basis of being "lawfully placed on the market" (e.g. under a suspension regime). If products produced under the trademark suspension regime were exported, this would affect the calculation of the level of suspension.

Although suspension of trademark protection is certainly permitted by Article 22.5, there may be reasonable policy grounds for a suspending country to choose a different sector in which to suspend TRIPS concessions.

e. Geographical Indication

A "geographical indication" is a name or symbol that associates a product with a place based upon attributes of products or upon the goodwill of producers of that place. Geographical indications are typically associated with food products, including wines and spirits. There is no limitation on the term of protection by GI, provided that the producing region continues to maintain the requisite association. Only producers of the region associated with the GI are entitled to use it on products. Because GIs are tied to specific producing regions they are not assignable or transferable for use on goods produced outside the identified producing region.

The suspension of protection by GI would presumably permit local producers of the suspending country to label their products with a GI notwithstanding that the product was produced locally. As with trademark, because GIs are used to convey information to consumers about the quality or characteristics of goods, there are policy reasons why allowing unauthorised use of GIs may not be beneficial from a consumer welfare standpoint. That is, consumers purchasing goods with the expectation of a certain quality or characteristic may find that the locally produced version is not what they expected. Consumers may benefit from a lower price, but may ultimately be dissatisfied. This would not benefit governments authorising third party use of GIs. As in the case of trademarks, the government could impose some form of quality control mechanism with respect to third-party GI users to attempt to protect consumers, but this may entail significant regulatory costs.

Also as with trademarks, if the enforcement of GIs in the suspending country has traditionally been weak, consumers may not have built up a strong expectation of association so suspension may not result in unanticipated quality deficiencies. Furthermore, not all goods identified by GIs are of a quality that is objectively distinct from comparable goods not protected by GIs. Geographical indications do not only protect objective differences. They may also be used to protect the "goodwill" of producers in the region. In some cases, authorising third-party use of GIs may have limited effects on consumers.

As with respect to trademark, if enterprises of the complained-against country are substantially reliant on protection by GI, the suspension of such protection may be a more powerful tool in the hands of the suspending country to encourage compliance with the ruling of the DSB.

The question of exports of products incorporating GIs produced by third parties under a suspension regime would be answered along the same lines as for trademark. A GI is protected on a country-to-country basis in accordance with national legislation. The mechanisms for protecting GIs vary widely among countries. It is entirely possible that some potential destinations for exports would not protect a given GI so that there would be no specific legal impediment to exportation and importation.

There has been little discussion in scholarly literature concerning the potential parallel trade in products protected by geographical indication. This is at least partially explainable by the nature of GI protection. Because specific GIs may in principle only be placed on goods produced in particular locations, there should be a limited number of equivalent goods lawfully placed on the market in other locations (i.e. other countries) that would be available for parallel trade. Nevertheless, opportunities for parallel trade may arise as a consequence of different distribution schemes using different prices in various markets. Aside from the fundamental characteristic of GIs, given the proximity to trademark protection, it appears likely that these two types of IP protection would be treated in a similar way from an exhaustion of rights standpoint. The presence of an export market would be taken into account in determining the level of suspension of concessions.

f. Industrial Design Protection

Industrial design protection is defined by the TRIPS Agreement to cover independently created industrial designs that are new and original. There is a requirement that protection with respect to textile designs is not unreasonably impaired by cost or related administrative burdens. The minimum duration of industrial design protection is 10 years. The holder of industrial design protection should be entitled to and prevent third parties from making, selling or importing products bearing or embodying the protected design.

National legislatures protect industrial design in a variety of different ways. Such design may be protected by copyright, trademark, trade dress, design patent, unfair competition, or by a *sui generis* form of design protection (including by registration).

The suspension of protection for industrial design may be a useful mechanism for inducing compliance with DSB decisions. For example, with respect to textiles and clothing, manufacturers in the suspending country might be authorised to produce copies of designs from the complained-against Member. This could be done without (or with) also authorising use of the foreign trademark. In that way, consumers could be offered similar or identical textile products without (or with) encountering potentially misleading information concerning the producer of that product.

Of course, in developing a programme of suspension, the suspending country must take into account its own particular legislative mechanisms for protecting industrial design. As noted above, those mechanisms vary substantially among countries.

Export and parallel trade issues would also arise with respect to goods produced under suspension of industrial design protection. Because countries protect industrial design with different legal mechanisms and because a wide spectrum of goods may be protected by industrial design, it is difficult to generalise with respect to the specific type of exhaustion issues that would be presented. If exports were to be undertaken, this would in any event be included within the calculation of the level of suspension.

g. Integrated Circuit Layout Protection

Integrated circuit layout protection is a *sui generis* form of IP protection. It protects original IC designs for a period of 10 years from the date of application for registration or first commercial exploitation. National legislatures may provide IC layout-design protection through different mechanisms, including registration systems.

The utility of suspending IC layout-design may largely be limited to countries with a capacity to produce ICs. Integrated circuit production is highly capital and technology intensive. It would be very difficult to rapidly take advantage of a suspension regime without an existing production base. It may also be difficult to sell ICs produced under a suspension regime for export – which is typically necessary to justify investment in IC production facilities – because holders of rights in import markets would likely seek to block imports of products incorporating ICs that infringed rights in the import market. While the potential for suspension of rights in ICs exists, this is a subject matter area that is likely to be of interest to a limited number of potential suspending countries in a limited number of situations.

h. Protection of Undisclosed Information

The TRIPS Agreement protects different types of so-called “undisclosed information”. The first is information that would traditionally be understood as “trade secret” information. Trade secret information is commercially valuable information that an enterprise has taken reasonable steps to protect from public disclosure. The second is certain types of regulatory data with respect to pharmaceutical and agricultural chemical products.

Trade secret protection may be provided by various legal means. It may be covered by unfair competition law or by specific statute. Traditional trade secret protection is of indefinite duration. It remains available so long as its holder continues to take reasonable steps to keep protected information secret. Third parties who acquire trade secret information by dishonest means are subject to liability under trade secret protection law. Trade secret information that is publicly disclosed by its holder loses protection.

Based upon the definition of traditional trade secret protection, it is not an obvious candidate for the suspension of TRIPS concessions because the information subject to protection is, by definition, not publicly available. There would be little immediate gain to third parties from the suspension of trade secret protection because additional information would become available only in cases where the trade secret holder elected to disclose it, or if third parties were encouraged to engage in dishonest commercial practices (which seems an unlikely avenue for governments to encourage). Compare the situation of patent rights, in which the relevant technology is disclosed in the patent application, thereby allowing it to be used by third parties. An additional problem with suspending trade secret protection is that secret information that became public during a suspension regime could not be effectively “put back” upon termination of the suspension regime. Thus, calculation of the level of suspension would need to take into account the continuing nature of the effect upon the trade secret holder.

Of substantially greater potential utility under a suspension regime is undisclosed pharmaceutical and agricultural chemical regulatory data with respect to new chemical entities submitted to regulatory authorities in the course of seeking approval for marketing. In a number of countries, such regulatory data is protected by “exclusive marketing rights” granted to the originators of the data. Such exclusive marketing rights prevent third parties from registering and marketing “generic” versions of the same chemical entities during the term of protection. That term of protection tends to range from 5-10 years depending on the country. It is important to note that the TRIPS Agreement, at Article 39.3, does *not* require a government to adopt marketing exclusivity to protect pharmaceutical and agricultural regulatory data. The obligation is to prevent against “unfair commercial use” of the data.

If regulatory data is not protected by exclusive marketing rights, but is more generally protected against unfair commercial use, it may nevertheless be difficult for generic producers to register pharmaceutical or agricultural chemical products without reference to the information submitted by the originator to the regulatory authority, depending on the protection scheme used in the subject country.

The suspension of regulatory data protection would allow generic producers to register and market pharmaceutical and/or agricultural chemical products on the basis of such data, without challenge from the data’s originator. It is important to note that a product protected by regulatory data protection may also be protected by patent. Therefore, in deciding upon a suspension regime, governments must consider both the patent situation and the regulatory data protection situation when pharmaceuticals and agricultural chemicals are at issue.

Protection of regulatory data takes place on a country-to-country basis. If a pharmaceutical or agricultural product is registered in the suspending country, it may also be registered in third countries where its protection may remain in force. This will affect assessments of export potential.

A significant issue regarding the suspension of data protection with respect to pharmaceuticals and agricultural chemicals is how newly registered products (i.e. taking advantage of the suspension) would be treated when the suspension is terminated. Under a marketing exclusivity regime, originators may argue that restoration of protection should foreclose further marketing and sale of the newly registered products. If there is no marketing exclusivity rule as such, but rather only protection against use of data for registration purposes, that issue presumably should not arise since a third-party pharmaceutical or agricultural chemical product would already be registered. The suspending government will need to address the question of rights upon termination of the suspension, particularly in respect to marketing exclusivity. In this regard, it is essential to recognise that marketing exclusivity is not required by the TRIPS Agreement, so that restoration of marketing exclusivity is likewise not required upon termination of a suspension regime. A suspending government might well adopt a new rule exempting previously approved products from marketing exclusivity without contravening TRIPS obligations. This is because third parties that had registered generic versions of pharmaceuticals or agricultural chemicals would not again be seeking to rely on undisclosed regulatory data.

i. Enforcement

Article 22.3(f)(iii) establishes Part III of the TRIPS Agreement as a separate sector for purposes of suspension of concessions. Part III addresses “Enforcement of Intellectual Property Rights”. Although there is considerable detail in Part III, the two principal obligations of Members are found in Article 41.1 and Article 61. The former provides, *inter alia*, that:

> Members shall ensure that enforcement procedures as specified in this Part are available under their law so as to permit effective action against any act of infringement of intellectual property rights covered by this Agreement, including expeditious remedies to prevent infringements and remedies which constitute a deterrent to further infringements.

Second, Article 61 provides, *inter alia,* that:

> Members shall provide for criminal procedures and penalties to be applied at least in cases of wilful trademark counterfeiting or copyright piracy on a commercial scale.

As a general proposition, Part III obligates Members to make available civil infringement proceedings, effective remedies (including the availability of injunction), border measures implemented by trade authorities, and criminal sanctions in a limited number of contexts.

One potentially effective route for the suspension of concessions under the TRIPS Agreement is to suspend the right of IPR holders to initiate enforcement proceedings during the pendency of the suspension, and to suspend rights to initiate proceedings subsequent to the suspension with respect to activities that had taken place during the suspension. By suspending enforcement without technically suspending the under-lying IPRs, the government might simplify the suspension rules. Termination of the suspension would reinstate rights to enforcement, but exclude activities which took place during the term of the suspension. The suspension of enforcement rights could be prescribed for a limited set of IPRs, or for a limited set of remedies.

With respect to limiting IPRs, suspension of enforcement could, for example, be prescribed with respect to patents and regulatory data protection. The suspending Member could provide that no injunctions would be available during the term of the suspension, and that no compensation could be claimed either during or after the suspension of activities during the suspension. In the US, by way of illustration, owners of patents are precluded from obtaining injunctions against the government for unauthorised use of their patents.[106] This is essentially a government use licensing mechanism, with a specialised court determining a royalty. In the suspension context, there may be no royalty requirement.[107]

The suspension of enforcement rights may raise some interesting questions regarding exhaustion. An IPR holder might argue that because the IPR itself has not been suspended, a first sale by a third party is not a "lawful" placing on the market, and therefore does not constitute the basis for exhaustion. This is a difficult conceptual argument to address. If an action is technically prohibited, but liability is excused, is that action lawful (because liability does not attach) or unlawful (because it remains technically prohibited)? Plausible arguments can be made for both accounts. The government might resolve the matter by specifying an outcome in the suspension legislation.

Suspension of enforcement would also require valuation. Presumably this would follow the same lines as suspension of the underlying IPRs.

j. Acquisition and Maintenance of IPRs

Part IV of the TRIPS Agreement is established by Article 22.3(f)(iii) as a sector from the standpoint of suspension. Part IV addresses "Acquisition and Maintenance of Intellectual Property Rights and Related *Inter-Partes* Procedures".

The principal obligation of Members under Part IV is to provide for the grant and/or registration of IPRs within a reasonable period of time, in a fair and equitable way, and without unnecessary cost or complexity, consistent with relevant IP rules.

Suspension of Part IV obligations might entail preventing or delaying applications for the grant and/or registration of IPRs during the suspension period. If, for example, inventors were prevented from filing patent applications, or having those applications processed, during a period of suspension, this would delay whatever exclusive rights might be obtained under the patent. By allowing the filing, but suspending processing, the suspending Member might avoid problems such as loss of priority for the patent applicant. This is an intriguing route for a potential suspending Member to induce compliance, particularly since it would affect only "future interests" in IPRs, and not previously granted rights.[108] It may be difficult to precisely calculate the value of this form of suspension, but presumably it could be based upon historic trends in patenting and a general valuation of patent rights.

A similar alternative approach might involve imposing additional fees or taxes with respect to registrations and/or renewals of IP registrations for nationals of the WTO Member against which suspension is undertaken. This would essentially involve a suspension of the national treatment obligation relating to IP application and maintenance. It might, however, be difficult to engage in "effective" cross-retaliation through this mechanism because it may not yield significant amounts of revenue (at least undertaken in isolation).

7. PRACTICAL CONSIDERATIONS FOR DEVELOPING COUNTRIES REGARDING SUSPENSION OF CONCESSIONS UNDER THE TRIPS AGREEMENT

The foregoing legal and policy analysis indicates that there is a range of legal options available to governments considering the suspension of concessions under the TRIPS Agreement in the context of cross-retaliation. It also suggests that some options may be preferable to others in terms of identifying the level of suspension and in avoiding legal conflicts.

a. National Legislation and Constitutional Concerns

Assuming that a government has implemented TRIPS obligations in domestic/national IP law, it will be necessary in some cases for the national legislature to adopt enabling legislation to authorise or implement a suspension of TRIPS concessions. National law will ordinarily prescribe the terms and conditions for the grant and termination of IPRs, as well as the conditions for the exercise of rights. Most governments have not included in general IP legislation a grant of authority to the executive to suspend rights or alter the conditions of exercise on the basis of retaliation authorised by the WTO DSB. Conceptually, such authorisation might be found in trade implementation authority granted to the executive, but because IPRs include a domestic law aspect,[109] this is somewhat less likely to have been expressly built-in to trade authority than in other implementation areas.

Holders of IPRs from the country against which retaliation is proposed may object to "discriminatory" changes to domestic IP rules on constitutional grounds. However, most national constitutions do not accord equivalent rights to foreign nationals as to local nationals.[110] An obligation to treat foreign IPR holders on the same basis as local IPR holders most likely arises from international treaty commitments, and not from the national constitution. Since the DSB authorisation effectively waives national and MFN obligations under the WTO agreements, the national legislature would not be contravening international obligations by differential treatment of nationals of the suspending country. This also applies to obligations under the WIPO Conventions, based upon the analysis provided earlier in this paper. That is, because the country against which the suspension is imposed will have expressly consented to the suspension of concessions pursuant to the WTO agreements, it will effectively have waived any claim under corresponding commitments at the multilateral level.

There are mechanisms based upon the use of pre-existing IP legislation for eliminating or minimising the requirements for new legislative action. Virtually all governments have enacted legislation that authorises the grant of compulsory and/or government use licenses in respect to patents. The TRIPS Agreement regulates such licensing in its Article 31 that, as confirmed by the Doha Declaration on the TRIPS Agreement and Public Health, does not restrict the grounds upon which compulsory patent licenses may be granted. A government seeking to suspend TRIPS obligations could do so by granting government use or compulsory licenses under the terms of its patent legislation, using as grounds the "public interest" in establishing compliance with trade agreements, or a related ground conforming to national legislation. Because the requirement to pay "adequate remuneration" under TRIPS Article 31(h) is assessed in reference to "the circumstances of each case, taking into account the economic value of the authorisation",[111] and because the circumstances of suspension of concessions cases would entail the absence of a remuneration payment (i.e. hypothetical royalties would offset the nullification or impairment), licenses could be granted on a royalty-free basis. For that matter, governments might decide to pay a reduced royalty as a matter of discretion.

Article 30 of the TRIPS Agreement permits the grant of "limited exceptions" to the rights of patent holders. A WTO Member might also make use of limited exceptions existing under national patent law in suspending concessions, though this route may not provide as clear a path as the Article 31 route from the standpoint of pre-existing legislation.

Each WTO Member's IP legislation is likely to contain other express exceptions or compulsory licensing provisions with respect to different fields of activity. Many countries provide for compulsory licensing with respect to the broadcast of copyrighted media content contingent upon the payment of equitable remuneration. Compulsory licensing of broadcasts and musical compositions is expressly authorised by the Berne Convention Articles 11*bis*(2) and 13(1). As with the compulsory licensing of patents under the TRIPS Agreement, the Berne Convention obligation relating to equitable remuneration would take into account the suspension of concessions context. Equitable remuneration in the context of an authorised suspension of rights may be quite limited.

Trademark rights are typically subject to "fair use" and other "limited exceptions", as authorised under the TRIPS Agreement. It seems somewhat less likely that a government will have pre-existing trademark exception legislation that would expressly encompass the type of suspension that might be contemplated under a DSB authorisation. This is partly because TRIPS Article 21 expressly precludes the compulsory licensing of trademarks. The national legislature might declare that third party use of a trademark will be deemed "fair use" for the duration of suspension, but this would presumably require new legislation.

It would be a matter for each government to examine national IP legislation with respect to industrial design, geographical indication, IC layout-design and trade secret rights to determine whether there is pre-existing legislative authority for suspension of rights in the nature, for example, of compulsory licensing provisions.

A practical area of promise also lies in legislation regarding the protection of regulatory data submitted with respect to pharmaceutical and/or agricultural chemical products. Such legislation may include authority of the government to make use, or authorise use, of regulatory data for purposes that do not constitute "unfair commercial use" (which is the standard adopted in Article 39.3 of the TRIPS Agreement). For example, such authority may be included within the scope of authority to grant compulsory patent licenses as a matter of assuring that regulatory approval may also be granted. National legislation varies considerably regarding the nature of regulatory data protection, making it difficult to generalise as to the authority that may be included in pre-existing legislation. Nonetheless, governments considering the suspension of rights with respect to regulatory data may well examine pre-existing legislation for avenues of authority prior to proposing new legislation.

The executive is ordinarily responsible for enforcement of criminal law, including IP law. The executive may be able to issue a directive under pre-existing legislation that suspends criminal prosecution of IP violators during the term of the suspension of TRIPS concessions. However, this is likely to raise difficult constitutional issues in terms of executive versus legislative authority. Similarly, the executive could, under existing authority (i.e. without new legislation), undertake to suspend the processing of patent applications during the term of a suspension of concessions. This may be somewhat less likely to raise constitutional separation of powers issues, but could nevertheless be problematic.[112]

b. Ordinary Regulation and Takings

As previously discussed, neither national constitutions nor international law are likely to pose a genuine legal impediment to the suspension of TRIPS concessions in light of the fact that such suspensions will have been authorised by the WTO DSB under an agreed-upon set of international legal rules. Nonetheless, this does not mean that governments contemplating suspension of TRIPS concessions should not attempt, as a matter of operational efficiency, to formulate such suspensions in ways that are less likely to provoke constitutional challenges.

Most constitutional systems differentiate between government “takings” of property and government “regulation” of property. A taking is generally understood to involve a permanent transfer to the government or other third-party owner. However, many constitutional systems also recognise the concept of a “regulatory taking”. A regulatory taking may occur when restrictions on the use of property imposed by the government are sufficiently severe that effective use of the property is precluded, thereby constituting a taking in all but name and form. Much ordinary government regulation, on the other hand, restricts the uses that may be made of property, whether real, movable or intangible. Real property is typically “zoned” for specific types of uses, such as “commercial” or “residential”, and within those categories a myriad of government regulations apply to those uses.

It is beyond the practical scope of this paper to assess as a matter of comparative national/ constitutional law where the border will be between government “taking” and ordinary government “regulation”. However, the suggestion made here is that in implementing a “suspension” regime that is inherently intended to be transitory, the government should avoid steps that would be construed as “permanent takings”.

First, this may be accomplished by expressly limiting the duration of the suspension, though it might be subject to renewal based on external events. Regulatory restrictions that are transitory are less likely to be considered “takings” as beneficial use of the property is intended to revert to its holder.

Second, suspension of a limited number of the “panoply” of IPRs is less likely to constitute regulatory taking. Effective use of the property would not be eliminated. Thus, for example, suspension of rights in films might be limited to the reproduction of DVDs, while copyright holders maintain the right of broadcast and public showing of the films (or vice versa).

Third, a suspension may be structured as an assessment against royalties or licensing fees with a limited duration. In principle, this assessment could be set at less than 100 percent of the subject royalties, further limiting the potential for its characterisation as a regulatory taking.

Fourth, compulsory and government use licensing authorises third-party use while allowing the right holder to continue making use of its protected subject matter. The government could, though it need not, limit the number of licensees or the extent of licensed use with respect to relevant subject matter. This would further limit the characteristics of "taking". If the government elected to pay a minimal royalty or use fee, this would further erode any argument concerning "taking".

Fifth, temporary limitations on the enforcement of IPRs may be difficult to characterise as "regulatory taking" because the use of the IPR content by its owner is not restricted. A temporary interference with a right to enforce property rights is a limited measure.

c. Exports and the Internet

A suspension of concessions regime is intended to be temporary. Revenues from exports would increase the level of economic benefit from the suspension, thereby promoting compliance and offsetting economic injury to the suspending country. There are, however, legal and practical obstacles to using a suspension regime as an export platform. While those obstacles might be addressed in a satisfactory way over a period of time, a government contemplating suspension might be better served by focusing on domestic market opportunities.

The principal legal obstacle to exports, as elaborated earlier, is that IPRs as a general proposition are granted and enforced on a country-to-country basis. Suspension of rights in the exporting country will not suspend rights in the importing country. There may not be corresponding or parallel IPRs in the importing country, or the importing country may have adopted a regime of international exhaustion of rights which *may* recognise exhaustion based on "lawful" placement on the market as opposed to "consent". In such cases exports and imports would be legal under a suspension regime, though the country against which the suspension is imposed may object politically on the grounds that it is not the intention of a suspension regime to interfere with market opportunities outside the country imposing the suspension. While these concerns could be addressed by the suspending country it is not so clear that the complexities introduced by exports under the suspension regime will justify the inefficiency costs associated with addressing them.

Revenues from exports would need to be counted as part of the value of the suspension. It might be preferable on policy grounds to obtain the economic and social welfare gains from suspension of domestic activity.

As a practical matter, except in limited cases, it will be difficult for industry to establish itself in the export sector in the limited and uncertain period of time provided under a suspension regime. Capital investment based upon a regime that is subject to termination on short notice may not be advisable.

This is not to suggest that in specific cases suspension of TRIPS concessions that may involve exports will not be warranted and/or necessary to accomplish the objective of inducing compliance. It is, however, to suggest that a government contemplating routes for suspension consider the legal and practical issues associated with exports carefully.

The Internet has had a profound effect on almost all areas of business activity. The Internet would certainly be relevant to most or all suspension regimes involving copyright subject matter that is typically subject to digital reproduction and transmission. In order to establish the level of suspension in many areas regulated by copyright, a government will probably need to adopt some form of digital rights management control that can "meter" the use of copyrighted material. Here, of course, suspending governments will face the same problems faced by the copyright-dependent industries, namely that DRM controls are subject to circumvention. It is an interesting question whether a government metering otherwise copyright-protected materials under a suspension regime would be liable for unauthorised use of those materials. There is no obvious WTO precedent for addressing that question.

In this regard, a suspending country might attempt to avoid difficulties by limiting the suspension to activities that are less prone to circumvention. This could include television broadcasts of copyrighted works, public showings of copyrighted works, reproduction of books, physical reproduction of DVDs and/or compact discs (possibly) incorporating DRM protection, and radio broadcasts of copyrighted works. Another way to avoid difficulties with respect to circumvention would be to use a suspension mechanism that involved assessment against licensing fees or royalties that would leave the initial matter of collection in the hands of the copyright holder. The suspending country would not play a role in the production and distribution of the expressive work, and would thus not be responsible with respect to circumvention. By assessing at less than 100 percent of royalties or licensing fees otherwise payable, the suspending country would leave copyright holders with an incentive to collect payment.

d. Social Welfare and Inducing Compliance

The suspending country government should well consider the social welfare consequences of its actions. A government might choose to address public health issues through the mechanism of a suspension, such as by suspending patent protection for pharmaceutical products that are used to address significant public health concerns. A pharmaceutical product will often be patented within a prospective importing country, but not in some countries from which exports may be available. A suspending country might fairly readily issue compulsory licenses for the importation of generic pharmaceutical products that could be substituted for patented products already on its market. This is a context in which there would be reasonable certainty in valuing the suspension of concessions because the price and volume of patented products on the market is information which is generally available from public or private data sources, and governments should be able to calculate the savings that can and do accrue from substituting imported generic products. The government could direct customs authorities to specifically track imports of generic pharmaceutical products during the period of suspension should they not already do so.

The suspension of plant patent or *sui generis* plant variety protection rights may also have an important positive social welfare impact. As noted earlier, a suspending country that did not otherwise permit the exercise of farmers' replanting rights could allow this during the suspension. If seed or plant varieties are ordinarily protected by patent or breeders rights, but are available for import from a country that does not provide equivalent protection, importation and related uses during the suspension term may be beneficial (recognising that the suspension would cover harvesting and sale of crops).

A government may also improve social welfare by making available entertainment-related products at lower cost through copyright suspension. It is not unreasonable to suppose that such "making available" would be well received by people within the country, thus increasing support for government policy. The same might be said for making available copies of popular clothing products.

It is also important to recall that a main purpose of suspension of concessions is to induce compliance by the country against which the suspension is imposed. It is important, therefore, to adopt a suspension regime that will affect the political constituencies (i.e. private operators) that will exert pressure to bring the complained-against country into compliance. The principal proponents of the TRIPS Agreement were the originator pharmaceutical industry and the copyright/entertainment industry. These two sectors remain the most powerful political constituencies demanding strong IP protection. It is fair to assume that retaliatory measures addressing either of those industry sectors will generate political pressure within the affected country.

At the same time, it would be well to recognise that those industries might not limit political counter-pressure to seeking compliance by their governments with WTO obligations. They may urge their home government to make strong diplomatic representations, and to exert economic pressure. It is very important for WTO Members contemplating suspension to be able to address this pressure.

8. CONCLUSION

From a legal standpoint, suspension of TRIPS concessions in the context of cross-retaliation is certainly manageable. While suspending concessions on trade in goods by imposing increased tariffs on imported goods may be less complicated, suspending concessions on trade in services would present its own potentially complex picture. In essence, the incorporation of the “new area” agreements of GATS and TRIPS as a consequence of the Uruguay Round negotiations introduced a more complex era in dispute settlement and retaliation. That is a fact of “modern” trade life.

For many developing countries, as a consequence of asymmetries in economic power, the suspension of concessions in TRIPS may represent their only practical mechanism for inducing the compliance of developed countries with WTO obligations. For many developing countries, other routes of suspension are likely to cause more harm than good from an economic standpoint.

Yet experience in the field of public health and the TRIPS Agreement teaches that legal rights are only part of the suspension equation. The main obstacle developing countries will face to cross-retaliation in TRIPS is political. Industries reliant on IPRs are willing to invest heavily in government lobbying and media propaganda campaigns. Although IP is a creature of industrial policy, as are tariffs and services regulation, the IP-dependent industries have historically been able to persuade governments and media outlets that any interference with IPRs is equivalent to “theft”, implying criminal intent. Raising tariffs may equally interfere with the business interests of private operators by restricting market access, but private operators have not been able to equate increased tariffs with a “theft of trading rights”.

A government proposing a suspension regime in TRIPS must prepare itself for counter-pressure. The government might well prepare press releases and diplomatic replies in advance. The government proposing the suspension should not be under the illusion that it will have the power to control external portrayal of its actions. It must be prepared to move forward in the face of external criticism and, perhaps, internal pressure from multinational corporations. This is the realistic way forward in the present international environment.

ENDNOTES

1 The term "retaliation" is not used in the WTO Agreement or the WTO Dispute Settlement Understanding in reference to suspension of trade concessions. However, it has been used by arbitrators determining appropriate levels of suspension under Article 22.6 of the DSU. See WTO (2000), *EC – Bananas III*. "Retaliation" and "cross-retaliation" might therefore be considered "terms of art" in WTO dispute settlement.

2 Details regarding interpretation and application of Article 22 of the DSU governing cross-retaliation are set out and analysed in an Annex hereto.

3 The Tokyo Round Agreements adopted in 1979 addressed internal regulatory measures that might adversely affect trade, though these agreements were accepted by a limited number of GATT Parties.

4 See GATT (1989, para.3). The GATT authorised the Netherlands to impose a quota against imports of wheat flour from the US for several years in the 1950s, but the Netherlands did not impose it. See references in Jackson (2001, 182 no.8).

5 For example, the US in 1988 imposed tariff increases on Brazil because of Brazil's alleged failure to adequately protect US patents despite the fact that the GATT 1947 did not establish an obligation to protect patents. See, e.g.¸ Abbott (1989).

6 See Hudec (1990, 113 & 122).

7 A principal reason for the added complexity is the relative difficulty in calculating the economic value of concessions in the areas of services and IPRs. Though the complexity of calculating the impact of changes in trade flows based on tariff adjustments should not be underestimated – particularly as the number of countries actively participating in world trade is high, and many are parties to preferential trading arrangements – economists can assess the potential impact of changes in tariff rates within reasonable orders of magnitude by looking at historical levels of trade and the demand-sensitivity of goods to changes in price. With respect to services, it is possible to design trade measures that will have a fairly specific impact, such as by limiting the number of transactions or service providers within a territory. On the other hand, the potential trade impact of more general changes in services regulatory measures are difficult to calculate because such changes may have broad impacts on a market that are difficult to anticipate. With respect to IPRs, it is also difficult to calculate the potential trade impact of broadly applicable changes to rules. This is a well-known problem in the field of economic assessment of intellectual property. See generally Maskus (2000) and further references *infra* at note 79. However, as with services, it may be possible to design more discreet IP-related measures for which more concrete advance assessment of the trade impact may be made. The difficulty of predicting the economic impact of changes in IP rules can and should be distinguished from determining the value of IP assets that might be affected by suspension of concessions. Specific IP assets are capable of being reasonably certainly valued, a process which is undertaken in a variety of contexts and further discussed herein.

8 GATS does not obligate Members to regulate their services markets in a particular way, but has the objective of providing equivalency of treatment within those markets.

9 See decision in *United States – Section 301* (WTO 1999).

10 Up until fairly late in the Uruguay Round negotiations, it was not at all clear that the result would take the form of the "single undertaking". Throughout much of the TRIPS negotiations

it was thought that the result might take the form of a "code" among a limited group of countries, rather than the universally binding agreement ultimately adopted. See Abbott (1989).

11 See, e.g, GATT (1990 *Final*), *Draft Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations* (the "Brussels" text), para.3 and Annex III, "Trade-Related Aspects of Intellectual Property Rights, including Trade in Counterfeit Goods, Commentary," which states:

> "It was agreed in the Mid Term Review that the institutional aspects of the international implementation of the results of the negotiations on TRIPS would be decided by Ministers pursuant to the final paragraph of the Punta del Este Declaration.
>
> There are thus a number of outstanding issues which can be settled only in the light of the decision on the institutional aspects of the international implementation of the results. These issues include not only that of the structure referred to above but also the arrangements for dispute settlement…."

12 The Uruguay Round negotiations had reached an impasse in 1991. At that stage, Director-General Arthur Dunkel decided on his own initiative to prepare a complete negotiating draft text of a result to move the negotiations to a conclusion. The text he distributed in December 1991 accomplished its objective, laying out a proposal that was largely acceptable to negotiators from all sides. This text is known as the "Dunkel Draft". The Dunkel Draft introduced in the draft dispute settlement understanding provisions that addressed the integration of the various agreements, and it was at this stage that draft provisions on cross-retaliation were introduced. There are numerous differences between the Dunkel Draft and the final Uruguay Round Agreements. Examining these differences helps to explain the meaning of the ultimately adopted WTO texts. See GATT (1991), *Uruguay Round - Draft Final*.

13 Proposals to authorise retaliation in the field of goods for failure to implement dispute settlement recommendations with respect to TRIPS were among the very first presented in the Uruguay Round negotiations. In its 20 Oct. 1987 submission to the TRIPS Negotiating Group, the US indicated: "In the event that recommendations [of a dispute settlement panel] are not complied with, the agreement should provide for retaliation including the possibility of withdrawal of equivalent GATT concessions or obligations". See GATT (1987, para.(a)(4)).

14 Concern by developing countries that cross-retaliation under GATT for noncompliance with respect to *TRIPS* was expressed in response to developed country proposals, see, e.g. GATT (1990 TRIPS, paras.11-13 & 27). See also footnote 15, *infra*.

15 Developing countries, including Argentina, Brazil, Chile, India, Nigeria and Peru did not support the idea of cross-retaliation. For example, in their joint proposal of May 1990 for a TRIPS Agreement, these countries limited the mandatory possibilities for dispute settlement to consultations, with optional voluntary recourse to other methods of dispute settlement, including arbitration (GATT, 1990 *Communication*, arts.19-20). These countries focused their attention in this phase of the negotiations on limiting threats and recourse to "unilateral measures" to redress alleged IPR deficiencies.

See, e.g, ibid., at art.22, as also incorporated in GATT (1990, *Chairman's Report*), TRIPS Negotiating Group Chairman's Report to the GNG, Annex, Part VI, para. 3D.

16 In discussions regarding an EC draft negotiating proposal, the record of the TRIPS Negotiating Group indicates: "In response to a question as to whether, under the Community proposal,

retaliation in the intellectual property field for a violation of GATT obligations would be possible, the representative of the European Communities said that if the TRIPS agreement were fully incorporated into the General Agreement and if all the normal requirements of the dispute settlement process were met, including authorisation for the retaliation by the Council, retaliation in the intellectual property field would be permissible, provided that it did not contravene the other international obligations of the country concerned" (see GATT, 1990 *TRIPS*, para. 27).

17 TRIPS Agreement, art. 64.1.

18 In a non-violation complaint, a Member alleges that while another Member has not acted inconsistently with an agreement, the other Member has acted in a way that deprives the complaining Member of benefits it expected to receive when it entered into the agreement. See Abbott (2000), and Annex note 24, *infra*.

19 TRIPS Agreement, art. 64.2.

20 Ibid., art. 64.3.

21 WTO (2000), *EC – Bananas III*, Decision by the Arbitrators.

22 Ibid., e.g. paragraphs 21-22 and 36.

23 Ibid., paras. 38 & 40.

24 Ibid., paras. 150-51.

25 Ibid., e.g. para. 57.

26 Ibid., para. 52.

27 Ibid., para. 73, 125-26.`

28 Ibid., e.g. paras. 94-96.

29 Ibid., e.g. paras. 100-01.

30 Ibid., e.g. paras. 129, 132 & 137.

31 Ibid., para. 139.

32 Ibid., e.g. paras. 141-47.

33 Ibid., paras. 159-64.

34 Ibid., para. 165.

35 This is the view expressed by the arbitrators. Recall, however, that paragraph 5(d) of the Doha Declaration on the TRIPS Agreement and Public Health confirms that relevant provisions of the TRIPS Agreement "leave each Member free to establish its own regime for such exhaustion without challenge". It is not clear that the arbitrators sufficiently accounted for this confirmed interpretation of the TRIPS Agreement.

36 WTO (2000), *EC – Bananas III*, para. 156.

37 Ibid., paras. 157-58.

38 Ibid., para. 152.

39 See the WTO Dispute Settlement Summary of Dispute DS27 (*EC – Bananas III*) which notes: "On 18 May 2000, the DSB authorised Ecuador to suspend concessions to the European Communities as requested".

40 See McCall Smith (2006).

41 See WTO (2007), *US – Gambling*.

42 In Antigua's proceeding against the US, the parties agreed on sequencing in accordance with this generally accepted practice (see WTO Secretariat Dispute Settlement Summary for Dispute DS285 (*US – Gambling*) at http://www.wto.org).

43 WTO (2007 *US – Gambling*, para.4.20).

44 Ibid., e.g. paras. 4.90-4.100.

45 Ibid., paras. 4.109-4.111.

46 Ibid.

47 Ibid., para. 5.6.

48 Ibid., para. 5.3.

49 Ibid.

50 Ibid., para. 5.11.

51 See WTO Dispute Settlement Summary for Dispute DS285 (*US – Gambling*). Recall that Article 22.7 of the DSU provides that: "The DSB shall be informed promptly of the decision of the arbitrator and shall *upon request*, grant authorisation to suspend concessions or other obligations where the request is consistent with the decision of the arbitrator, unless the DSB decides by consensus to reject the request." [italics added]

52 Inside US Trade (2005), arising out of WTO (2005), *United States – Subsidies On Upland Cotton*.

53 See WTO (2007 *US – Cotton*).

54 In Brazil's proceeding against the US in the Uplands Cotton proceeding, the parties also accepted the generally agreed sequencing framework (see WTO Dispute Settlement Summary for Dispute DS267).). See generally Jackson et al. (2008), at 348-50.

55 See Inside US Trade (2005).

56 There is a general problem confronting many developing countries in initiating and prosecuting WTO dispute settlement actions, namely their limited financial and personnel resources. This problem is at least partially mitigated by the operation of the Advisory Centre on WTO Law that provides legal assistance to developing countries.

57 This does not mean that larger developing economy countries may not determine that withdrawal of concessions in the same sector (e.g. goods), or under the same agreement,

will not be practical or effective. That determination involves a number of factors including, for example, the extent to which increased tariffs would raise primary or intermediate goods input costs for local manufacturers, thereby rendering those manufacturers less competitive. The above text is intended only to distinguish smaller economy developing countries with virtually no possibility of retaliating at a level which may have an impact on a noncompliant developed Member from those that may be large enough to create a material impact, even though the latter may harm themselves through retaliation in the same sector or under the same agreement.

58 See e.g. Kanter and Rivlin (2007).

59 This is not invariably the case as rents or royalties may be reinvested locally.

60 Even if there is some net R&D inhibiting effect, this seems unlikely to be a key factor in the decision-making of particular developing countries given the comparatively low proportion of global R&D conducted in developing countries, particularly in small economy developing countries.

61 Recognising that the TRIPS Agreement does impose certain limited obligations on governments with respect to criminal enforcement. See UNCTAD-ICTSD (2005, 619-21).

62 See European Court of Justice (1994), *Federal Republic of Germany v Council of the European Union – Bananas – Common Organisation of the Markets – Import Regime*. From the Summary:

7. The same considerations justify the restriction on the freedom of traders who previously operated on open markets to pursue their trade or business, the substance of that right not being impaired. With respect to those traders' right to property, the loss of market shares does not impact that right, since the market share held before the establishment of a common organisation of a market constitutes only a momentary economic position exposed to the risks of changing circumstances and is not covered by the right to property. Similarly, a position on the market resulting from an existing situation cannot, especially if that situation is contrary to the rules of the common market, benefit from protection on the basis of acquired rights or legitimate expectation.

63 See further discussion in Section 7(b).

64 The Vienna Convention provides:

Article 30

Application of successive treaties relating to the same subject-matter

1. Subject to Article 103 of the Charter of the United Nations, the rights and obligations of States parties to successive treaties relating to the same subject-matter shall be determined in accordance with the following paragraphs.

2. When a treaty specifies that it is subject to, or that it is not to be considered as incompatible with, an earlier or later treaty, the provisions of that other treaty prevail.

3. When all the parties to the earlier treaty are parties also to the later treaty but the earlier treaty is not terminated or suspended in operation under article 59, the earlier treaty applies only to the extent that its provisions are compatible with those of the latter treaty.

4. When the parties to the later treaty do not include all the parties to the earlier one:

> (a) as between States parties to both treaties the same rule applies as in paragraph 3;
>
> (b) as between a State party to both treaties and a State party to only one of the treaties, the treaty to which both States are parties governs their mutual rights and obligations.

5. Paragraph 4 is without prejudice to article 41, or to any question of the termination or suspension of the operation of a treaty under article 60 or to any question of responsibility which may arise for a State from the conclusion or application of a treaty the provisions of which are incompatible with its obligations towards another State under another treaty.

65 Under general principles of equity, an “estoppel” arises when a first party promises or engages in conduct indicating its intention to act in a certain way, thereby establishing a legitimate expectation for a second party. The first party may not thereafter engage in conduct intended to defeat the legitimate expectation of the second party.

The *Nuclear Tests Case* (Australia v. France), ICJ Judgment of 20 Dec. 1974 (I.C.J. Reports 1974, at 253) is a widely noted decision of the International Court of Justice in which France established an estoppel (i.e. a binding legal obligation) against further nuclear testing in the Pacific by its own formal unilateral pronouncements.

In the WTO panel decision in the *US – Section 301* case (WTO, 1999), the parties extensively briefed the significance of the Nuclear Tests Case. The panel ultimately determined with regard to unilateral statements of the United States:

> Accordingly, we find that these statements by the US express the unambiguous and official position of the US representing, in a manner that can be relied upon by all Members, an undertaking that the discretion of the USTR has been limited so as to prevent a determination of inconsistency before exhaustion of DSU proceedings. (para. 7.125)
>
> … It of course follows that should the US repudiate or remove in any way these undertakings, the US would incur State responsibility since its law would be rendered inconsistent with the obligations under Article 23. (para. 7.126)

The principle is established that states may by their conduct and/or pronouncements establish legal obligations against conduct inconsistent with such conduct and/or pronouncements. By accepting the rules on cross-retaliation that apply to the TRIPS Agreement, WTO Members have by their own conduct accepted an obligation not to defeat those rules by recourse to alternative forums.

See also, e.g. United States Court of Appeals (1985), *Hass v. Darigold Dairy Products*, which states:

Equitable estoppel has been defined as

> [t]he doctrine by which a person may be precluded by his act or conduct... from asserting a right which he otherwise would have had. [Citation.] The effect of voluntary conduct of a party whereby he is precluded from asserting rights against another who has justifiably relied upon such conduct and changed his position so that he will suffer injury if the former is allowed to repudiate the conduct.

Black's Law Dictionary 483 (5th ed. 1979), cited in part in Jablon, 657 F.2d at 1068; the doctrine has also been described as standing for the principle that where one party has by his representations or his conduct induced the other party to a transaction to give him an advantage which it would be against equity and good conscience for him to assert, he would not in a court of justice be permitted to avail himself of that advantage. Amalgamated Clothing, 602 F.2d at 1370 (quoting Union Mutual Insurance Co. v. Wilkinson, 80 US (13 Wall.) 222, 233, 20 L.Ed. 617 (1872)).

66 See, e.g. Bridges Weekly (2008).

The Berne Convention provides:

Article 20 Special Agreements Among Countries of the Union

> The Governments of the countries of the Union reserve the right to enter into special agreements among themselves, in so far as such agreements grant to authors more extensive rights than those granted by the Convention, or contain other provisions not contrary to this Convention. The provisions of existing agreements which satisfy these conditions shall remain applicable.

67 Article 11 of the WCT provides that: "Contracting Parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this Treaty or the Berne Convention and that restrict acts, in respect of their works, which are not authorised by the authors concerned or permitted by law." Article 12(1) of the WTO provides:

Contracting Parties shall provide adequate and effective legal remedies against any person knowingly performing any of the following acts knowing, or with respect to civil remedies having reasonable grounds to know, that it will induce, enable, facilitate or conceal an infringement of any right covered by this Treaty or the Berne Convention:

> (i) to remove or alter any electronic rights management information without authority;
>
> (ii) to distribute, import for distribution, broadcast or communicate to the public, without authority, works or copies of works knowing that electronic rights management information has been removed or altered without authority.

Articles 18 and 19 of the WPPT respectively provide the same.

68 See Abbott (1989).

69 See, e.g. Abbott (2007).

70 See, e.g. Abbott (2006); Fink and Reichenmiller (2005); Roffe (2004); Vivas-Eugui (2003).

71 Regarding third parties, the dispute settlement procedure provides:

Article 20.6: Request for an Arbitral Panel

4. If a Party does not join as a complaining Party in accordance with paragraph 3, it normally shall refrain thereafter from initiating or continuing:

> (a) a dispute settlement procedure under this Agreement; or

(b) a dispute settlement proceeding under the WTO Agreement or under another free trade agreement to which it and the Party complained against are party, on grounds that are substantially equivalent to those available to it under this Agreement, regarding the same matter in the absence of a significant change in economic or commercial circumstances.

72 CAFTA, Art. 10.3.

73 Ibid., Art. 10.4.

74 Ibid., Art. 10.5.

75 Ibid., Art. 10.7.

76 Article 10.9 regarding performance requirements, which generally prohibits the imposition of transfer of technology requirements (at subparagraph 1(f)), provides:

(b) Paragraph 1(f) does not apply:

(i) when a Party authorises use of an intellectual property right in accordance with Article 31 of the TRIPS Agreement, or to measures requiring the disclosure of proprietary information that fall within the scope of, and are consistent with, Article 39 of the TRIPS Agreement; or

(ii) when the requirement is imposed or the commitment or undertaking is enforced by a court, administrative tribunal, or competition authority to remedy a practice determined after judicial or administrative process to be anticompetitive under the Party's competition laws. [footnotes omitted]

77 See Abbott (1990).

78 See *US – Gambling* arbitration, *supra* note 41.

79 See Hamilton (1941) and Machlup (1958), and others cited in Abbott (1989).

80 See, e.g. USITC Study written by former Pfizer employee, R. Sherwood, directly transposing unverified data from industry questionnaire, discussed in Abbott (1989).

81 See, e.g. Gadbaw and Richards (1988).

82 See, e.g. Burstein (1984).

83 For example, see the Fifth Annual BSA and IDC Global Software Piracy Study to illustrate the type of assumptions made by industry groups to support assertions of financial losses. http://global.bsa.org/idcglobalstudy2007//studies/2007_global_piracy_study.pdf. Compare that with the model and assumptions used by Chaudhuri et al. (2006).

84 See, e.g. Chaudhuri et al. (2006); Fink (2001); Watal (2000).

85 See generally, Maskus (2000).

86 See, e.g. Longcroft (2008), including references to various securitised transactions, such as bonds backed by copyright royalties, and the treatment of patents and other IPRs as commercial assets subject to securitisation.

87 See, e.g. ibid. discussing activities of the American Stock Exchange, and the German Institute for Standardization, as well as the International Organization for Standardization.

88 See WTO (2001).

89 Ibid.

90 See WTO (2005 EC, paras.7.141-7.171).

91 Ibid., at para. 7.149.

92 See WTO (2002).

93 These are minimums prescribed by the TRIPS Agreement, extended in some jurisdictions.

94 See, e.g. Fifth Annual BSA and IDC Global Software Piracy Study, ibid. op. cit. 83.

95 There are, as noted, a variety of "rights to exclude" provided for by the TRIPS Agreement and incorporated provisions of the Berne Convention.

96 See WTO (2001).

97 Ibid. paras. 3.36-3.58.

98 An additional useful feature of the collective management system reference in the US Copyright Act arbitration was that it identified copyright holders by their nationality, which is another factor that needs to be addressed by a suspension system. See ibid., paras. 3.54-3.56

99 The panel in the *US – Copyright* case used the WIPO Copyright Treaty as a source of interpretative guidance. This practice was questionable in light of the limited number of parties to the WCT.

100 Virtually any system of DRM can be "broken". The process of DRM from the standpoint of copyright holders is to stay sufficiently ahead of the deconstruction technology to earn a return on content.

101 This aspect of the problem was identified by Sisule Musungu in an email of 27 July 2008.

102 Berne Convention, art 5(2).

103 See, e.g. Correa (2004).

104 See, e.g. case law from various jurisdictions cited in Abbott (2000); and see Abbott (2002, 494-97), discussing different perspectives on "consent" issues.

105 The arbitration panel in *EC – Bananas III*, discussed supra, refers to footnotes 13 and 14 of article 51 of the TRIPS Agreement to suggest that, at least in the field of copyright "piracy", WTO Members have recognised a doctrine of "consent".

106 Instead, the patent holder is allowed to seek compensation before a specialised court for the government's use of the patents.

107 If the government suspends IPRs in copyright or trademark, it may be useful to simultaneously suspend criminal enforcement penalties for copyright piracy and/or trademark infringement

on a commercial scale because the type of activity that the government is allowing might, under ordinary circumstances, constitute criminal activity. Although a private operator under a suspension regime presumably would not evidence the requisite "intent" to violate criminal law, it would nonetheless avoid confusion to suspend penalties along with related IPRs.

108 Third parties might find disclosure of the information otherwise included in a patent application from other countries so that use could be made of the inventions during the suspension period. Alternatively, the suspending government might publish patent applications according to its ordinary schedule, but delay further processing of applications.

109 See European Court of Justice (1994 *Uruguay*).

110 There is no uniform rule regarding whether local incorporation of a legal entity will entitle a foreign-national owner to treatment as a domestic person from a constitutional protection standpoint. Courts may grant domestic constitutional protection to a locally incorporated enterprise, or they may treat the foreign beneficial owner of the local enterprise as the real party in interest and apply the constitutional treatment accorded to aliens. This may depend upon the extent of control exercised from abroad.

111 TRIPS Agreement, art. 31(h).

112 For example, the *India – Mailbox* case decided by the WTO Appellate Body substantially involved in a question of allocation of authority to regulate patents within the Indian constitutional framework (WTO 1997).

ANNEX – INTERPRETATION AND APPLICATION OF ARTICLE 22 OF THE DSU

Article 22, WTO Dispute Settlement Understanding
Compensation and the Suspension of Concessions

1. Compensation and the suspension of concessions or other obligations are temporary measures available in the event that the recommendations and rulings are not implemented within a reasonable period of time. However, neither compensation nor the suspension of concessions or other obligations is preferred to full implementation of a recommendation to bring a measure into conformity with the covered agreements. Compensation is voluntary and, if granted, shall be consistent with the covered agreements.

2. If the Member concerned fails to bring the measure found to be inconsistent with a covered agreement into compliance therewith or otherwise comply with the recommendations and rulings within the reasonable period of time determined pursuant to paragraph 3 of Article 21, such Member shall, if so requested, and no later than the expiry of the reasonable period of time, enter into negotiations with any party having invoked the dispute settlement procedures, with a view to developing mutually acceptable compensation. If no satisfactory compensation has been agreed within 20 days after the date of expiry of the reasonable period of time, any party having invoked the dispute settlement procedures may request authorisation from the DSB to suspend the application to the Member concerned of concessions or other obligations under the covered agreements.

3. In considering what concessions or other obligations to suspend, the complaining party shall apply the following principles and procedures:

(a) the general principle is that the complaining party should first seek to suspend concessions or other obligations with respect to the same sector(s) as that in which the panel or Appellate Body has found a violation or other nullification or impairment;

(b) if that party considers that it is not practicable or effective to suspend concessions or other obligations with respect to the same sector(s), it may seek to suspend concessions or other obligations in other sectors under the same agreement;

(c) if that party considers that it is not practicable or effective to suspend concessions or other obligations with respect to other sectors under the same agreement, and that the circumstances are serious enough, it may seek to suspend concessions or other obligations under another covered agreement;

(d) in applying the above principles, that party shall take into account:

 (i) the trade in the sector or under the agreement under which the panel or Appellate Body has found a violation or other nullification or impairment, and the importance of such trade to that party;

 (ii) the broader economic elements related to the nullification or impairment and the broader economic consequences of the suspension of concessions or other obligations;

(e) if that party decides to request authorisation to suspend concessions or other obligations pursuant to subparagraphs (b) or (c), it shall state the reasons therefore in its request. At the same time as the request is forwarded to the DSB, it also shall be forwarded to the relevant Councils and also, in the case of a request pursuant to subparagraph (b), the relevant sectoral bodies;

(f) for purposes of this paragraph, "sector" means:

(i) with respect to goods, all goods;

(ii) with respect to services, a principal sector as identified in the current "Services Sectoral Classification List" which identifies such sectors;[1] [footnotes renumbered]

(iii) with respect to trade-related intellectual property rights, each of the categories of intellectual property rights covered in Section 1, or Section 2, or Section 3, or Section 4, or Section 5, or Section 6, or Section 7 of Part II, or the obligations under Part III, or Part IV of the Agreement on TRIPS;

(g) for purposes of this paragraph, "agreement" means:

(i) with respect to goods, the agreements listed in Annex 1A of the WTO Agreement, taken as a whole as well as the Plurilateral Trade Agreements in so far as the relevant parties to the dispute are parties to these agreements;

(ii) with respect to services, the GATS;

(iii) with respect to intellectual property rights, the Agreement on TRIPS.

4. The level of the suspension of concessions or other obligations authorised by the DSB shall be equivalent to the level of the nullification or impairment.

5. The DSB shall not authorise suspension of concessions or other obligations if a covered agreement prohibits such suspension.

6. When the situation described in paragraph 2 occurs, the DSB, upon request, shall grant authorisation to suspend concessions or other obligations within 30 days of the expiry of the reasonable period of time unless the DSB decides by consensus to reject the request. However, if the Member concerned objects to the level of suspension proposed, or claims that the principles and procedures set forth in paragraph 3 have not been followed where a complaining party has requested authorisation to suspend concessions or other obligations pursuant to paragraph 3(b) or (c), the matter shall be referred to arbitration. Such arbitration shall be carried out by the original panel, if members are available, or by an arbitrator[2] appointed by the Director-General and shall be completed within 60 days after the date of expiry of the reasonable period of time. Concessions or other obligations shall not be suspended during the course of the arbitration.

7. The arbitrator[3] acting pursuant to paragraph 6 shall not examine the nature of the concessions or other obligations to be suspended but shall determine whether the level of such suspension is equivalent to the level of nullification or impairment. The arbitrator may also determine if the proposed suspension of concessions or other obligations is allowed under the covered agreement. However, if the matter referred to arbitration includes a claim that the principles and procedures set forth in paragraph 3 have not been followed, the arbitrator shall examine that claim. In the event the arbitrator determines that those principles and procedures have not been followed, the complaining party shall apply them consistent with paragraph 3. The parties shall accept the arbitrator's decision as final and the parties concerned shall not seek a second arbitration. The DSB shall be informed promptly of the decision of the arbitrator and shall upon request, grant authorisation to suspend concessions or other obligations where the request is consistent with the decision of the arbitrator, unless the DSB decides by consensus to reject the request.

8. The suspension of concessions or other obligations shall be temporary and shall only be applied until such time as the measure found to be inconsistent with a covered

agreement has been removed, or the Member that must implement recommendations or rulings provides a solution to the nullification or impairment of benefits, or a mutually satisfactory solution is reached. In accordance with paragraph 6 of Article 21, the DSB shall continue to keep under surveillance the implementation of adopted recommendations or rulings, including those cases where compensation has been provided or concessions or other obligations have been suspended but the recommendations to bring a measure into conformity with the covered agreements have not been implemented.

9. The dispute settlement provisions of the covered agreements may be invoked in respect of measures affecting their observance taken by regional or local governments or authorities within the territory of a Member. When the DSB has ruled that a provision of a covered agreement has not been observed, the responsible Member shall take such reasonable measures as may be available to it to ensure its observance. The provisions of the covered agreements and this Understanding relating to compensation and suspension of concessions or other obligations apply in cases where it has not been possible to secure such observance.[4]

1. Background of Article 22 of the DSU

At its inception in 1947, and for several decades thereafter, disputes between the GATT Contracting Parties were largely treated as diplomatic affairs. The focus of the dispute settlement system was to find an appropriate political accommodation. By the late 1970s, however, GATT dispute settlement had evolved into a relatively standardised procedure in which panels of arbitrators would render legal decisions regarding the appropriate interpretation of the agreement that the Contracting Parties were expected to respect and implement. This process evidenced certain problems.

Because the GATT acted only by the consensus of its Contracting Parties, a party to a dispute could refuse to accept the appointment of a panel, thereby delaying resolution of the dispute. More important, a party to a dispute could block adoption of the decision of the panel, thereby preventing it from becoming binding. Finally, there was no prescribed mechanism for assuring that the losing party in a dispute would comply with the decision of the panel in a reasonable period of time, nor was there a specific mechanism for challenging the way in which a decision was implemented.

The Dispute Settlement Understanding that is an integral part of the WTO Agreement addressed these gaps in the GATT dispute settlement system. Members of the WTO do not have the right to block the appointment of panels nor to refuse adoption of panel reports. There is a series of mechanisms designed to ensure timely implementation of recommendations and for resolving disputes about the adequacy of implementation efforts. Notably, the WTO DSU established the Appellate Body before which Members can obtain review of panel decisions. In light of the more binding character of WTO dispute settlement compared to GATT dispute settlement, it was considered important that a single “permanent” body be established to ensure the quality and consistency of dispute settlement decisions.

As noted in the main body of this paper, although the issue of potential cross-retaliation was discussed in the TRIPS Negotiating Group throughout the Uruguay Round, because of agreement that overall institutional issues were to be considered only towards the end of the Round, it was at a fairly late stage that the question of how the dispute settlement system might be “integrated” among three main subject matter areas (GATT, GATS and TRIPS) was formally addressed.[5] When Director-General Arthur Dunkel distributed the “Dunkel Draft” negotiating text in December 1991, provisions were introduced in the draft dispute settlement understanding that addressed the integration of the various agreements, and it was at this stage that draft provisions on cross-retaliation were introduced.[6]

The Dunkel Draft provisions addressing cross-retaliation were similar to those ultimately adopted in the DSU, but there are a few differences. The cross-retaliation provisions in the Dunkel Draft were part of a text separate from the draft DSU.[7] The DSU uses different language than the Dunkel Draft with respect to what will be considered a "sector" in the field of TRIPS for purposes of assessing cross-retaliation.[8] The language of the Dunkel Draft referred to "any [intellectual property] right" covered by the TRIPS Agreement as a sector.[9] The DSU refers instead to the "categories" of IPRs specified in each Section of Part II of the TRIPS Agreement. There are fewer enumerated "categories" heading the various sections of Part II than there are forms of intellectual property covered by the TRIPS Agreement (as confirmed by the Appellate Body in the *US – Havana Club* decision).[10] The DSU modification to the Dunkel Draft arguably reduced the number of sectors that could be assessed for cross-retaliation.

2. Interpretation and Analysis of Article 22 of the DSU

Analysis of potential opportunities for cross-retaliation involving the withdrawal of concessions under the TRIPS Agreement involves interpretation of the meaning of Article 22 of the DSU. Such interpretation must take into account the relationship between the DSU and other WTO agreements, including the TRIPS Agreement. The Vienna Convention on the Law of Treaties provides the basic rules of treaty interpretation applicable to the WTO agreements. Pursuant to Article 31 of the VCLT, the treaty interpreter looks to the language of the agreement in its context, including agreements made subsequent to its adoption regarding interpretation. If the treaty language is ambiguous, the interpreter may turn to the negotiating history as a supplementary means of interpretation.[11]

a. Paragraph 1 – Compliance Preferred to Suspension

Potential WTO remedies are stated as being of two types: "compensation" and the "suspension of concessions". The DSU system does not contemplate the award of damages. Its underlying objective is to promote the rebalancing of negotiated concessions.

"Compensation" refers to a payment or other benefit from a Member obligated to comply with a DSB ruling to the Member owed compliance.[12] Compensation may appear to be a form of damages. This presumably accounts for the "voluntary" nature of compensation as specified in the DSU. The DSB does not assess the terms of voluntary compensatory settlements, provided they do not violate the covered WTO agreements.[13]

"Suspension of concessions" is the enforcement remedy made available to Members that are subject to non-implementation of DSB decisions. In trade terms, the granting by one Member to another Member of a trade benefit, such as a reduction in tariff rates or removal of quotas, is considered a "concession". A concession has a value that can be calculated, at least in approximate terms. For example, by examining pre-existing tariff rates, trade flows, and supply and demand sensitivity to price changes (or "elasticities"), economists should be able to predict within a reasonable range the extent to which market access will improve following a reduction in tariff rates. Much of the WTO trade negotiating mechanism is based on an understanding that changes in trade terms result in changes to trade flows that can be predicted with some degree of accuracy.

The introduction of trade in services and TRIPS into the WTO system complicated calculation of the value of concessions. The economic impact of changes in services and IPR regulation are much less well understood by economists than the impact of changes in goods regulation. There are a number of reasons for this. Goods are tangible and their supply is relatively "inelastic" as compared with intangible services and content protected by IPRs. In addition, changes to services and IPR regulation tend to be more complex than changes to goods regulation, with less precisely predictable outcomes. Calculating the value of concessions in the TRIPS Agreement is addressed in the main body of this paper.

"Suspension" can be defined as the temporary removal of a privilege.[14] The term implies limited duration. Article 22.1 makes this explicit by stating that compensation and suspension of concessions are "temporary" measures. This is because the DSU expressly provides that WTO Members are expected to implement DSB decisions, thereby establishing an international legal obligation. Article 22.1, by further stating that full implementation is "preferred" to compensation or suspension of concessions, appears to hedge the obligation of full implementation. The statement that WTO Members prefer A to B does not imply that B is unacceptable. Rather, that B is "less preferred".

The issue of whether the DSU requires strict implementation of DSB decisions, or permits a Member to avoid implementation through payment of compensation or suffering suspension of concessions, has been the subject of a good deal of scholarly discourse.[15] There is no consensus on this issue. Scholars and WTO Members hold different views as to whether DSB decisions establish a strict implementation obligation under international law, or instead may be adequately addressed by providing remedial adjustment.

It is useful to note here that, notwithstanding the terms of Article 22.1, compensation or suspension of concessions is the prescribed remedy for an adverse finding based upon a non-violation nullification or impairment claim, as per the specific terms of Article 26.1 of the DSU. The modification or withdrawal of an offending measure is not the preferred remedy in all cases. This aspect is discussed further with respect to Article 22.3.

b. Paragraph 2 – Triggering Suspension Procedures

Article 22.2 establishes the procedure to be followed if a Member is failing to implement the DSB decision within the "reasonable period of time" established pursuant to Article 21.3 of the DSU. Pursuant to Article 21.3, the reasonable period of time is a maximum of 15 months from the adoption of the relevant panel or Appellate Body report by the DSB, but may have been otherwise set by approval of a Member proposal by the DSB, mutual agreement of the disputing parties, or as otherwise determined by a compliance panel.[16]

The question of whether a party has brought its measures into conformity with the decision adopted by the DSB is subject to determination by a compliance panel pursuant to Article 21.5 of the DSU. This led to debate among Members concerning whether it is appropriate to suspend concessions prior to conclusion of such a compliance panel determination. On one hand, the language of Article 22.2 suggests that it is not necessary to wait for a compliance panel determination because it refers to the end of the "reasonable period of time" as the starting point for the 20-day period of negotiation concerning compensation. On the other hand, a Member which suspends concessions prior to a decision by a compliance panel concerning whether the DSB decision has been properly implemented risks a subsequent finding that the other Member had, in fact, fully implemented the decision. This could – and in the *EC – Bananas III* case did – lead to an additional round of dispute settlement[17]. Following extensive discussion among DSB Members, it is now generally accepted that arbitration pursuant to Article 22.2 may be initiated promptly following expiration of the reasonable period of time for implementation, but that such arbitration will be suspended until the compliance panel has made its ruling.[18] There are proposals as part of the Doha Development Agenda to formally resolve the apparent conflict between the time frames established in Articles 21 and 22.[19]

Article 22.1 makes clear that payment of compensation is voluntary, and Article 22.2 suggests that neither Member is obligated to accept compensation to resolve their dispute. The text refers to "mutually acceptable" compensation, appearing to leave the complaining Member free to reject an offer of compensation.[20]

Upon the expiration of 20 days following the reasonable period of time for implementation, the injured Member "may request authorisation from the DSB to suspend the application to the Member concerned of concessions or other obligations under the covered agreements". Clearly, authorisation of suspension must be requested from the DSB. However, Article 22.6 makes clear that authorisation by the DSB is effectively automatic, in the sense that a consensus against authorisation is required to block suspension, so that the Member seeking authorisation would be required to vote against its own request. This leaves questions of timing – and arbitration – that are addressed in Article 22.6.

It is critical to note that Article 22.2 refers to the suspension of concessions or "other obligations under the covered agreements". This language may be used to address an objection against the suspension of IPRs under the TRIPS Agreement to the effect that IPRs are not "concessions" (which, from an economic standpoint, they are). *Even if hypothetically* granting IPR protection is not a concession, it is an "other obligation" under the TRIPS Agreement.

c. Paragraph 3 – Principles and Procedures

There are several important points made by the introductory clause of Article 22.3. First, the procedure applied in the following subsections is mandatory. This follows from the terminology "shall apply". The term "shall" is a directive or order to the subject.

Second, it is the "complaining party" that is to make the determinations prescribed by the procedure.

Third, reiterating an element discussed previously, the complaining party may suspend "concessions" or "other obligations", which avoids conceptual debate regarding the nature, for example, of government obligation to protect IPRs.

Fourth, the complaining party must apply both "principles" and "procedures". A "principle" is a higher-level governing rule that controls subordinate rules or decisions.[21] Therefore, specific decisions regarding suspension of concessions are governed by the higher-level rules of the "principles". A "principle", however, is susceptible to the application of exceptions, express or implied. A "procedure" is a series of steps to be followed.[22]

i. Paragraph 3(a) – General principle of same sector

> "the general principle is that the complaining party should first seek to suspend concessions or other obligations with respect to the same sector(s) as that in which the panel or Appellate Body has found a violation or other nullification or impairment;"

Something that is "general" applies to the entire set of subject matter under consideration. A "general principle" is a governing rule that applies broadly to the full set of subject matter. However, a "general" principle may be susceptible to narrower "specific principles" as expressly or implicitly provided.

"Seek" as used in the present context means to make an effort at, try or attempt.[23] It implies that the complaining party or "seeker" need not be successful in its efforts. Because the procedures of Article 22.3 are mandatory, it is necessary that the complaining party make an effort to act as prescribed, but in regard to this subparagraph (a), it is not mandatory to achieve a particular result.

The "same sector(s)" can only be defined with reference to subparagraph (f) below. With respect to that "same sector(s)", its identification is determined by reference to the decision of the panel or Appellate Body. Panel and Appellate Body reports specifically identify the covered agreement and provision as to which a violation is found, so as a general rule it should not be difficult to determine the locus of a violation. The reference to "or other nullification or impairment" appears to contemplate the adverse findings of a panel or the Appellate Body regarding a so-called "non-violation nullification or impairment" claim. The remedy for a non-violation finding, as per the terms of Article 26.1 of the DSU, is limited to a "mutually satisfactory adjustment", which may include compensation or withdrawal concessions. The arbitrator under paragraph 6 below may include "compensation" as part of the recommendation for a mutually satisfactory adjustment, although that proposal is nonbinding.

At the present time, parties may bring non-violation complaints under the GATT and GATS, but not under the TRIPS Agreement.[24] If a WTO Member were to suffer a non-violation injury under the GATT or GATS, it is an interesting question whether it could seek to suspend concessions or other obligations under the TRIPS Agreement, even though a non-violation injury may not presently be claimed under the TRIPS Agreement.[25]

ii. Paragraph 3(b) – Not practicable or effective – on to different sectors under the same agreement

> "if that party considers that it is not practicable or effective to suspend concessions or other obligations with respect to the same sector(s), it may seek to suspend concessions or other obligations in other sectors under the same agreement;"

The term "if that party considers" implies discretion on the part of the complaining Member. "Considers" means that a party has evaluated relevant evidence or factors and made a determination in the exercise of its judgment.[26] It does not refer to an objectively prescribed outcome mandated by a particular balancing of elements. As with all matters of treaty implementation, Members are required to act in good faith, and there are limits to the range of decisions that might be made in good faith.

The complaining party may consider that it is not "practicable or effective" to suspend concessions in the same sector. "Practicable" and "effective" are stated in the alternative, using the conjunction "or". Thus, the complaining party may determine that the suspension *either* would not be "practicable" or that the suspension would not be "effective". It need not determine that the suspension would be both impractical and ineffective.

Something is "practicable" if it can be accomplished without undue difficulty.[27] Difficulties in accomplishing an objective may arise from many sources. That is, it may be difficult to reach a particular result for a variety of reasons. It may therefore be problematic to list reasons why it might not be practicable for a complaining party to suspend concessions in the same sector under a covered agreement. Plainly, if the complaining party made no concessions in a particular sector, it would have no concessions to suspend in that sector. But a party may also find it not practicable to suspend concessions in a particular sector because to do so would cause harm to its economy or to enterprises or consumers within its economy. It would defeat the purposes of the WTO dispute settlement system if Members that succeeded in demonstrating violation of a covered agreement could enforce their rights only by taking actions that caused themselves harm.[28]

However, DSU remedies are specifically applied – not subject to MFN extension – and it is possible to limit the impact of a suspension. For example, imports may be diverted through a specifically targeted tariff increase from enterprises within the complained-against Member to enterprises within other Members. This may inflict harm on exporters in the complained-against Member without significantly raising prices in the complaining Member. In some circumstances, the complained-against Member will be a sole source, or a sole low-cost source, of a particular consumable or intermediate input, and it will not be practicable to shift to suppliers in third-party Members.

A course of action is "effective" if it succeeds in accomplishing its objective. The objective of DSU remedies is, in the short-term, to rebalance concessions and, in the longer term, to impel the complained-against Member to implement the recommendations of the DSB. A developing country which relies upon imports to satisfy a wide range of consumer and business demands may find it very difficult to offset losses from restricted export markets by imposing trade barriers of its own. By raising tariffs on goods or restricting the importation of services, the developing country will be increasing consumer and enterprise costs. Although additional customs revenues may offset some private welfare losses, demand destruction from higher prices may cause substantial harm to the overall domestic economy. For many developing countries, it will be a challenge to find means to suspend concessions that will be "effective" in rebalancing concessions. It may be impractical to envision impelling a large economy country to fully implement a DSB decision because it is not possible to inflict a politically effective quantum of harm on exporters in the large economy country.

In this subparagraph (b), the test of practicability or effectiveness is directed towards deciding whether to suspend concessions in the same sector(s) where the violation was found, as a predicate to suspending concessions in a different sector under the same covered agreement. Subparagraph (f) defines the meaning of "sector". With respect to "goods" the matter is straightforward. All goods are part of the same sector. Therefore, any developing country considering whether it is practicable or effective to withdraw concessions for violation of a covered agreement concerning trade in goods is assessing whether it might suspend concessions with respect to imported goods as a whole. There is no additional sector under trade in goods. For trade in services, the matter is somewhat more complex because each of the principal services sectors in a WTO classification list is considered a "sector". For TRIPS, the assessment is also complex because each of the categories of IP in Part II, and the obligations under Part III and Part IV, are each considered separate sectors. The significance of these sectoral distinctions is discussed in subparagraph (f) below.

iii. Paragraph 3(c) – Not practicable or effective, and serious – another covered agreement

> "if that party considers that it is not practicable or effective to suspend concessions or other obligations with respect to other sectors under the same agreement, and that the circumstances are serious enough, it may seek to suspend concessions or other obligations under another covered agreement;"

Subparagraph (c) presupposes decisions under subparagraphs (a) and (b) that suspension of concessions in the same sector, and suspension of concessions in different sectors under the same covered agreement, will not be practicable or effective. If those decisions have been made and the complaining party considers that "the circumstances are serious enough", it may suspend concessions under "another covered agreement". It is in this context that the term "cross-retaliation" is most often used, although it might also be used to refer to suspension of concessions in different sectors under the same covered agreement.

There is little textual guidance as to the meaning of "circumstances" that are "serious enough". "Circumstances" refers to the general context in which a decision is made and is quite a broad term.[29] "Serious" is an adjective that characterises the significance of an event or situation, but can be used to connote a substantial range of significance.[30] A circumstance that is "serious" may be one that is "taken seriously" or it may be one that is "substantially threatening". "Enough" connotes a minimum threshold of adequacy.[31] "Serious enough" implies a substantial discretion from the standpoint of the complaining party. It is difficult to interpret "circumstances… serious enough" as imposing a substantial limitation on the complaining party with respect to the threat posed to the domestic economy or social welfare, particularly when applied in the context of the subjective view of the complaining party. It is the complaining party that must consider the circumstances "serious enough".

There appears therefore to be a relatively low threshold for pursuing cross-retaliation once a decision has been made that suspension of concessions in the same sector, or in different sectors under the same covered agreement, will not be practicable or effective. In other words, the "serious enough" standard does not appear to add significantly to the threshold.

iv. Paragraph 3(d) – Matters to take into account

"in applying the above principles, that party shall take into account:

(i) the trade in the sector or under the agreement under which the panel or Appellate Body has found a violation or other nullification or impairment, and the importance of such trade to that party;

(ii) the broader economic elements related to the nullification or impairment and the broader economic consequences of the suspension of concessions or other obligations;"

Use of the term "shall" indicates that it is mandatory for the complaining party to consider the factors listed in subparagraphs (d)(i) and (d)(ii) in assessing the possibilities for suspension of concessions. However, the list is of matters which the complaining party must "take into account", and this makes clear that the enumerated factors are neither exclusive, nor do they mandate a particular result. Also, as the introductory clause refers to "the above principles", it appears that the reference to consideration of factors applies to each of the steps in consideration of the appropriate place for suspension of concessions, that is, whether in the same sector, a different sector under the same agreement, or across agreements.

(a) Paragraph 3(d)(i) – Importance of trade

This subparagraph (i) refers to the trade in the sector or under the agreement in which a violation has been found, but provides minimal guidance as to whether that trade is to be viewed from the standpoint of imports, exports or other types of trade interest. Although it might initially be supposed that the complaining party is directed to examine the "level" of trade, whether imports, exports or other, the qualification that the complaining party should look to "the importance of such trade to that party" suggests that other factors in addition to the monetary amount should be looked at. For example, a country may import a relatively small amount of a mineral used in an essential industry. Despite the modest aggregate monetary volume of imports, the impact on the importing country of a restriction in availability could be very "important". Conversely, a complaining party might import a high volume of a particular commodity from the complained-against party, but in a sector of global trade in which there are many competitive exporting countries. In that context, the aggregate level of trade may be high, but the importance of the trade with a particular country might be relatively low because there are substitute suppliers.

(b) Paragraph 3(d)(ii) – Broader economic consequences

The consequences of a violation of the covered agreement are typically nullification or impairment of bargained for concessions. Under the DSU, a violation is presumed to give rise to nullification or impairment.[32] A WTO Member need not prove that it has lost trade opportunities in order to prevail on its claim. It need only demonstrate that the terms of trade have been altered in such a way as to give rise to that possibility. In some cases, violations will have resulted in significant, demonstrable nullification or impairment of benefits.

Subparagraph (ii) points out that the economic impact of a change in terms of trade in a particular sector of an economy may ripple through other parts of the economy. For example, an increase in the price of steel will lead to an increase in the price of automobiles and the cost of construction of new buildings that, all else being equal, will reduce demand for automobiles and construction, thereby having a broad impact on the economy. That is a "broader economic consequence" related to the nullification or impairment.

By the same token, suspension of concessions in a particular sector may injure the economy of the complaining party. Raising tariffs as a form of redressing injury may be problematic for a variety of reasons. This will typically raise prices for consumers, and may raise the price of intermediate goods for manufacturers. A complaining party must therefore consider how to withdraw concessions without injuring itself as much as or more than it injures the complained-against party. This takes into account the broader economic consequences of the suspension of concessions. It is this type of calculation that is likely to lead to a decision to suspend concessions in a sector different to the one in which the violation is found, or to suspend concessions under another covered agreement. Further consideration is given to the types of cross-retaliation that may be considered in the main body of this paper.

v. Paragraph 3(e) – Reasons

This provision provides transparency. The complaining party must state its reasons for requesting cross-retaliation, bearing in mind that approval by the DSB is effectively automatic.[33] The only significant interpretive question raised by this subparagraph is the meaning of "reasons". "Reasons" typically refer to the basis or grounds for decision. The term might be used in reference to a set of conclusions that resulted in a decision, or it might be used in reference to a detailed justification for a decision. Because the terminology of subparagraph (e) does not expressly require a detailed justification for the request, it should be sufficient for the complaining party to provide a set of reasons in the nature of conclusions drawn from analysis, rather than a detailed justification. If arbitration is requested pursuant to paragraph 6, the arbitrator may require the complaining party to provide more details regarding the manner in which its request was made.

vi. Paragraph 3(f) – Defining sectors

There is an interesting asymmetry in the definition of sectors in subparagraph (f). A violation with respect to trade in goods can be redressed automatically by suspension of concessions with respect to any goods. A complaining party that succeeds in demonstrating violation of a regulatory requirement with respect to manufactured goods may automatically suspend concessions with respect to imports of agricultural products. This is a broad grant of authority to the complaining Member. On the other hand, if a complaining party succeeds in demonstrating that it has been deprived of rights with respect to securing patents, it may not automatically suspend concessions in the field of copyright. As a consequence of the definitions in subparagraph (f), in order to cross-retaliate among different categories of IP, the complaining party must follow the procedures set forth in Article 22.3.[34]

vii. Paragraph 3(g) – Defining covered agreements

Subparagraph (g) broadly defines "agreement", particularly with respect to trade in goods. Annex 1A encompasses 13 agreements, and there are additionally four Plurilateral Agreements, so that in principle a violation of any one of 17 trade in goods-related agreements may automatically result in the suspension of trade concessions with respect to any goods.

d. Paragraph 4 – Equal to the Level of Nullification or Impairment

Recall that the objective of WTO dispute settlement remedies is to promote full implementation of the recommendations of the panel or Appellate Body and, failing that, to rebalance the bargained-for concessions between the disputing parties. If a Member has decided against full implementation, it is not clear why directly offsetting the value of its noncompliance against suspension of concessions by a complaining party will encourage compliance, since the defaulting Member will be getting what it bargained for in default. Nonetheless, by authorising the suspension of equivalent concessions the defaulting Member should be precluded from unfairly gaining from its failure of implementation. In addition, because the complaining party may suspend concessions against enterprises in fields that are politically important in the defaulting Member – and which may not be directly involved in the dispute – this may place pressure on the defaulting Member to comply.

Commentators have long noted the fundamental asymmetry of WTO remedies with regards to the relationship between developed and developing countries. While the economies of many developing countries can be severely adversely affected by the suspension of concessions by their major developed country trading partners, the converse is not true.[35] Many developing countries cannot cause significant harm to the economies of their developed country trading partners by suspending concessions because, as importers, they tend to represent only minor parts of the aggregate trade of the developed countries.

Article 22.4 states the basic rule that the level of suspended concessions or other obligations "shall" be equivalent to the level of nullification or impairment. It is a mandatory rule. It is doubtful, however, that any complained-against party will raise an objection if the proposed level of suspension is "less than" the level of nullification or impairment. The rule might more practically be stated that the level of suspension shall not exceed the level of nullification or impairment.

There have been a total of 17 arbitrations under Article 22.6 regarding the level of suspended concessions, although a significant number of these have involved the same dispute subject matter (but different complaining parties) and the number of distinct cases from an analytic standpoint is about 10. The decisions of the arbitrators are reviewed in the main body of this paper.

e. Paragraph 5 – Prohibited

The TRIPS Agreement does not expressly address the suspension of concessions or other obligations in the context of dispute settlement. In this sense, it appears reasonable to conclude that TRIPS permits the withdrawal of concessions or other obligations in the context of cross-retaliation. This conclusion is strongly reinforced by Article 22.3(f), which defines "sector" in terms of TRIPS obligations that would be superfluous (i.e. inutile) if the Agreement did not permit the suspension of concessions.

The TRIPS Agreement incorporates by reference terms of the Paris and Berne Conventions. The suspension of IPRs governed by the Paris and Berne Conventions is not expressly addressed by those agreements. Neither of those agreements expressly prohibits the suspension of rights or obligations in the context of dispute settlement. The relationship between those conventions and TRIPS cross-retaliation is examined further in the main body of this paper. It is adequate here to make the point that the cross-referenced agreements do not address the temporary suspension of rights or obligations undertaken to foster compliance with WTO rules.

f. Paragraph 6 – the Arbitrator

Paragraph 2 refers to those situations in which the complaining party considers that the complained-against party has failed to properly implement the decision adopted by the DSB. As noted earlier, pursuant to paragraph 6 the authorisation to suspend concessions is effectively automatic because rejection of the request would require the requesting party to vote against it. Equally, however, the complained-against party has an effectively automatic right to delay the suspension of concessions by objecting to the level of suspension, or by claiming that appropriate principles and procedures have not been followed when retaliation other than that in the same sector (i.e. under paragraph 3(a)) has been requested.

Paragraph 6 is clear in providing that the "original" panel should conduct the arbitration, subject only to the original members' availability to serve. This rule appropriately takes into account that the original panel will have closely examined the facts underlying the request for authorisation of the suspension of concessions and should therefore be in a good position to act expeditiously in assessing the request. If all of the members of the original panel are not available, there is nothing to prevent the Director General of the WTO from appointing one or more of the original members to the requested arbitration panel. Unlike the original procedure for the appointment of panellists by the Director General (Article 8:7, DSU), there is no requirement for the Director General to undertake consultations in connection with the appointment of an arbitrator in this setting.

There is no mechanism in the DSU for extending the period of time allowed to the arbitrator to render a decision under paragraph 6. This means that 60 days from the expiration of the reasonable period of time is the nominal maximum. However, there is no prescribed mechanism for recourse if the arbitrators fail to meet this deadline, and in practice they have routinely failed to do so.[36] Recall, also, that there is potential conflict between the course of the time period for a determination regarding the adequacy of implementation under Article 21.5, and the course of the time period for suspension of concessions. Under Article 21.5, the panel has 90 days to decide whether measures have been brought into compliance, and that 90 days is subject to extension (unlike the time period under this Article 22.6). It is therefore quite possible that suspension of concessions – if it was based on a prompt Article 22.6 decision – could be authorised prior to a determination of the adequacy of implementation. There is no clear method based on the text of the DSU to reconcile the temporal conflict between Article 21.5 and Article 21.6. That is why a generally accepted practice has developed to avoid this problem,[37] and why proposals have been made to amend the DSU in the Doha Development Round to ameliorate this conflict. Paragraph 6 clearly prohibits the complaining party from suspending concessions while the maximum 60-day arbitration period is pending.

g. Paragraph 7 – Subject of Review

From the standpoint of dispute settlement, paragraph 7 is the key passage with respect to cross-retaliation. This is because it sets out the basis upon which the arbitrator is authorised to review the complaining Member's decision regarding the level of concessions to be suspended, and its compliance with relevant "principles and procedures". Paragraph 7 is framed in a way that appears intended to support WTO Member "sovereignty" or discretion in making determinations regarding suspension, though there are certainly limitations built into those determinations.

The first sentence of paragraph 7 prohibits the arbitrator from examining the "nature" of the concessions or other obligations to be suspended.[38] Presumably the "nature" refers to the type of goods, services or IPRs that the complaining party has elected to suspend. So, for example, a complaining party suspending concessions in the goods sector should not be questioned as to whether it has suspended tariff concessions with respect to sweaters or steel rods. There has been discussion over the course of WTO dispute settlement history as to whether a country may adopt a so-called "carousel" suspension practice in which it rotates the products affected by a suspension over the course of time.[39] This matter has not been squarely addressed by arbitration, but the arbitrators in the *EC – Beef Hormones* (US) case suggested that the imposition of a carousel suspension might require an adjustment in the way in which the effect of the suspension was calculated.[40] This implies that the arbitrators did not consider carousel suspension to be impermissible "as such", but rather that it would affect the calculation of the level of suspension. This is a potentially significant matter in respect to TRIPS cross-retaliation because a party suspending concessions in the field of TRIPS might decide to take action with respect to different forms of IP over the course of time.

Albeit there may be some delay in imposing suspension should an arbitrator find that a complaining party has not properly followed the "procedures" listed in paragraph 3, it is doubtful that a determination that additional procedural steps should be undertaken will substantially delay the imposition of suspension.[41]

Paragraph 7 obligates the DSB to promptly authorise suspension of concessions consistent with the arbitrator's decision. Only a consensus against authorisation will block the suspension, which would require the objection of the complaining party seeking the authorisation. That is not likely to happen. From a practical standpoint, the authorisation should be considered "automatic".

It is important to note that there is no authority vested in the Appellate Body to review the decision of the arbitrator with regard to suspension of concessions. The directive that the parties do not seek a second arbitration implies that the only foreseeable remedy might be such a second arbitration, but that it is not permitted.

This does not, however, mean that the complained-against party affected by a suspension has no avenue of legal recourse. Since the complaining party is obligated to impose the suspension consistent with the decision of the arbitrator, the complained against party may initiate a new dispute settlement action claiming that the party suspending concessions is doing so inconsistently with its WTO obligations.[42] Such a proceeding may require a long period until it results in any concrete decision by a new panel and/or the Appellate Body.

h. Paragraph 8 – Duration of Suspension

The first sentence of paragraph 8 reaffirms that the suspension of concessions by the complaining party is intended to be temporary, and not a substitute for compliance with the DSB ruling by the complained against party. It logically follows that the suspension will end when compliance has been achieved. Recall that the objective of WTO dispute settlement is not to penalise the party that has defaulted, but rather to "rebalance" the concessions contemplated by WTO negotiations. The mechanism for compliance may be "removal" of the inconsistent measure. It may also include modification of an inconsistent measure in a way that addresses the problem of nullification or impairment of benefits. Whether or not such modification in fact meets the requirements for compliance laid out by the DSB (through adoption of a panel or Appellate Body report) is subject to further review, including through resort to further proceedings before the original panel pursuant to Article 21.5. There have been instances in which the issue of compliance has been resubmitted to the original panel substantially following initiation of a suspension of concessions.[43] In one such case, the original panel held that resubmission on the issue of compliance was mandatory on the part of the complaining member that had sought to continue suspending concessions.[44]

The final clause of the first sentence of paragraph 8 also makes clear that the parties may reach a mutually satisfactory settlement. This is consistent with Article 22.2.

The second sentence of paragraph 8 cross-references Article 21.6, which authorises the DSB to continue its oversight of the compliance/implementation process. As noted, this oversight may include resubmission by either party to the panel on the question of whether implementation has remedied the nonconforming measure(s), which at least one panel has decided is required for the continuation of suspension when the complained-against Member asserts it has achieved compliance.[45]

i. Paragraph 9 – Responsibility for Sub–Federal Units

Paragraph 9 reflects generally understood principles of international law that a state is responsible for the conduct of governmental entities located within its territory. A WTO Member may not avoid its obligations by invoking the authority of local or (internal) regional governing bodies. Paragraph 9, however, makes a certain concession to the constitutional difficulties that may be faced by some Members in securing compliance by those bodies. The obligation of "strict compliance" with DSB decisions (if it otherwise exists, see above) is waived. If reasonable measures do not convince local bodies to bring their measures into compliance, then compensation or suffering continued suspension of concessions will be deemed satisfactory. There is apparently no unique relevance of paragraph 9 to the subject of TRIPS cross-retaliation.

ENDNOTES OF ANNEX

1 The list in document MTN.GNS/W/120 identifies eleven sectors.

2 The expression "arbitrator" shall be interpreted as referring either to an individual or a group.

3 The expression "arbitrator" shall be interpreted as referring either to an individual or a group or to the members of the original panel when serving in the capacity of arbitrator.

4 Where the provisions of any covered agreement concerning measures taken by regional or local governments or authorities within the territory of a Member contain provisions different from the provisions of this paragraph, the provisions of such covered agreement shall prevail.

5 Up until fairly late in the Uruguay Round negotiations, it was not at all clear that the result would take the form of the "single undertaking". Throughout much of the TRIPS negotiations it was thought that the result might take the form of a "code" among a limited group of countries, rather than the universally binding agreement ultimately adopted. See Abbott (1989).

6 The Uruguay Round negotiations had reached an impasse in 1991. At that stage, Director-General Arthur Dunkel decided on his own initiative to prepare a complete negotiating draft text of a result to move the negotiations to a conclusion. The text he distributed in December 1991 accomplished its objective, laying out a proposal that was largely acceptable to negotiators from all sides. This text is known as the "Dunkel Draft". There are numerous differences between the Dunkel Draft and the final Uruguay Round Agreements. Examining these differences helps to explain the meaning of the ultimately adopted WTO texts (GATT 1991).

7 The separate text is headed "Elements of an Integrated Dispute Settlement System", Dunkel Draft, page T1 with a subpart "Integrated Dispute Settlement System", and a further subheading " Suspension of Concessions", ibid., pg.T5.

8 WTO Dispute Settlement Understanding, art. 22.3(f)(3).

9 The Dunkel Draft referred to "any right covered in Sections 1-7 of Part II", whereas the DSU refers to "each of the categories of intellectual property rights covered in Section 1, or Section 2, or Section 3, or Section 4, or Section 5, or Section 6, or Section 7 of Part II" (ibid.).

10 See WTO (2002).

11 Per Article 32 of the VCLT, negotiating history may also be used as a supplemental means of confirming an interpretation.

12 The Oxford New Shorter English Dictionary defines "compensation", inter alia, as "2. A thing that compensates or is given to compensate (for); a counterbalancing feature or factor; amends, recompense; spec. money given to compensate loss or injury, or for requisitioned property".

13 The requirement that a voluntary compensation agreement be consistent with the covered WTO agreements raises the question of whether such an agreement may be inconsistent with the MFN obligation. A Member that has failed to bring its measures into conformity may seek to offer a special concession to an injured Member as a means of compensation. Ordinarily, WTO

MFN rules prohibit granting a concession to one Member that is not unconditionally extended to other Members. DSB authorisation to an injured Member to "suspend concessions" appears to assume a waiver of the MFN requirement. The DSB does not specifically authorise voluntary compensation agreements. It is doubtful that compensation may disregard MFN rules (e-mail from William Davey, former Director of the WTO Legal Division, to the author of 1 July 2008 [hereinafter "Davey e-mail"), indicating that the predominant view is that waiver of MFN is not permitted in the context of voluntary compensation).

14 The Oxford New Shorter English Dictionary defines "suspension", inter alia, as: "1. The action of suspending something; the condition of being suspended; esp. temporary cessation or prevention".

15 Compare Jackson (1997) and Hippler Bello (1996).

16 In practice, the reasonable period of time tends to be in the range of 8-10 months (Davey e-mail).

17 Discuss WTO (1999 *EC Meat*).

18 In Antigua's proceeding against the US, the parties agreed on sequencing in accordance with this generally accepted practice (see WTO Dispute Settlement Summary for Dispute DS285). In Brazil's proceeding against the US in the Uplands Cotton proceeding, the parties also accepted this sequencing (see WTO Dispute Settlement Summary for Dispute DS267). See generally Jackson et al. (2008), at 348-50

19 See, e.g. WTO (2003), Balás Report to the Trade Negotiations Committee, Special Session of the DSB, including Annex: Chairman's text, as of 28 May 2003, consolidating Member proposals. Note that the WTO Secretariat Briefing Note issued in connection with the Hong Kong Ministerial stated: "The issue on which there is, perhaps, the most widespread support for change is the procedural issue of "sequencing". The issue arises from a lack of clarity in the DSU's text as to the order in which two phases of the procedure should occur when a member believes that another has failed to comply fully with the final rulings" (WTO Briefing Note). As a broad generalisation, the proposals on sequencing would require that the compliance panel complete its determination prior to authorisation of suspension of concessions.

20 Because treaties incorporate a general obligation of performance in "good faith", it could be argued that an injured Member is not entitled to "unreasonably" refuse an offer of compensation, despite its voluntary character and the requirement of mutual acceptance. However, since what is "reasonable" might only be determined pursuant to Article 22 arbitration, this argument is not likely to prevail.

21 The Oxford New Shorter English Dictionary defines "principle", inter alia, as: "5. A fundamental truth or proposition on which others depend; a general statement or tenet forming the basis of a system of belief etc.; a primary assumption forming the basis of a chain of reasoning".

22 The Oxford New Shorter English Dictionary defines "procedure", inter alia, as: "1. The fact or manner of proceeding; a system of proceeding; conduct, behaviour; spec. (a) Law the formal steps to be taken in a legal action; the mode of conducting judicial proceedings".

23 The Oxford New Shorter English Dictionary defines "seek", inter alia, as: "1. Try to find, look for, (a thing or person of uncertain whereabouts); make a search or inquiry for, attempt to discover, (a thing or person suitable for a purpose etc., an unknown thing)".

24 Article 64.2 of the TRIPS Agreement established a five-year moratorium on the initiation of non-violation and situation complaints. During that period, Members were to examine the scope and modalities for such complaints and submit recommendations to the Ministerial Conference. A decision to approve such recommendations or to extend the five-year moratorium was to be made by consensus. The question of whether failure of the TRIPS Council to submit recommendations to the Ministerial Conference acts to continue the moratorium in force is a matter of debate. The moratorium on non-violation complaints under the TRIPS Agreement was continued at the Hong Kong Ministerial Conference in December 2005. The concluding Ministerial Declaration provided:

> 45. We take note of the work done by the Council for Trade-Related Aspects of Intellectual Property Rights … and direct it to continue its examination of the scope and modalities for complaints of the types provided for under subparagraphs 1(b) and 1(c) of Article XXIII of GATT 1994 and make recommendations to our next Session. It is agreed that, in the meantime, Members will not initiate such complaints under the TRIPS Agreement. (WTO 2005 Ministerial *Declaration*).

The moratorium thus continues in effect until the next subsequent Ministerial Conference. The extension does not prejudge what steps are to follow.

25 Because of the rarity of non-violation actions under GATT and GATS, this question is not further explored here.

26 The Oxford New Shorter English Dictionary defines “consider”, inter alia, as: “1. v.t. Look at attentively; survey; scrutinise”.

27 The Oxford New Shorter English Dictionary defines “practicable”, inter alia, as: “Able to be put into practice; able to be effected, accomplished, or done; feasible”.

28 Pure free trade theory may suggest that a country is always better off by lowering its trade barriers, so that any “suspension of concessions” will make the suspending country worse off in some way. Looked at through that lens, WTO remedies other than full implementation of recommendations are inconsistent with the objectives of the organisation.

29 The Oxford New Shorter English Dictionary defines “circumstance”, inter alia, as: “The material, logical, or other environmental conditions of an act or event; the time, place, manner, cause, occasion, etc., of an act or event; the external conditions affecting or that might affect action”.

30 The Oxford New Shorter English Dictionary defines “serious”, inter alia, as: “3. Important, grave; having (potentially) important, esp. undesired, consequences; giving cause for concern; of significant degree or amount, worthy of consideration; colloq. (of a price or value) high”.

31 The Oxford New Shorter English Dictionary defines “enough”, inter alia, as: “A. adj. Sufficient in quantity, number, etc.; not less than what is needed”.

32 See Article 3.8, DSU.

33 The Oxford New Shorter English Dictionary defines “reason”, inter alia, as: “2bA. cause of a fact, situation, event, or thing, esp. one adduced as an explanation; cause, ground”.

34 Because developing countries were concerned with potential cross-retaliation for violation of the TRIPS Agreement, it is likely to have been developing country negotiators that argued for the “ hurdles” to cross-retaliation in TRIPS. Developing countries that were determined not

to have fully complied with rules regarding patent protection did not want their copyright holders automatically subject to retaliation.

35 It should be noted that, to date, no developed country has sought authorisation to withdraw concessions from a developing country as a consequence of non-implementation of a DSB decision. Of course, this could be explained by an economic power imbalance that encourages developing countries to avoid lingering “trade battles” with developed countries.

36 Davey e-mail.

37 In principle, because Article 21.6 categorically authorises suspension as of a fixed date the complaining party could not be unduly criticised for undertaking a suspension upon completion of the arbitration, but it would be acting at the risk of a panel determination that the complained-against party was already in compliance with the decision.

38 The New Shorter Oxford English Dictionary defines “nature” as: “The inherent or essential quality or constitution of a thing”.

39 See WTO (1999 *EC Meat*, para.22). The arbitrators said:

> Replying to our questions, the US submitted that “[a]lthough nothing in the DSU prevents future changes to the list [of products subject to suspension] …, the United States has no current intent to make such changes”. We thus assume that the US -- in good faith and based upon this unilateral promise -- will not implement the suspension of concessions in a “carousel” manner. We therefore do not need to consider whether such an approach would require an adjustment in the way in which the effect of an authorised suspension is calculated.

40 Ibid.

41 The factors that an arbitrator may take into account are discussed above. For many developing countries, the impracticability and ineffectiveness of suspending concessions under the GATT or GATS should not be difficult to demonstrate based upon imbalances in trade flows and the potential impact on intermediate producers and consumers. It will be difficult in most cases for an arbitrator to reach the conclusion that continued failure to receive the benefit of WTO obligations will not have a “serious” impact on the national economy.

42 See, e.g. WTO (2008), *United States – Continued Suspension of Obligations in the EC – Hormones Dispute*. In this proceeding, the original panel determined that the complaining parties (i.e. the US and Canada) had acted inconsistently with Article 23 of the DSU by maintaining suspension of concessions following adoption by the complained-against party (i.e. the EC) of measures it contended brought it into compliance, without the complaining parties having first had recourse to the original panel under Article 21.5 of the DSU on the issue of compliance.

43 Ibid.

44 Ibid.

45 Ibid.

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