THE PRESUMPTION OF CONFORMITY FOR CLIMATE MEASURES: RECONCILING THE CLIMATE CHANGE REGIME AND THE WTO

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ABSTRACT

Climate change is the most pressing concern of the world today, posing an existential threat to the planet's ecosystem and human society. Bold actions are necessary to meet the goal of limiting the temperature increase to 1.5℃ above the pre-industrial level under the Paris Agreement. However, the potential WTO-inconsistency of such climate measures creates legal uncertainty that hampers the state's climate change mitigation strategies. The general exceptions under the General Agreement on Tariffs and Trade (GATT) Article XX (b) or (g) are frequently discussed as a way to justify climate measures under the World Trade Organization (hereinafter "WTO") Agreements. However, close scrutiny of the relevant WTO jurisprudence casts doubts over such a reconciliation strategy. This article proposes a framework for reconciliation based on the presumption of conformity for specific climate measures adopted by the parties to the Paris Agreement with WTO rules. Such presumption of conformity represents the division of competence under which deference will be paid to the respective competency of the WTO and the climate change regime.

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KEYWORDS: *climate change, GATT Article XX, presumption of conformity, the Paris Agreement*

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I. INTRODUCTION

Climate change is one of the most pressing concerns of the world today, posing an existential threat to mankind. Although the United Nations Framework Convention on Climate Change (hereinafter "UNFCCC") was signed by 154 states as early as in 1992 to "prevent dangerous anthropogenic interference with the climate system" (Article 2),[1] the international community has been slow to recognize the urgency of the problem, and has only recently begun to take concrete actions. By concluding the Paris Agreement that went into effect in 2016, the states agreed on the goal of limiting the temperature increase to 1.5°C above the pre-industrial level, and each party has made an individual pledge on the climate actions and policies it intends to implement. However, such individual and collective efforts of the states made so far have been way below the level required to achieve the objective. Therefore, at the recent Conference of the Parties (hereinafter "COP") 26 meeting in Glasgow, the U.K., which closed on November 20, 2021, the parties to the Paris Agreement adopted the Glasgow Climate Pact which stressed "the urgency of enhancing ambition and action in relation to mitigation, adaptation and finance in this critical decade to address gaps between current efforts and pathways in pursuit of the ultimate objective . . ."[2] In particular, the Pact recognized that "limiting global warming to 1.5°C requires rapid, deep and sustained reductions in global greenhouse gas emissions, including reducing global carbon dioxide emissions by 45 per cent by 2030 relative to the 2010 level and to net zero around mid-century . . ."[3] Therefore, the global efforts to address the climate change are expected to accelerate and will likely involve more drastic and innovative actions to reduce the greenhouse gas emission.

On the other hand, as many such climate change strategies and policies will likely have an impact on international trade, the issue of WTO-inconsistency of such trade-related measures for climate change mitigation policy (hereinafter "climate measures"), and the relationship between the climate change regime under the UNFCCC and the Paris Agreement, and the trade regime under the World Trade Organization (hereinafter "WTO") Agreements has come to the fore. The legal uncertainty that this issue creates is a cause of concern as it may undermine the efforts to address climate change by exerting a "chilling effect" on the policymakers who design and implement climate measures. In fact, the relationship between multilateral

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[1] United Nations Framework Convention on Climate Change [hereinafter UNFCCC] art. 2, May 9, 1992, 1771 U.N.T.S. 107.

[2] Glasgow Climate Change Conference, *Decision -/CP.26: Glasgow Climate Pact*, UNFCCC 2, https://unfccc.int/sites/default/files/resource/cop26_auv_2f_cover_decision.pdf (last visited Feb. 2, 2022).

[3] *Id.* at 3.

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environmental agreements (hereinafter "MEAs") such as the Paris Agreement and the WTO Agreements, and the potential conflict between the trade-related measures taken in pursuance of such MEAs and WTO rules, has been a subject of a great deal of discussions among academics and WTO Members. Despite a number of attempts to resolve the unclarity, including WTO Members' discussion on "the relationship between existing WTO rules, and specific trade obligations set out in multilateral environment agreements (MEAs) [with a view to enhancing the mutual supportiveness of trade and environment]" at the Doha Development Agenda (hereinafter "DDA") negotiation,[4] no clear consensus on the road to the reconciliation has emerged so far. In fact, the differences in Members' positions revealed during the DDA negotiation indicate the difficulties involved in this issue.

Yet, the need for the framework for clear reconciliation of the WTO and the climate change regime is becoming ever greater, as the friction between the two is expected to rise.[5] This article purports to suggest that a framework based on the "presumption of conformity" of climate measures with the WTO Agreements can be a viable reconciliation strategy. Such a framework will contribute to the global climate change mitigation efforts by providing clarity on the available policy space for each state's climate measures while maintaining a check on the abuse of such climate measures as disguised restrictions on trade. Chapter 2 will briefly review the universe of the climate measures that may have WTO-consistency problems, and explain the sources of conflict. Chapter 3 will discuss why the application of the general exceptions under the General Agreement on Tariffs and Trade (hereinafter "GATT") Article XX is an inadequate means by which such conflict can be resolved. Chapter 4 will introduce the concept of the presumption of conformity by reviewing the proposals made by some WTO Members during the DDA negotiation, and will present a model that will be best-suited for climate measures. Chapter 4 will further discuss the necessity of the division of competence between the climate change regime and the trade regime, which must serve as one of the guiding principles for the such presumption of conformity, and the overall framework of the reconciliation. Chapter 5 is the conclusion of this article.

[4] World Trade Organization, Ministerial Declaration of 14 November 2001, ¶ 31(i), WTO Doc. WT/MIN(01)/DEC/1, 41 ILM. 746 (2002).

[5] Richard G. Tarasofsky & Alice Palmer, *The WTO in Crisis: Lessons Learned from the Doha Negotiations on the Environment*, 82(5) ROYAL INST. INT'L AFFS. 899, 900 (2006).

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II. POTENTIAL SOURCES OF CONFLICT

A. The Objective of the Paris Agreement and the Parties' Obligations

The Paris Agreement was concluded with the aim to "strengthen the global response to the threat of climate change," and as a more specific objective, to hold "the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels." (Article 2) However, the Paris Agreement does not lay out any specific actions that the parties shall (or may) take to achieve such an objective. The Paris Agreement simply states that the parties are required to voluntarily establish their own emission reduction targets and the course of action to achieve them. (Article 4.2)[6] Each party's national emission reduction targets and the proposed actions to achieve such targets were submitted in the form of "intended nationally determined contributions (hereinafter "INDCs")" which become "nationally determined contributions (hereinafter "NDCs")" once that party ratifies the Paris Agreement. To clarify, these INDCs and NDCs do not form a part of the Paris Agreement, and the content and the level of commitment therein are left to the discretion of the parties.

B. Climate Measures and the Potential Areas of WTO-Inconsistency

Therefore, the design and implementation of climate measures are currently left to the discretion and initiative of individual party states. As the Glasgow Climate Pact reemphasized, the key to climate change mitigation is the reduction of emission of greenhouse gas (hereinafter "GHG"), and various ways to achieve it have been discussed and considered. According to the joint study of the WTO and the United Nations Environment Programme (hereinafter "UNEP"), there are mainly three categories of such policy measures: (1) price and market mechanisms to internalize environmental costs of GHG emissions, such as carbon tax based on the carbon content of fossil fuels, emission trading schemes (hereinafter "ETS"), and border carbon adjustment (hereinafter "BCA"); (2) financial mechanisms to promote development and usage of climate friendly goods and technologies, such as subsidies and incentives to usage of renewable energy, development/usage of low-carbon and energy efficient products, and development and invention of carbon sequestration technologies; and (3)

[6] Article 4.2 provides as follows: "Each Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions." UNFCCC, *Adoption of the Paris Agreement*, at 22, U.N. Doc. FCCC/CP/2015/L.9/Rev.1 (Dec. 12, 2015).

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technical requirements to promote the use of climate-friendly goods and technologies (such as mandatory technical regulations or voluntary standards on products and production methods to improve energy efficiency of products and processes) and to reduce GHG emission from production and usage of products.[7]

Such climate measures have implications for international trade, and may be inconsistent with various rules of the WTO Agreements, including the GATT, the Agreement on the Subsidies and Countervailing Measures (hereinafter "ASCM"), Agreement on the Trade-Related Investment Measures (hereinafter "TRIMs"), and the Technical Barriers to Trade (hereinafter "TBT") Agreement.[8] For instance, if application of a carbon tax or ETS discriminates imported goods against domestically produced "like products," or against imported "like products" from another WTO Member, it will likely be a violation of the national treatment obligation under GATT Article III, or the most favored treatment obligation under GATT Article I, as applicable.[9] Emission allowances distributed to domestic producers without charge under an ETS may also constitute an export subsidy prohibited under ASCM.[10] In particular, BCA has taken the center stage of the climate change discourse as the European Union (hereinafter "EU") recently adopted the resolution on the implementation of its version of BCA, the Carbon Border Adjustment Mechanism (CBAM).[11] BCA is regarded as a necessary means to address the competitiveness issues and the problem of "carbon leakage" created due to different regulations on GHG emission across borders. BCA intends to level the playing field by adjusting for the effects of a carbon tax or ETS at the border. Thus, BCA related to the carbon tax would mainly consist of (i) imposition of tax on imported goods at the border in the amount that would have been taxed if such good had been produced in the importing country, and (ii) provision of rebates on goods being exported, accounting for the amount of charges or tax imposed on such goods that are not imposed in the country of destination. BCA related to an ETS is less straightforward, but it could take the form of certain requirements on imports from the countries that do not impose equivalent emission reduction policies, such as the requirement of purchasing emissions

[7] LUDIVINE TAMIOTTI ET AL., TRADE AND CLIMATE CHANGE: WTO-UNEP REPORT 88-129 (2009), https://www.wto.org/english/res_e/booksp_e/trade_climate_change_e.pdf.
[8] *Id.*; Susanne Droege et al., *The Trade System and Climate Action: Ways Forward Under the Paris Agreement* 13-20 (Climate Strategies, Working Paper, 2016).
[9] Bradly J. Condon, *Climate Change and Unresolved Issues in WTO Law*, 12(4) J. INT'L ECON. L. 895, 896 (2009).
[10] *Id.* at 897.
[11] *See generally* European Parliament Resolution of 10 March 2021 Towards a WTO-compatible EU Carbon Border Adjustment Mechanism (2020/2043(INI)), 2021 O.J. (C 474) 2.

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allowances under the ETS of the importing country.[12] The potential WTO-inconsistency of BCA has been extensively discussed, as there exists some unclarity on whether BCA constitutes the border tax adjustment allowed under GATT Article II.2(a),[13] failing which, BCA will likely run afoul of GATT Article II:1(b) as import duties imposed in excess of bound tariffs. BCA may also be found inconsistent with GATT Article I or III if applied in a discriminatory fashion, or possibly with ASCM when it involves rebates on exportation.[14]

Another issue that has been highlighted recently is the subsidies and incentives for renewable energy that may run afoul of the rules of ASCM and TRIMs. In particular, the feed-in-tariff (hereinafter "FIT") program for renewable energy and its local content requirement (hereinafter "LCR") has already been subject to a number of WTO disputes, most notably, *Canada — Renewable Energy*.[15] A FIT program offers renewable energy producers certain minimum purchase prices for the electricity generated from renewable energy sources. Such guaranteed prices are fixed for a long period of time at a rate higher than those for conventional energy sources. Such scheme is essential for renewable energy to be competitive, since the cost-efficiency of producing electricity using solar photovoltaic (hereinafter "PV") and wind power energy is not yet on a par with that of electricity production using fossil fuel energy. A more controversial aspect of the FIT program is the LCR requiring the beneficiaries of the program to purchase a certain minimum volume of domestically produced energy generation equipment for solar PV or wind power facilities. The purpose of such LCR is to stimulate local investment in the production of renewable energy generation equipment, but it is inconsistent with Article 2.1 of the TRIMs as ruled by the Appellate Body in *Canada — Renewable Energy* and in *India — Solar Cells*.[16] Article 2.1 of the TRIMS requires that a trade-related investment measure be applied consistently with Article III of GATT, which in turn prohibits discrimination of imported products "in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use" under the subparagraph 4. A subsidy contingent on the domestic content requirement is also prohibited

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[12] Michael A. Mehling et al., *Designing Border Carbon Adjustments for Enhanced Climate Action*, 113(3) AM. J. INT'L L. 433, 442 (2019); TAMIOTTI ET AL., *supra* note 7, at 101.

[13] Much depends on whether energy inputs (including fossil fuels) used in the production of goods would constitute "articles from which the imported product has been manufactured or produced in whole or in part" under GATT Article II.2(a). TAMIOTTI ET AL., *supra* note 7, at 104.

[14] *Id.* at 104-06.

[15] *See generally* Appellate Body Report, *Canada — Certain Measures Affecting the Renewable Energy Generation Sector and Canada — Measures Relating to the Feed-in Tariff Program*, WTO Doc. WT/DS412/AB/R, WT/DS426/AB/R (adopted May 24,2013).

[16] *Id.* ¶ 6.1; Appellate Body Report, *India — Certain Measures Relating to Solar Cells and Solar Modules*, ¶ 6.2, WTO Doc. WT/DS456/AB/R (adopted Oct. 14, 2016).

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under Article 3 of the ASCM. The Appellate Body in *Canada — Renewable Energy* found that the FIT program in dispute did not constitute a prohibited subsidy despite the LCR attached, because the claimants had failed to establish a "benefit" conferred. However, such a finding of the Appellate Body was based on its controversial construction of the "relevant market" to determine the "benefit" conferred by the FIT program, and it is questionable if the same ruling will be repeated down the road.[17]

Finally, mandatory technical regulations to promote climate-friendly products may be found inconsistent with the rules of the TBT Agreement, which requires WTO Members to ensure national treatment and most-favored nation treatment of like products from another WTO Member with respect to technical regulations (Article 2.1), and also to ensure that technical regulations are "prepared, adopted or applied with a view or with the effect of creating unnecessary obstacles to international trade" (Article 2.2).[18] Further, import restrictions on products that fail to meet certain energy-efficiency standards may constitute a violation of GATT Article XI which prohibits quantitative restrictions, and/or GATT Articles I and/or III when they constitute discrimination on like products originating from other WTO Members.

Numerous pieces of literature have discussed the potential WTO-inconsistency of various aspects of climate measures at length and in depth,[19] and need not be repeated in this article. It suffices to observe that plenty of potential for conflicts with the WTO Agreements, and the legal uncertainty created therefrom exists. Further, the list of the climate measures with potential WTO-inconsistency is not a closed one. As the global community begins to accelerate the efforts to hold back the pace of climate change, the climate measures that states may be forced to consider and employ may begin to have more trade-disruptive effects.[20] There have been numerous discussions on the possible reconciliation strategies, and one solution that has been frequently put forward is the application of the general exceptions

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[17] Aaron Cosbey & Petros C. Mavroidis, *A Turquoise Mess: Green Subsidies, Blue Industrial Policy and Renewable Energy: The Case for Redrafting the Subsidies Agreement of the WTO*, 17(1) J. INT'L ECON. L. 11, 12, 31, 34 (2014); Thomas Cottier, *Renewable Energy and Process and Production Methods*, THE E15 INITIATIVE 3 (Aug. 2015), http://e15initiative.org/wp-content/uploads/2015/07/E15_Climate_Cottier_FINAL.pdf.

[18] Agreement on Technical Barriers to Trade, art. 2.1-.2, Apr. 15, 1994, 1868 U.N.T.S. 120.

[19] *See, e.g.*, Joost Pauwelyn, *U.S. Federal Climate Policy and Competitiveness Concerns: The Limits and Options of International Trade Law* 17-41 (Nicholas Inst. for Env't Pol'y Sol., Duke Univ., Working Paper No. 07-02, 2007); Condon, *supra* note 9; KATERYNA HOLZER, CARBON-RELATED BORDER ADJUSTMENT AND WTO LAW 91-218 (2014); Luca Rubini, *Ain't Wastin' Time No More: Subsidies for Renewable Energy, the SCM Agreement, Policy Space, and Law Reform*, 15(2) J. INT'L ECON. L. 525, 540-70 (2012); TAMIOTTI ET AL., *supra* note 7, at 103-10, 115-18, 124-29.

[20] James Bacchus, *Global Rules for Mutually Supportive and Reinforcing Trade and Climate Regimes*, WORLD ECO. F. 13 (Jan. 2016), http://www3.weforum.org/docs/E15/WEF_Climate_Change_POP.pdf.

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under GATT Article XX, the subparagraphs (b) and (g) in particular. The following chapter, however, will examine why the application of GATT Article XX to climate measures cannot be an adequate solution.

III. THE PROBLEMS WITH RECONCILIATION THROUGH GATT ARTICLE XX

A. The Overview of the Problems

While GATT Article XX is frequently cited as the way to reconcile climate measures with WTO rules,[21] there are limitations to the extent to which climate measures may be accommodated through GATT Article XX. Firstly, it is doubtful whether GATT Article XX can be applied beyond GATT to other WTO Agreements. Indeed, there is no textual basis for application of the general exceptions outside GATT, as the language of the *chapeau* of GATT Article XX itself—"[n]othing in this *Agreement* shall be construed to prevent the adoption or enforcement by any Contracting Party of measures [Emphasis added]"—suggests that Article XX exempts measures only from the rules of GATT. However, a number of jurisprudential and policy arguments have been made in favor of application of GATT Article XX beyond GATT, especially to the ASCM.[22] For instance, Condon argues that given the fact that the main object and purpose of the ASCM is "to augment and improve GATT disciplines regarding the use of subsidies and countervailing measures," it would be unreasonable to construe that GATT Article XX is not applicable to the ASCM when it can be applied to GATT Article VI and XVI.[23] Such view was helped in part by somewhat ambivalent stance of the Appellate Body on this issue.[24] In *US — Shrimp Turtle (Thailand)* and *US — Custom Bond Directive*, the Appellate Body declined to rule on whether GATT Article XX(d) was applicable to the Anti-Dumping Agreement (hereinafter "ADA") to justify a measure found to constitute a "specific action against dumping" under Article 18.1 of the ADA.[25] The Appellate Body did find in *China — Periodicals* that Article XX

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[21] *See, e.g.*, Condon, *supra* note 9, at 911-20; TAMIOTTI ET AL., *supra* note 7, at 104, 107-10; HOLZER, *supra* note 19, at 146-77.

[22] Robert Howse, *Climate Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis,* IISD 17-19 (May 2010), https://www.iisd.org/system/files/publications/bali_2_copenh agen_subs idies_legal.pdf; Andrew Green, *Trade Rules and Climate Change Subsidies*, 5(3) WORLD TRADE REV. 377, 407-10 (2006); Rubini, *supra* note 19, at 561-64.

[23] Condon, *supra* note 9, at 903-04.

[24] Rubini, *supra* note 19, at 564.

[25] Condon, *supra* note 9, at 903; Appellate Body Report, *United States — Measures Relating to Shrimp from Thailand and United States — Customs Bond Directive for Merchandise Subject to Anti-Dumping/Countervailing Duties*, ¶¶ 304-19, WTO Doc. WT/DS343/AB/R, WT/DS345/AB/R (adopted Aug. 1, 2008).

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was applicable to China's Accession Protocol, but such finding was based on a certain language in the Accession Protocol which was interpreted as the linkage between the rules of GATT and the Accession Protocol.[26] In sum, while it can be argued that the exact scope of GATT Article XX application is still an open question, it is doubtful that WTO adjudicatory bodies will apply GATT Article XX to other WTO Agreements without a certain textual basis such as that found in the China's Accession Protocol.

Secondly, a close analysis of the relevant WTO jurisprudence reveals that there is much unclarity on whether all the climate measures will actually pass muster under the requirements of subparagraph (b) or (g), and the *chapeau* of GATT Article XX. In fact, whether GATT Article XX will exempt trade-related measures taken in pursuance of MEAs such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (hereinafter "CITES") and the Basel Convention is a topic that has been widely and extensively discussed. There is a strong argument that such trade-related measures will be justified under GATT Article XX especially since MEAs "embody the well-considered, negotiated compromises of their signatories on how best to address the environmental problem in question."[27] However, such trade-related measures may take various forms and have different characters, and the fact that such measures are taken in pursuance of MEA objectives will not *ipso facto* guarantee that they will pass muster under case-by-case scrutiny under GATT Article XX. The legal uncertainty on this issue is abetted by the fact that WTO adjudicatory bodies are yet to rule on a direct challenge against a trade-related measure taken in pursuance of an MEA. As will be discussed below, such unclarity regarding WTO-consistency is greater with respect to climate measures due to the particular problems of trade-related measures taken in pursuance of the Paris Agreement which is not found in those in other MEAs.

B. Subparagraph (b) / (g)

Given the general consensus on the serious adverse impact of anthropogenic climate change on the Earth's ecosystem and human society, it is relatively uncontroversial that the objective of climate measures is covered by the policy objectives pertaining to subparagraphs (b) and (g). There is little question that the climate change mitigation efforts pertain to

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[26] As the Appellate Body Report quoted, paragraph 5.1 of the China's Accession Protocol indicates, "[w]ithout prejudice to China's right to regulate trade in a manner consistent with the WTO Agreement." Appellate Body Report, *China — Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products*, ¶¶ 6, 230, 233, WTO Doc. WT/DS363/AB/R (adopted Jan. 19, 2010).

[27] ANUPAM GOYAL, THE WTO AND INTERNATIONAL ENVIRONMENTAL LAW: TOWARDS CONCILIATION 142-84 (2006).

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the protection of "human, animal or plant life or health," and that the Appellate Body's expansive interpretation of the term, "exhaustible natural resources" in subparagraph (g)[28] will include the "atmosphere".[29] On the other hand, there is unclarity on the degree of *connection* between such justifying policy objective and the measure—namely, whether the requirement of the measure is "necessary" or "relating to"—would be met. Regarding the "necessary" requirement under subparagraph (b), WTO adjudicatory bodies will weigh and balance three factors: i) the trade-restrictiveness of the challenged measure, ii) the extent of its contribution to the attainment of the policy objective, and iii) the importance of the policy objective.[30] Such "necessity" test usually also involves the determination of whether there is a "less trade-restrictive alternative reasonably available" to the respondent.[31] The Appellate Body found that whether a certain alternative measure imposes "undue burden," or "prohibitive costs or substantial technical difficulties" on the respondent would be relevant for the question of whether such alternative was "reasonably available."[32]

Setting aside the criticisms on the methodology employed by WTO panels and the Appellate Body in conducting such necessity tests, there is a particular difficulty with determining whether a certain climate measure is "necessary" to achieve the goal of climate change mitigation. While it is generally agreed that urgent actions are called for to avert the dire consequences of climate change, there is less agreement on what such actions should be. States will have to design and implement climate measures amidst scientific and technological uncertainties, and will have difficulties with presenting clear evidence of the basis for the climate measures they implement.[33] To wit, current jurisprudence on "necessity" for Article XX(b) is not a good fit for climate measures. It may be extremely difficult for WTO panels and the Appellate Body to determine the contribution of a certain climate measure to climate change mitigation, and the reasonable availability of a less trade-restrictive alternative. As the understanding and development of climate change mitigation technologies and policies are still at a nascent stage, WTO panels and the Appellate Body are in no position to assess the

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[28] PETROS MAVROIDIS & MARK WU, THE LAW OF THE WORLD TRADE ORGANIZATION (WTO): DOCUMENTS, CASES AND ANALYSIS 305 (2d ed. 2013); The WTO panel and the Appellate Body have ruled that "clean air" and endangered species such as sea turtle constitute "exhaustible natural resource."; Panel Report, *United States — Standards for Reformulated and Conventional Gasoline*, ¶ 6.37, WTO Doc. WT/DS2/R (adopted May 20, 1996); Appellate Body Report, *United States — Import Prohibition of Certain Shrimp and Shrimp Products*, ¶¶ 129-34, WTO Doc. WT/DS58/AB/R, (adopted Nov. 6, 1998) [hereinafter *US — Shrimp (AB)*].

[29] Pauwelyn, *supra* note 19, at 35.

[30] Appellate Body Report*, Brazil — Measures Affecting Imports of Retreaded Tyres*, ¶ 156, WTO Doc. WT/DS332/AB/R (adopted Dec. 17, 2007) [hereinafter *Brazil — Tyres (AB)*].

[31] *Id.*

[32] HOLZER, *supra* note 19, at 156; *id.* ¶ 171.

[33] Green, *supra* note 22, at 386.

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technological feasibility and predicted effects, and the administrative and economic costs of various climate measures. Further, as climate change is a complex challenge that demands solutions from many interlinked areas,[34] climate measures are likely to be designed as a comprehensive strategy consisting of multiple measures that are meant to complement one another. The Appellate Body recognized the particularly complex nature of climate measures in *Brazil — Retreaded Tyres*, where it stated that "certain complex . . . environmental problems may be tackled only with a comprehensive policy comprising a multiplicity of interacting measures" and also that the contributing effect of measures to mitigate the climate change and global warming "can only be evaluated with the benefit of time."[35] It is doubtful, however, whether WTO adjudicatory bodies actually possess the competence to understand the intricacies of such broad and comprehensive scheme of climate change policy, and make informed determinations that may sometimes involve a forward-looking analysis.

On the other hand, the requirement of "relating to" under subparagraph (g) seems to present a lower huddle,[36] through which the difficulties of the "necessity" test can be bypassed. The Appellate Body interpreted the phrase, "relating to" as requiring "a substantial relationship" or "a close and genuine relationship of ends and means" between the challenged measure and the "conservation of exhaustible natural resources."[37] Such requirement seems to be a more straightforward and less stringent standard than the "necessity" test. That said, states may employ climate measures that are not directly related to the goal of mitigation, but are still deemed integral to the overall comprehensive climate change strategy. For instance, the primary rationale of the LCR attached to a FIT program is industrial policy needs and political considerations rather than climate change mitigation itself. (In the short term, LCR may even work against climate change mitigation as it will increase the cost of installed capacity by forcing investors to source from more costly local suppliers).[38] BCA is also more related to the competitiveness concerns than the mitigation goal itself. BCA can be partially justified as a way to address the "carbon leakage", but the carbon leakage remains to be a theoretical possibility without concrete empirical evidence on actual relocation of energy-intensive industries and firms to countries with less

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[34] BRADLY J. CONDON & TAPEN SINHA, THE ROLE OF CLIMATE CHANGE IN GLOBAL ECONOMIC GOVERNANCE 9 (1st ed. 2013).
[35] *Brazil — Tyres (AB)*, *supra* note 30, ¶ 151.
[36] Condon, *supra* note 9, at 918.
[37] *US — Shrimp (AB)*, *supra* note 28, ¶ 136; *see also* Appellate Body Report, *China — Measures Related to the Exportation of Various Raw Materials*, ¶ 355, WTO Doc. WT/DS394/AB/R, WT/DS395/AB/R, WT/DS398/AB/R (adopted Feb. 22, 2012).
[38] Cosbey & Mavroidis, *supra* note 17, at 30.

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stringent climate change regulations.[39] In *Brazil — Taxation*, the Panel held that the discriminatory aspect of Brazil's various incentive measure made available to auto-vehicle producers fulfilling certain conditions geared to foster investment in Brazil had no "substantial relationship" with the objective of conserving petroleum, and ruled that subparagraph (g) was inapplicable.[40] Brazil had argued that the conditions for receiving such incentives—performance of a minimum number of production steps in Brazil, and investment in R&D and other expenditures made within Brazil—were intended to develop "the competitiveness and technological capabilities of its domestic industry," which would ultimately contribute to the objective in the long-run by making it possible to produce more energy-efficient vehicles in Brazil.[41] The Panel acknowledged that such argument was at least conceivable, but found that Brazil failed to present supporting evidence for such "theoretical possibility".[42] In sum, while the Appellate Body has acknowledged that "a comprehensive policy comprising a multiplicity of interacting measures" may be required to tackle a complex environmental problem such as climate change,[43] some of such "interacting measures" that are not directly related to the climate change mitigation may not be justifiable under subparagraph (g) due to lack of "substantial relationship".

C. The Chapeau

A similar problem may be encountered with the *chapeau* which requires that the measures "are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or as a disguised restriction on international trade." According to the Appellate Body, the focus of the *chapeau* requirement is "the manner in which the measure is applied" rather than the measure itself or its content.[44] However, the Appellate Body also stated that it will look into "the design, architecture, and revealing the structure of a measure," as well as "the cause or the rationale of the discrimination" to determine whether the application of a measure constituted "arbitrary or

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[39] *See generally* GABRIEL FELBERMAYR & SONJA PETERSON, ECONOMIC ASSESSMENT OF CARBON LEAKAGE AND CARBON BORDER ADJUSTMENT (2020), https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/603501/EXPO_BRI(2020)603501_EN.pdf; Florian Misch & Philippe Wingender, *Revisiting Carbon Leakage* (IMF, Working Paper No. WP/21/207, 2021), https://www.elibrary.imf.org/view/journals/001/2021/207/001.2021.issue-207-en.xml.

[40] Panel Report, *Brazil — Certain Measures Concerning Taxation and Charges*, ¶ 7.4.6.3, WTO Doc. WT/DS472/R, WT/DS497/R (adopted Jan. 11, 2019).

[41] *Id.* ¶ 7.994.

[42] *Id.* ¶ 7.995.

[43] *Brazil — Tyres (AB)*, *supra* note 30, ¶ 151.

[44] Appellate Body Report, *United States — Standards for Reformulated and Conventional Gasoline*, at 22, WTO Doc. WT/DS2/AB/R (adopted May 20, 1996).

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unjustifiable discrimination."[45] This makes the demarcation line between the *chapeau* and the subparagraphs of GATT Article XX somewhat blurry. For instance, in *EC — Seals*, the Appellate Body found that the challenged measure, the import ban on seal products produced using inhumane hunting methods, was inconsistent with the *chapeau*, because the exception granted for the seal products produced by the Inuit and other indigenous communities of the measure, while serving a legitimate purpose in its own right, did not have the rational connection to the policy objective of the measure pertaining to the subparagraph (a)—the promotion of seal welfare and public moral of the citizens of the European Union.[46] This means that, while reviewing the *chapeau* requirements, the panels and the Appellate Body may revisit the issues under subparagraph (b) or (g).[47] Further, the issue of climate measure that serves a legitimate purpose but is not directly related to the climate change mitigation will likely be repeated under the *chapeau* review.[48] In other words, WTO adjudicatory bodies may deny a rational connection between the discriminatory aspect of some of climate measures such as LCR attached to the FIT program, or BCA on one hand, and the climate change mitigation on the other hand. Such LCR is often regarded as an effective industrial policy tool which ensures that an infant industry would develop steadily and quickly into a mature industry.[49] From the climate change mitigation perspective, such an industrial policy would create new innovating competitors in an area that urgently needs more innovation and competition.[50] From the perspective of each state employing climate change policies, development of "national champions" and creation of jobs in such a crucial industry through LCR may be the only way to make the sizable public expenditure spent on FIT programs and other related climate mitigation strategies politically feasible.[51] Similarly, implementation of carbon tax or emission trading system may not be possible unless the competitive concerns are addressed by BCA. However, the current WTO

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[45] Appellate Body Report, *European Communities — Measures Prohibiting the Importation and Marketing of Seal Products*, ¶ 5.302, WTO Doc. WT/DS400/AB/R, WT/DS401/AB/R (adopted June 18, 2014) [hereinafter *EC — Seal*]; *Brazil — Tyres (AB)*, *supra* note 30, ¶ 229.

[46] *EC — Seal*, *supra* note 45, ¶¶ 5.320, 5.338; Julia Y. Qin, *Accommodating Divergent Policy Objectives Under WTO Law: Reflections on EC-Seals Products*, 108 AM. J. INT'L. L. UNBOUND 308, 310-12 (2014).

[47] Julia Y. Qin, *Defining Nondiscrimination Under the Law of the World Trade Organization*, 23 BOS. UNIV. INT'L. L.J. 215, 258, 263-66 (2015).

[48] Gracia Marín Durán, *Measures with Multiple Competing Purposes After EC – Seal Products: Avoiding a Conflict Between GATT Article XX-Chapeau and Article 2.1 TBT Agreement*, 19(2) J. INT'L ECON. L. 467, 475 (2016); Lorand Bartels, *The Chapeau of the General Exceptions in the WTO GATT and GATS Agreements: A Reconstruction*, 109 AM. J. INT'L. L. 95, 118 (2015).

[49] Rubini, *supra* note 19, at 550.

[50] Cosbey & Mavroidis, *supra* note 17, at 33; *id.* at 530.

[51] Rubini, *supra* note 19, at 530; Howse, *supra* note 22, at 19.

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jurisprudence casts doubt over whether LCR and BCA will meet the requirements of the GATT Article XX *chapeau*.[52]

Furthermore, the outcomes of the *chapeau* review by WTO adjudicatory bodies are unpredictable or even arguably arbitrary, as it depends upon case-by-case evaluations of a number of highly case-specific factors. There is no clear WTO jurisprudence on definitions and interpretations of the terms of the *chapeau*, such as "arbitrary or unjustifiable discrimination", "a disguised restriction on trade" or "countries where the same conditions prevail," leading one commentator to note that such unclarity relating to the *chapeau* can be abused by WTO adjudicatory bodies to deny the application of the general exceptions to a trade-related measure.[53] WTO precedents such as *US — Shrimp Turtle* did, however, present some of the factors that WTO adjudicatory bodies will consider for the *chapeau* review. In ruling that the challenged measure failed to meet the *chapeau* requirement in this dispute, the Appellate Body found the following factors relevant: (i) the rigidity, inflexibility, and unilateral and coercive nature of the challenged measure - the US regulation of requiring and enforcing the use of Turtle Excluding Device (TED) for the shrimp and shrimp products imported into the US— which had not considered "different conditions which may occur in the territories of those other Members,"[54] (ii) the failure by the US to pursue a multilateral solution for the preservation of sea turtles, [55] and (iii) discriminatory treatment accorded to the complainants *vis-à-vis* other countries in the Caribbean and Western Atlantic region in terms of the technology transfer and the length of "phase-in" period allowed for implementation, [56] among others. The interpretation of the *chapeau* requirements in *US — Shrimp Turtle* has been subjected to criticisms for its lack of textual basis and sound reasoning,[57] and it is unclear to what extent the criteria and the factors, which may be pertinent only to the factual circumstances of *US — Shrimp Turtle,* are applicable to other disputes. Nevertheless, the findings in *US — Shrimp Turtle* presents particular difficulties for climate measures. The states have negotiated multilateral instruments on climate change as required by *US — Shrimp Turtle* and concluded them*,* but as discussed in the preceding section, none of such instruments includes any specific rules on the climate measures that must or

[52] HOLZER, *supra* note 19, at 165-77; Cosbey & Mavroidis, *supra* note 17, at 46.
[53] LIDIA RIEDER, THE RELATIONSHIP BETWEEN TRADE-RELATED ENVIRONMENTAL MEASURES IN MULTILATERAL ENVIRONMENTAL AGREEMENTS AND THE WTO LAW 120-21 (1st ed. 2020).
[54] *US — Shrimp (AB)*, *supra* note 28, ¶¶ 161-65.
[55] *Id.* ¶¶ 166-72.
[56] *Id.* ¶¶ 173-75.
[57] Bartels, *supra* note 48, at 110; Sanford Gaines, *The WTO's Reading of the GATT Article XX Chapeau: A Disguised. Restriction on Environmental Measures*, 22(4) UNIV. PA. J. INT'L ECON. L. 739, 858 (2001).

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may be employed. Thus, the climate measures that the states currently contemplate, design and implement are essentially "unilateral" in nature, without guidance or support from an international instrument on climate change. Such climate change policy by each state may have a "command and control" character, and possibly an "intended and actual coercive effect on the specific policy decisions made by foreign governments" which the Appellate Body in *US — Shrimp Turtle* found as the problems of the challenged US measure.[58] Further, designing and implementing climate measures with consideration for "the different conditions which may occur in the territories of those other Members" may be a challenging task. In the context of BCA, such consideration would require a complex task of comparing relevant carbon-reduction strategies and climate policies in different countries, which would be especially difficult when the comparison between a priced-based system such as carbon taxes or emission caps must be compared with a non-priced-based scheme such as emission standards or restrictions.[59]

IV. THE PROPOSAL FOR THE PRESUMPTION OF CONFORMITY

A. The Need for Clarification

Therefore, GATT Article XX is ill-suited for systemic reconciliation of climate measures with WTO rules, and it is unclear whether a particular climate measure can be justified under the general exceptions. In fact, WTO adjudicatory bodies have had a close brush with such a legal conundrum in recent disputes such as *Brazil — Taxation, India — Solar Cells*, and *Canada — FIT*. WTO panels and the Appellate Body could sidestep the real difficult issue of the applicability of the GATT Article (b) or (g) to climate measures in these disputes, but only barely. In *India — Solar Cells*, and *Canada — FIT*, neither India nor Canada made arguments for exemption under the GATT Article XX (b) or (g). In *Brazil — Taxation*, Brazil did make arguments for justification under Article XX (b) and (g),[60] but apparently without sufficient evidence to support its arguments that the development of the domestic industry for fuel-efficient vehicles would contribute to curbing of CO_2 emissions in Brazil, which had made it easy for the panel to dismiss Brazil's argument without seriously considering its merit.

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[58] *US — Shrimp (AB)*, *supra* note 28, ¶ 161; Gaines, *supra* note 57, at 800.
[59] HOLZER, *supra* note 19, at 170.
[60] Brazil in this dispute claimed that the petroleum was the "exhaustible natural resources" that its challenged measure was intended to conserve petroleum. However, Brazil could have easily argued that "climate", "ecosystem" or other objectives related to climate change as the "exhaustible natural resources" instead.

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More difficult cases likely await WTO panels and the Appellate Body, as the tension between the WTO Agreements and the climate change regime will continue to rise amidst accelerated global efforts to meet the challenge of climate change[61] which may give rise to "endless legal questions."[62] Unless the potential for legal conflicts is identified and resolved, the states will be in the dark as to which climate measures are available to them. Such unclarity and unpredictability may have a "chilling effect" on some of the states, leading them to risk aversion rather than the adoption of bold and innovative climate-friendly policies. For instance, the potential inconsistency with WTO rules has been frequently cited as a reason not to implement BCA.[63] On the other hand, such a state of unclarity may propel other states to resort to potentially WTO-inconsistent unilateral climate measures, resulting in the proliferation of trade disputes. Therefore, it is imperative to clarify the relationship between climate change and the trade regime and the universe of WTO-consistent climate measures available so that both the policy space of the states to address the climate change, and WTO-consistent implementation of climate measures are ensured.

One way to provide such clarification is through the adoption of an authoritative interpretation regarding the applicability of the general exception to climate measures as suggested by several commentators.[64] Bacchus, for instance, suggested that WTO Members adopt a decision confirming that climate measures taken in pursuance of "climate agreements" under the UNFCCC will qualify for the general exceptions of GATT Article XX.[65] In fact, the proposals for such "presumption of conformity" had been made in the broader context of the MEA—the WTO Agreements relationship. During the DDA negotiation to clarify the relationship between Specific Trade Obligations (hereinafter "STO"s) set out in MEAs and the WTO Agreements, Switzerland and Japan proposed that STOs be presumed to conform to WTO rules without the review under GATT Article XX. Such proposals did not make much headway at the DDA for a lack of support from other WTO Members. However, the existential threat of the climate change may galvanize WTO Members to find the necessary political will to adopt the presumption of conformity at least for climate measures.

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[61] Clara Brandi, *Trade Elements in Countries' Climate Contributions Under the Paris Agreement*, INT'L CTR. FOR TRADE AND SUSTAINABLE DEV. (Mar., 2017), https://euagenda.eu/upload/publications/untitled-81229-ea.pdf.
[62] Bacchus, *supra* note 20.
[63] Mehling et al., *supra* note 12, at 456.
[64] Bacchus, *supra* note 20, at 17; Droege et al., *supra* note 8, at 36; Robert Howse, *Securing Policy Space for Clean Energy Under the SCM Agreement: Alternative Approaches*, THE E15 INITIATIVE 2-4 (Dec., 2013), https://e15initiative.org/publications/securing-policy-space-for-clean-energy-under-the-scm-agreement-alternative-approaches/.
[65] Bacchus, *supra* note 20, at 16.

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Thus, an authoritative interpretation enshrining the "presumption of conformity" for certain climate measures on the basis of institutional interactions and collaboration between the WTO and the climate change regime will provide the necessary framework for reconciliation. An authoritative interpretation under the Article IX:2 of the Marrakesh Agreement provides that "[t]he Ministerial Conference and the General Council shall have the exclusive authority to adopt interpretations of this Agreement and of the Multilateral Trade Agreements" by a three-fourths majority of WTO Members. An authoritative interpretation can be used to clarify ambiguity and fill the gaps in the existing rules of the WTO Agreements, and also to modify the rules that have proven in practice to be impractical to apply, but to the extent that it is "used in a manner that would undermine the amendment provisions in Article X" (Article IX.2).[66] Waivers for climate measures and the amendment to the WTO Agreements to expressly accommodate climate measures have also been proposed. However, waivers are temporary, and thus inappropriate for providing a long-term solution, and may send an undesirable signal that climate measures are indeed inconsistent with the WTO Agreements.[67] Further, any amendment to the WTO Agreements would be extremely difficult while an authoritative interpretation is relatively easier to adopt.[68]

B. The Mechanism of the Presumption of Conformity

1. The Proposals During the DDA Negotiations: Switzerland and Japan — A useful starting point for the formulation of the presumption of conformity for climate measures will be the proposals made by WTO Members at the DDA negotiation. The European Communities (hereinafter "EC") first floated the idea in its very first submission by urging WTO Members to discuss and reach a consensus on "the extent to which 'specific trade obligations' should be considered to be automatically in conformity with WTO."[69] While the EC had not followed up with the details of such proposal, subsequent proposals submitted by Japan and Switzerland provided more substance to such automatic conformity or "presumption of conformity" of STOs in MEAs with WTO rules.[70] The proposals of

[66] Claus-Dieter Ehlermann & Lothar Ehring, *The Authoritative Interpretation Under Article IX:2 of the Agreement Establishing the World Trade Organization: Current Law, Practice and Possible Improvements*, 8(4) J. INT'L ECON. L. 803, 810 (2005).
[67] *Id.* at 816.
[68] *Id.* at 807.
[69] Special Session of the Comm. on Trade and Env't, *Submission by the European Communities: Multilateral Environmental Agreements (MEAs): Implementation of the Doha Development Agenda*, ¶ 7, WTO Doc. TN/TE/W/1 (Mar. 21, 2002).
[70] *See generally* Special Session of the Comm. on Trade and Env't, *Submission by Japan: The Relationship Between WTO Rules and Specific Trade Obligations Set Out in MEAs*, WTO Doc.

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Switzerland and Japan differed, however, on the scope of STO, and the extent and conditions of the presumption. The rationale for such a presumption of conformity as explained by Switzerland is that an STO set forth in an MEA represents a conscious decision by the parties to the MEA that the trade-related measure mandated by such STO is either "necessary" or "related to" the achievement of the objectives of such MEA in the context of GATT Article XX,[71] and such a decision made by sovereign states should not be second-guessed by WTO adjudicatory bodies.[72] It was also argued that "there would be no logic in a country putting into a question the need for a measure which it agreed to in another forum." [73] Therefore, the concept of STO is key to understanding the rationale and scope of the presumption of conformity. However, WTO Members had failed to agree on the definition of this term during the DDA negotiation. India categorized trade-related obligations in MEAs into the following four groups, which were useful for the discussion of the issue[74]:

1. a trade measure that is both mandatory and specific in its entirety.
2. only the outcome to be achieved is identified with a list of appropriate measures that Parties could implement to achieve the desired outcome.
3. the outcome to be achieved is identified, however the measures which could be implemented to achieve that outcome are not specified.
4. additional and more stringent measures to achieve the overall objectives of the MEA which are more in the form of a right granted to a Party as opposed to an obligation.

While it is difficult to summarize WTO Members' varied views on the scope and definition of "STO", the majority view clearly preferred a narrow reading, accepting only the first category of trade-related measures—those that are both mandatory and specific—as representing STOs. On the other hand, Members such as the EC, Switzerland and Japan took an expansive view. Japan proposed that STOs include (i) "the trade measure that is expressly provided for as mandatory under an MEA", and (ii) "the trade measure identified in the MEA as potential means to meet *obligation de résultat* explicitly provided for in an MEA," which are generally coextensive

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TN/TE/W/26 (Apr. 25, 2003) [hereinafter Submission by Japan]; *See generally* Special Session of the Comm. on Trade and Env't, *Submission by Switzerland: Statement by Switzerland at the Meeting of the Special Session of the Committee on Trade and Environment of 1-2 May 2003*, WTO Doc. TN/TE/W/32 (May 13, 2003) [hereinafter Submission by Switzerland].

[71] Special Session of the Comm. on Trade and Env't, *Note by the Secretariat: Summary Report on the Sixth Meeting of the Committee on Trade and Environmental Special Session*, ¶ 23, WTO Doc. TN/TE/R/6 (June 12, 2003) [hereinafter CTESS 6th Meeting].

[72] *Id.* ¶ 17.

[73] *Id.* ¶ 24.

[74] Special Session of the Comm. on Trade and Env't, *Submission by India: Relationship Between Specific Trade Obligations Set Out in MEAs and WTO Rules*, ¶ 8, WTO Doc. TN/TE/W/23 (Feb. 20, 2003).

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with India's categories one and two.[75] Switzerland adopted an even broader reading, suggesting that both (i) trade-related measures that are both mandatory and also expressly laid out in MEAs, and (ii) trade-related measures "that are appropriate and necessary to achieve an MEA objective" should be covered under the STOs.[76] How Switzerland and Japan each defined STOs is significant because the definition of STOs delineates the universe of trade-related measures to which presumption of conformity will be applicable. As Switzerland's definition is broader than that of Japan's, the scope of Switzerland's version of the presumption of conformity will be much wider.

The two proposals also differed on the mechanism and structure of the presumption of conformity to be applied. Switzerland proposed automatic presumption of conformity of STOs with subparagraph (b) or (g) of the GATT Article XX without review by WTO adjudicatory bodies, but a reversal of the burden of proof with respect to the *chapeau*, in other words, contestable implementation.[77] Thus, a trade-related measure taken in pursuance of an STO will be deemed to satisfy the requirements of the subparagraphs, and will not be subject to review by WTO adjudicatory bodies. However, WTO Members may still contest the implementation of such measures as "arbitrary or unjustifiable discrimination" or "a disguised trade restriction." Note that under the current jurisdiction, it is the respondent Member who would have to establish the challenged measure would be exempted under the GATT Article XX exceptions, which entails establishing not only that the measure falls under the sub-paragraphs of Article XX but also that the application of the measure is consistent with the *chapeau*. Japan's proposal for the presumption of conformity is somewhat more intricate, as it treated the two categories of STOs—(i) the trade-related measure in explicitly provided for as mandatory under an MEA, and (ii) the trade-related measure identified in an MEA as potential means to meet the *obligation de résultat* explicitly provided for in the MEA—differently. For the first category, Japan's version of presumption of conformity will provide an absolute presumption of conformity with WTO rules[78] without any conditions or possibility of rebuttal.[79] For the second category of trade-related measures, however, Japan's proposal would provide the presumption of conformity with WTO rules, only on the conditions that such trade-related

[75] Submission by Japan, *supra* note 70, ¶ 5
[76] CTESS 6th Meeting, *supra* note 71, ¶ 14
[77] Submission by Switzerland, *supra* note 70, ¶ 13; WTO, CTESS 6th Meeting, *supra* note 71, ¶16.
[78] Although Japan's proposal conformity with "WTO rules" rather than the rules of GATT Japan's statements indicate that Japan had GATT Article XX in mind when formulating the proposal and the requirements therein. Special Session of the Comm. on Trade and Env't, *Submission by Japan: The Relationship Between Existing WTO Rules and Specific Trade Obligations Set Out in Multilateral Environment Agreements (MEAs)*, ¶ 14, WTO Doc. TN/TE/W/10 (Oct. 3, 2002).
[79] *Id.*

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measures are "based on scientific principles" and "proportional in range and degree in the pursuit of the MEA objectives."[80] In sum, two proposals differ in a couple of aspects. Under Switzerland's version, the presumption will be uniformly applied to all STOs (which is very broadly construed by Switzerland), but the challenged measure may still be scrutinized under the *chapeau* when a WTO Member challenges the application of the measure. According to Japan's proposal, the presumption of conformity applicable to the trade-related measures of the STOs of the first category would be irrebuttable and be exempt from any judicial review whatsoever. However, the trade-related measures under the second category STOs may be subject to judicial review of whether they are based on scientific principles and proportionate to the contribution to the MEA objective.

2. Application to Climate Measures — As many WTO Members rejected the very idea of the presumption of conformity, there had been few follow-up discussions on either proposal. As a result, there was no opportunity to further develop the proposals by providing the details and rectifying obvious shortcomings. The two proposals by Switzerland and Japan still provide a template for the presumption of conformity to climate measures, but such problems will first have to be addressed.

(a) The Scope of the Presumption of Conformity—STOs — Firstly, Switzerland's definition of STOs is too broad as it includes the obligation to take trade-related measures that are not expressly laid out as mandatory in an MEA, but nonetheless "appropriate and necessary to achieve an MEA objective". As each Member will be entitled to designate such "appropriate and necessary" trade-related measure, application of the presumption of conformity to such measure would invite abuse for a protectionist motive. Switzerland's proposal provides a safeguard for such abuse by allowing challenge in accordance with the *chapeau* language (with the reversed burden of proof). However, such a broad application would be inconsistent with the rationale for the presumption of conformity that Switzerland had propounded. There is no basis for the proposition that WTO Members had agreed that a trade-related measure unilaterally decided by one Member as "appropriate and necessary" for an MEA objective is "necessary" for or "related to" the policy objective of GATT Article XX (b) or (g). On the other hand, the majority view during the DDA negotiation, accepting only the first category of trade-related measures (both mandatory and expressly provided for in MEAs), seems to be too narrow, and more importantly, simply would be unfeasible with respect to climate measures. Given the uncertainty in climate change science, technology and economic impacts of climate measures, and considering the different technological and economic capacity of each state, it will be inappropriate (and perhaps politically impossible) to

[80] *Id.*

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impose a mandatory obligation to implement specific climate measures on the parties to the Paris Agreement.

Therefore, Japan's definition of STOs seems to achieve the right balance, as it requires STOs to at least expressly identify the trade-related measures which must or may be taken as the potential means to achieve the goal of the MEA. The discretion allowed with respect to the second category of trade-related measures has been deliberately provided by an MEA, and an argument can be made that WTO panels and the Appellate Body should not be allowed to "interfere with the sovereign right of a party to use this discretion."[81] A problem is that there is currently no specific obligation to take any climate measure under the Paris Agreement or any other instrument of the climate change regime. That is why the definition of STO for climate measures should include provisions in binding decisions made by the COP. The COP of an MEA serves as the central venue where discussions among the parties related to the effective operation of the MEA are held. Collective decisions or resolutions may be adopted as a result of such discussions, and such COP decisions are crucial to the shaping and development of the MEA which is regarded as "a dynamic, living international instrument."[82] Thus, it is quite common for an MEA to lay out only a foundational framework and leave concrete details to be filled and shaped through the COP.[83] Such structure will particularly be fitting for the climate change regime, as it allows the parties to complement and update the relevant instruments in keeping with the changing conditions, development of the technology, and evolving understanding of science and policy needs relevant to the climate change. While neither Switzerland's nor Japan's proposal addresses this issue, WTO Members during the DDA negotiations had generally acknowledged the importance of COP decisions and had not rejected the possibility of COP decisions being regarded as STOs. Given that the COP decision effectively binds the parties,[84] there is no reason why the specific trade-related obligations adopted by a COP decision cannot constitute an STO for the purpose of the presumption of conformity. Thus, COP decisions adopted by the COP of the UNFCCC or Meeting of the Parties of the Paris Agreement that lay out specific climate measures that the parties must or may take to achieve the objective of the Paris Agreement can serve as STOs to which the presumption of conformity will be applicable. In sum, the scope of STOs appropriate for the climate change regime will be climate measures laid out in COP decisions that fall into category one or two of Japan's proposed scope of "STOs": (i) the climate measures that are expressly

[81] *Id.*
[82] CTESS 6th Meeting, *supra* note 71, ¶ 56.
[83] The primary examples are the UNFCCC and the Paris Agreement.
[84] Bacchus, *supra* note 20.

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provided for as mandatory in COP decisions (or other binding instruments of the climate change regime), or (ii) the climate measures identified in such COP decisions (or other binding instruments of the climate change regime) as potential means to meet the objective of the Paris Agreement or other instruments of the climate change regime. In light of the political realities, such climate measures in COP decisions will more likely be formulated as a second category rather than the first. Thus, to prevent the potential for abuse of discretion by WTO Members, such climate measures and the manner in which they will be implemented must be identified and delineated as clearly and specifically as possible.

(b) Structure of the Presumption of Conformity — As for the structure and extent of the presumption of conformity, Japan's proposal seems to be somewhat convoluted. That the first category of STOs under Japan's proposal will be given an irrebuttable presumption of conformity seems to be going too far, since, unlike Switzerland's proposal, it negates even the chance to challenge their implementation. On the other hand, the presumption of conformity for the second category of STOs is subject to quite onerous requirements of scientific principle and proportionality. Such a proposition begs the question of how the review under such requirements would be different from the review in accordance with GATT Article XX(b), (g), or the *chapeau*. To wit, replacement of GATT Article XX with such requirements of which WTO adjudicatory bodies have no relevant precedents would only add unclarity, and would defeat the purpose of the presumption of conformity. In this regard, Switzerland's proposal—the presumption of conformity with no additional requirements and the contestable implementation—seems to be more straightforward, and in keeping with the purpose and rationale of the presumption of conformity. A difficult question would be if the reversed burden of proof regarding the contestable implementation would be sufficient to address the problems associated with the *chapeau* review. On the other hand, the *chapeau* requirements will likely be the minimum check on the possible abuse of the presumption of conformity that WTO Members would likely demand. In fact, the UNFCCC itself provides in Article 3.5 that "measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade." The problem with the *chapeau* may be addressed to a certain extent if the authoritative interpretation also contains additional interpretative guidelines regarding the *chapeau*. For instance, it can be clarified that, for the purpose of the review of the "arbitrary or unjustifiable discrimination," the Appellate Body must not require the rationale of a discriminatory aspect of a climate measure (if any) to be "rationally connected" to one of the policy objectives of the subparagraph (b) or (g), and that rational connection to other legitimate and proper purpose related to

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climate change policy (such as competitiveness concerns) would suffice. Such clarification would not only go to some lengths to rectify the problem identified in this article but also represents the correct interpretation of the *chapeau* requirement as argued by Bartels.[85]

It needs to be emphasized that COP decisions will be the key to the effective operation of the presumption of conformity for climate measures. The parties to the climate change regime will discuss and decide on specific trade-related measures that will be necessary for the achievement of the objective of the Paris Agreement. Such climate measures will be set forth as the options that the parties may take, and will be given a presumption of conformity unless they constitute "arbitrary or unjustifiable discrimination" or "a disguised restrictions on trade." Further, it would be desirable to provide, to the extent possible, the mandatory guidelines or rules to be followed when implementing such climate measures, so as to minimize the parties' discretions and the room for abuse. To that end, relevant WTO organs should also be consulted when drafting COP decisions to draw on the expertise of the WTO in identifying and remedying the risk of abuse for a protectionist motive. Still, the notion of the presumption of conformity is that the ultimate decision on the climate measures necessary for the climate change mitigation lies with the parties to climate change regime, not the trade regime. The flexibility provided by COP decisions means that climate measures may be constantly added, modified and updated based on the most current knowledge and technology, and the emergence of international consensus. For instance, there are no international rules on the calculation of carbon-content of products, and it will be very difficult to reach a consensus on the adoption of certain controversial climate measures, such as LCR attached to FIT programs. However, once consensus on such rules and climate measures emerges, they can be incorporated through a COP decision and will be given the benefit of the presumption of conformity. The shelter from WTO challenges provided under such a scheme will allow the flexibility and room to maneuver for the climate change regime to freely discuss, adopt, add and modify the climate measures based on the most up-to-date knowledge and best available technology. It should be emphasized that such flexibility and discretion are essential for the states to proceed with their climate change strategies amidst the uncertainties surrounding the problem of climate change.

3. Proposed Authoritative Interpretation and the Division of Competence — The authoritative interpretation that will provide the framework for the reconciliation will provide the presumption of conformity with the requirements of subparagraph (b) or (g) of GATT Article XX (or with the Article 2.1 of the TBT Agreement in case of TBT measures) to the

[85] Bartels, *supra* note 48, at 124-25.

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specific climate measures (which will likely be set forth as options) laid out in COP decisions or other binding instruments of the climate change regime, and reversed burden of proof with respect to the *chapeau* requirement. Further, the authoritative interpretation will also clarify that GATT Article XX is applicable to other WTO Agreements relevant to climate measures such as ASCM. An alternative approach would be the adoption of an authoritative interpretation simply stating that the presumption of conformity will apply with respect to "all WTO rules". However, such an approach would stretch the boundaries of the permissible authoritative interpretation to its limit, as it may be regarded as modifying WTO Members' rights and obligations "in a manner undermining the amendment provision" of Article IX.2 of the Marrakesh Agreement. Application of GATT Article XX to the WTO Agreements such as the ASCM has some legal grounds as discussed above, and thus, this issue seems to be within the permissible boundary of clarification through an authoritative interpretation.

In sum, such a framework for reconciliation will include the following key elements:

1. The presumption of conformity for the climate measures adopted by COP decisions (or other binding instruments) of the climate change regime, either as mandatory and specific obligations for the parties or as expressly and clearly identified potential means to meet the objective of the Paris Agreement (or any other instrument of the climate change regime);
2. The presumption of conformity of such climate measures with respect to the subparagraph (b) or (g) of GATT Article XX (and Article 2.1 of the TBT Agreement), and the reversal of the burden of proof with respect to the *chapeau*, whereas the complaining party will have to establish that the implementation of such climate measures by respondents constituted "arbitrary or unjustifiable discrimination", or "a disguised restriction on international trade";
3. Interpretative guidelines and clarification to prevent expansive reading of the *chapeau* by WTO adjudicatory bodies, as discussed earlier in this article.
4. Clarification that GATT Article XX is applicable to the WTO Agreements other than GATT, such as ASCM, and thus, the presumption of conformity may be applicable to subsidy measures meeting the criteria; and
5. The procedure and mechanism of close institutional collaboration between the WTO and the climate change regime, especially in drafting and designing the climate measures in COP decisions (and other binding instruments) subject to the presumption of conformity.

The proposals for the presumption of conformity met with strong objections by many WTO Members during the DDA negotiation, as such

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Members believed that WTO adjudicatory bodies should retain the mandate to review WTO-consistency of STOs, and that the proposals would fundamentally change the Members' rights and obligations.[86] Further, the very premise that the trade-related measures taken in pursuance of obligations under MEAs must be deemed "necessary" has been questioned.[87] It is debatable whether the fact that a particular STO is laid out in an MEAs can be interpreted to mean that the "necessity" or "substantial relationship" of trade-related measures taken in pursuance of such STO can indeed be presumed. However, such unclarity also seems to be within the boundaries that an authoritative interpretation can be used to clarify without undermining the amendment provision. On the other hand, the reason for such clarification is compelling, as the elimination of this legal uncertainty is urgently needed for global efforts to address climate change. One may still argue that any legitimate climate measure can be accommodated through GATT Article XX without the need to introduce a systemic change such as the presumption of conformity if WTO adjudicatory bodies simply adopt a more liberal and consistent interpretation of the requirements of GATT Article XX. However, it is questionable whether case-by-case review by WTO panels and the Appellate Body without specific interpretative guidelines can provide predictability and clarity on WTO-consistency of various climate measures. It has been also pointed out that the issue of this magnitude and political significance should not be left to the discretion of WTO panels and the Appellate Body alone.[88]

Furthermore, the WTO is essentially a trade regime, and it will be beyond its "core competency" of international trade to make technical, scientific, economic and policy judgments regarding climate change, the complexity and magnitude of which are growing at a fast pace .[89] It is further pointed out that what WTO adjudicatory bodies lack is not merely expertise

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[86] CTESS 6th Meeting, *supra* note 71, ¶ 19; Special Session of the Comm. on Trade and Env't, *Note by the Secretariat: Summary Report on the Third Meeting of the Committee on Trade and Environmental Special Session*, ¶ 28, WTO Doc. TN/TE/R/3 (Oct. 31, 2002); Special Session of the Comm. on Trade and Env't, *Submission by the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu: The Relationship Between WTO Rules and "Specific Trade Obligations Set Out in MEAs"*, ¶ 12, WTO Doc. TN/TE/W/36 (July 3, 2003).

[87] Special Session of the Comm. on Trade and Env't, *Note by the Secretariat: Summary Report on the Fourteenth Meeting of the Committee on Trade and Environment in Special Session*, ¶¶ 6, 7-9, WTO Doc. TN/TE/R/14 (Feb. 9, 2006). (Noted by the representative of Australia and of Argentina.).

[88] JOHN H. JACKSON ET AL., LEGAL PROBLEMS OF INTERNATIONAL ECONOMIC RELATIONS: CASES, MATERIALS AND TEXT ON THE NATIONAL AND INTERNATIONAL REGULATION OF TRANSNATIONAL ECONOMIC RELATIONS 643 (5th ed. 2008) (commenting that "one might question the wisdom of leaving the resolution of trade-environment conflict solely to judicial interpretations").

[89] Gabrielle Marceau & Joel P. Trachtman, *A Map of the World Trade Organization Law of Domestic Regulation of Goods: The Technical Barriers to Trade Agreement, the Sanitary and Phytosanitary Measures Agreement, and the General Agreement on Tariffs and Trade*, 48(2) J. WORLD TRADE 351, 386 (2014).

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in science and environmental issues but "a deeper, intuitive comprehension of environmental policy that comes only with experience," a deficiency which cannot be rectified by the outside experts brought in on *ad hoc* basis according to the WTO dispute settlement procedure.[90] On the other hand, it is evident that the WTO and its dispute settlement body have the proper competence for reviewing any potential issue regarding Article 3.5 of the UNFCCC and its GATT Article XX *chapeau* like language. Therefore, any framework for the clarification of the relationship between climate change and the trade regime must be based on the principle of division of competence, and the "agreed deference between regimes," which is not a novel concept in international law.[91] The presumption of conformity will provide the mechanism to effectuate such principles within the agreed framework for reconciliation. To reiterate, under such a framework, the relevant organs of the UNFCCC or the Paris Agreement, as the institutions with the requisite expertise and legitimacy, will undertake the responsibility to design the most effective climate measures, and the WTO will show deference to such decisions to the extent proscribed by the mechanism of the presumption of conformity. The WTO will provide its own competency, to which deference will be shown by the climate change regime, by advising the climate change regime so that such climate measures will be designed in a way that would not unduly restrict international trade, and by reviewing the implementation of such climate measures for possible abuse for a protectionist motive.

V. CONCLUSION

This article discussed the issue of potential WTO-inconsistency of climate measures, which creates a chilling effect and hampers the global efforts to arrest climate change. This article also argued that GATT Article XX is an inadequate means to resolve the problem due to the unclarity of the relevant WTO jurisprudence, and the particular problems of applying the general exceptions to climate measures. This article finally presented the framework based on the presumption of conformity incorporating the ideas from the proposals made during the DDA as the way forward. Such presumption of conformity based on the principle of division of competence, if adopted by an authoritative interpretation, can serve as the comprehensive and flexible framework for the reconciliation between the trade and climate

[90] Sanford, *supra* note 57, 803.
[91] Margaret A. Young, *Climate Change Law and Regime Interaction*, 5(2) CARBON & CLIMATE L. REV. 147, 153 (2011). Young observes that such agreed deference can be found in the area of protection of endangered marine species.

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change regime, which would provide legal certainty on this issue and ensure the policy space for the states' climate change mitigation strategies.

The WTO has built close cooperative relationships with many MEAs, such as UNEP and CITES. However, to resolve the legal uncertainties and problems identified in this article, the relationship between the WTO and the climate change regime should go further than such voluntary cooperative arrangements. To reiterate, the division of competence and the deference being paid to the respective competence of the other regime should define the relationship between the WTO and the climate change regime, and their respective roles. In fact, an example of such division of competence and the agreed deference to the competency of other international organizations already exists in the WTO. GATT Article XV on "Exchange Matters" stipulates in paragraph 2 the WTO's legal obligation to consult the International Monetary Fund (hereinafter "IMF") and to accept the IMF's determinations regarding the matters of monetary reserves, balance of payments or foreign exchange arrangements to prevent any inconsistent interpretations by the two organizations.[92] Still, the framework for reconciliation proposed here represents a systemic reform with a far broader scope and greater implications than the arrangement under GATT Article XV. Getting WTO Members to accept such systemic reform based on a controversial notion could be a huge challenge, as amply shown during the DDA negotiations. However, "the uniqueness of the existential global challenge of climate change"[93] may be just enough to push WTO Members down such a road.

[92] Vera Thorstensen et al., *Exchange Rate Measures: Who Judges the Issue—IMF or WTO?*, 18(1) J. INT'L ECON. L., 117, 126-28 (2015).
[93] Bacchus, *supra* note 20, at 15.

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