Unfinished Business: Lessons from the Deadlock of the Environmental Goods Agreement

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Abstract

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The Environmental Goods Agreement (EGA) negotiations started in 2014 but deadlocked in 2016. The EGA was intended to promote sustainable development and revitalize the World Trade Organization (WTO) system. This dissertation finds that two important international documents inspired the EGA: the Information Technology Agreement and its expansion (ITA and ITA-II) and the 2012 Asia-Pacific Economic Cooperation List of Environmental Goods (APEC EGs List). However, the EGA negotiation became deadlocked notwithstanding these two successful precedents. This dissertation will consider why there was so much optimism regarding the EGA before the negotiations deadlocked, and whether the deadlock of the EGA negotiations has any significance for the future of the WTO more generally.

The modalities (multilateral vs. plurilateral, project-based vs. list-based structure, hard vs. soft law, etc.) chosen for the EGA negotiations appear appropriate in light of the goals of the EGA project, so the possibility of inappropriate modality choice alone does not explain the deadlock. The critical mass agreement is considered as a future template for the WTO negotiations. More general political and economic factors may also provide help to provide an explanation.

Advanced economies appeared to be more interested in selling EGs to emerging economies than emerging economies are interested in buying them, so the EGA may not offer a win-win to both advanced and emerging economies. The growing tensions between China and U.S. that erupted into a trade war in 2018 also played a role. The EGA negotiations deadlock provides a framework through which the challenges facing the larger WTO system generally can be viewed.

Table of Contents

Table of Figures

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DEDICATION

This dissertation is dedicated to my parents.

Without their love and support, I may not survive this journey.

List of abbreviations

APEC	Asia-Pacific Economic Cooperation
APEC List of EGs	2012 Leaders' Declaration ANNEX C - Asia-Pacific Economic Cooperation List of Environmental Goods
ASEAN	the Association of Southeast Asian Nations
CTE	WTO Committee on Trade and Environment
CMA	Critical Mass Agreement
CPTTP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership (Evolved from TPP)
DEPA	Digital Economy Partnership Agreement
DDA	Doha Development Agenda
Doha Round	the Doha Development Round
DSU	The Agreement on Dispute Settlement Understanding
EGs	Environmental Goods
EGA	Environmental Goods Agreement
EGS	Environmental Goods and Services
EPP	Environmentally preferable product
EU	European Union
EVSL	the APEC Early Voluntary Sector Liberalization Initiative
FTAs	Free Trade Agreements
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade

GDP	Gross Domestic Product
GPA	Government Procurement Agreement
HS	The Harmonized Commodity Description and Coding System, generally referred to as "Harmonized System" or simply "HS," is a multipurpose international product nomenclature developed by the World Customs Organization (WCO).
IMF	International Monetary Fund
ITA	Ministerial Declaration on Trade in Information Technology Practices Known as the "International Technology Agreement"
ITA-II	Ministerial Declaration on the Expansion of Trade in Information Technology Products Known as "the Expansion of International Technology Agreement"
ITO	International Trade Organization
Marrakesh Agreement	Marrakesh Agreement Establishing the World Trade Organization
Mega-Regional FTA	Mega-Regional Free Trade Agreement
MFN	Most-Favored-Nation
NAFTA	North American Free Trade Agreement
OECD	Organization for Economic Co-operation and Development
PA	Plurilateral Agreement
PPMs	Processes and production methods
PTA	Preferential Trade Agreement

PRC	People's Republic of China
RCEP	Regional Comprehensive Economic Partnership
RTA	Regional Trade Agreement
SCM	The Agreement on Subsidies and Countervailing Measures
TPP	Trans-Pacific Partnership (Evolved to CPTTP)
TTIP	Transatlantic Trade and Investment Partnership
TRIPs	The Agreement on Trade-Related Aspects of Intellectual Property Rights
UNCTAD	Union Nations Conference on Trade and Development
U.S.	United States of America
VCLT	Vienna Convention on the Law of Treaties
WCO	World Customs Organization
WTO	World Trade Organization
WTO Telecom Agreement	The World Trade Organization Agreement on Basic Telecommunications Services
1944 Bretton Woods Conference	United Nations Monetary and Financial Conference that took place in Bretton Woods, New Hampshire in 1944

Chapter 1 Introduction: Deadlock of Negotiations and the WTO in Crisis

I. Background

The Environmental Goods Agreement (EGA) negotiations started in 2014 but deadlocked in 2016. The EGA was intended to promote sustainable development and revitalize the World Trade Organization (WTO) system. Negotiations have remained deadlocked from the end of 2016 until 2022. While the challenges to the international economic system posed by the global pandemic that started in 2020 may have contributed to the deadlock, the problems faced by the EGA negotiations appear to run much deeper. When this dissertation was completed in 2022, it was almost like the EGA negotiations had never happened: almost no one seems to mention it, it is not covered in the news media, and no country advocates restarting the negotiations.

The WTO as an institution has never publicly announced the failure of the negotiations, but it seems to have forgotten about this agreement. There is some academic commentary considering its modalities, the promise of plurilateral approaches generally, and borrowing from the economic theory of computer networks and platforms to highlight its need to achieve a "critical mass" of support for the negotiations to be completed successfully. But the continuing interest of international trade law academics will not be enough to bring it back. The EGA is a hybrid of both environmental protection and trade liberalization, and the success of multilateral economic negotiations depends on many other factors, in addition to the kind of purely legal factors that often capture the attention of international trade law academics.

The EGA is a product from the Doha Round. The WTO members have tried to negotiate a trade agreement to lower tariffs and non-tariff barriers for environmental goods and services

since the Doha Development Agenda (DDA) was launched in November 2001.[1] Another motive for seeking a trade agreement governing environmental goods and services is to help environmental protection and promote sustainable trade and development.[2] After years of negotiation in Special Sessions of the WTO Committee on Trade and Environment(CTE), the WTO members did not conclude a multilateral agreement on environmental goods and services as they expected; the negotiations broke down in deadlock just as the other negotiations in the Doha Round did by the late 2000s.

However, a new hope was raised because of the success of the Bali Agreement on Trade Facilitation and the Asia-Pacific Economic Cooperation List of Environmental Goods (APEC List of EGs.)[3] Fourteen WTO members, representing 41 countries and customs territories, announced the launch of the EGA negotiation to eliminate tariffs on many important environmental goods on July 8, 2014.[4] It soon developed into eighteen participants representing 46 WTO members and had 18 rounds of negotiations until December 2016.[5] Although there were no more negotiations after December 2016, the WTO never officially announced that the negotiations failed.

Academics have labeled the EGA a critical mass agreement using plurilateral and list-based approaches. First, the EGA is a critical mass agreement as the Information Technology

[1] WTO, Ministerial Declaration of 14 November 2001, WT/MIN (01) DEC/01, para. 31(iii): "…reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services."

[2] WTO, Activities of the WTO, and the Challenge of Climate Change. Available at: http://www.wto.org/english/tratop_e/envir_e/climate_challenge_e.htm. (Last visited on May 1, 2021)

[3] Known as "2012 Leaders' Declaration ANNEX C – APEC List of Environmental Goods"

[4] See WTO EGA official Website: https://www.wto.org/english/tratop_e/envir_e/ega_e.htm (Last visited May 1, 2021)

[5] The eighteen participants in the EGA negotiations are: Australia, Canada, China, Costa Rica, European Union, Hong Kong, China, Iceland, Israel, Japan, Korea, New Zealand, Norway, Singapore, Switzerland, Liechtenstein, Chinese Taipei, Turkey, and United States. See WTO EGA official Website: https://www.wto.org/english/tratop_e/envir_e/ega_e.htm (Last visited May 1, 2021)

Agreement and its expansion (ITA/ITA-II). The critical mass agreement is called after "critical mass" because it contains a requirement to have a significant percentage of a certain product market. This critical mass requirement is used to reduce the free-riding concerns because such kind of agreement is not signed by all the WTO members, and the benefits will be extended to all the WTO members on a most-favored-nation (MFN) basis. Therefore, this critical mass provision is the most important feature of this agreement, and that is why this kind of agreement is called critical mass agreement (CMA).

Second, the EGA uses a plurilateral negotiation approach, which is a condition for the agreement to be effective. The default negotiation strategy for multilateral agreements under the WTO is "single undertaking" (nothing is decided until everything is decided), while the default plurilateral negotiation strategy is for member states with a common interest to focus on improving specific commitments in a specific domain.[6] The EGA abandoned the traditional multilateral negotiation modality of the WTO, which would have required unanimity, and used plurilateral negotiations with a nominated product list under the WTO law framework. This "moving away from multilateralism to plurilateralism" strategy is one way that the failure of the Doha Round might be addressed.

Third, the EGA participating members also decided to use a product list to scope the range of the environmental goods. The default negotiation strategy for WTO agreements might be thought of as a "project approach," which results in a document that contains a more or less complete description of the undertakings nations ratifying the treaty will have to commit to.

[6] See WTO official website, Key stages in the services negotiations, https://www.wto.org/english/tratop_e/serv_e/key_stages_e.htm (Last visited on Nov 6, 2022); also see WTO official website forum, The WTO in Crisis: Five Fundamentals Reconsidered, https://www.wto.org/english/forums_e/public_forum12_e/art_pf12_e/art9.htm (Last visited on Nov 6, 2022).

By contrast, a list approach does not provide a complete description of undertakings but permits the scope of undertakings to adjust dynamically over time as list items are added or removed. There is no formal definition in WTO jurisprudence of either the "project approach" or the "list approach" as modalities, so these terms are merely offered as convenient labels for the purposes of the analysis in this dissertation.

The EGA negotiators initially used the APEC List of EGs as a model for the negotiation and planned to make it a hard law to gain more binding power. Such decisions by the WTO negotiators involved difficult questions of strategy because the WTO law framework is hard law with many limits, while the APEC List of EGs is soft law and has less binding power. When the EGA negotiators tried to re-nominate the list with some additions, however, they failed to get a consensus regarding the revised list.

Given the rapid completion of the APEC List of EGs and its continued vitality since taking effect, it initially appeared that the details of the list of EG goods might only be a technicality that could be resolved relatively easily. But as the weeks and months became years during which there were no new rounds of EGA negotiations, it slowly became clear that the details of the list of EG goods might not be a technicality. It now appears that the controversy surrounding which goods can be designated as EGs and which cannot expose much more fundamental conflicts of interest that negotiators could not resolve.

It is now apparent that the WTO might not be capable of resolving the conflicts of interest that the EGA negotiations exposed even though it has the example of the great success that the APEC EGs List now enjoys as a model. The APEC EGs List was announced in 2012, and the volume of EG trade in the APEC region is growing yearly. The tensions among APEC countries appear to be less than those among EGA negotiating countries. The scope of EGs under the APEC EGs

List is not large, while the scope of EGs during the EGA negotiations expanded and would be much more significant. Perhaps the only inference that can be drawn from the current deadlock in the EGA negotiations is that the participating WTO members apparently do not believe they stand to gain enough from concluding an EGA to make the compromises necessary to finish the negotiations. In addition, the growing fragmentation and polarization of international economic relations outside the context of WTO negotiations seem to be creating barriers to the successful completion of the EGA.

One "elephant in the room" with regard to the EGA deadlock might be deteriorating China-U.S. trade relations. Although there is no pre-existing consensus about what constitutes "Environmental Goods," it is clear that in markets for many goods that most people would agree are EGs, such as solar panels, China enjoys a competitive advantage that frightens other countries. Requests from China to add goods not conventionally thought of as EGs, such as electric or electronic bicycles, to the list of EGs have caused considerable controversy because other countries perceived that adding such products to the list would increase China's competitive advantage at their expense. Thus, negotiations over whether such goods could be added to the list tended to focus more on trade tensions between China and other nations rather than on the contribution of e-bicycles to environmental protection.

Another "elephant in the room" with regard to the EGA deadlock might be the possibility that the WTO system has become an anachronism, so instead of increasing certainty in trading relations among nations, its inability to perform its negotiation function successfully might be increasing uncertainty instead. If the EGA deadlock provides evidence that the traditional 20th-century multilateral trading system is now in decline, then it might also provide evidence that a switch from conventional modalities (multilateral, hard law, and project-based) to more novel

modalities (plurilateral, soft law and list-based) would not be enough to save it. Furthermore, the international economic system may now be sliding backward into a period of protectionism similar to that last seen in the 1930s.

The growing interest in mega-regional free trade agreements(Mega-Regional FTAs), like the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and Regional Comprehensive Economic Partnership (RCEP), suggests they may supplant the WTO in this new era of uncertainty. The CPTPP could be a successful regional trade agreement or might even signal what the contours of a new world trade system might look like. It is possible that the CPTPP could transcend its "regional" character and permit outside of Asia, such as the UK, to join. Therefore, these Mega-Regional FTAs may signal the emergence of something like a new General Agreement on Tariffs and Trade (GATT)[7], which helped provide the foundation for the later development of the WTO. The CPTPP has one feature in common with the WTO: emerging from the wreckage of a first, more ambitious effort that failed. In the case of the WTO, it was the failure of the U.S. to ratify the ambitious 1948 Havana Charter that led to the establishment of the much more modest GATT. In the case of the CPTPP, it was the failure of the U.S. to ratify the Trans-Pacific Partnership (TPP) that led to the establishment of the more modest CPTPP. If the current CPTPP members decide to stay small and reject applications from countries such as China and the UK, at least initially, then the future of the world trade system might remain unclear for some time. After all, it is an era of shifts, changes, and uncertainties.

This dissertation will consider why there was so much optimism regarding the EGA before the negotiations deadlocked and whether the deadlock of the EGA negotiations has any significance for the future of the WTO more generally. There is still a great deal of concern

[7] General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 [hereinafter GATT].

about climate change around the world, and the approach to the EGA negotiation modalities was seen as flexible and innovative. This dissertation will consider whether the EGA negotiation deadlock should be seen as merely a delay on the road to success or caused by the impact of some factors unrelated to trade law, including the pandemic, or as a signal of the decline of the WTO generally.

II. Methodology

At the beginning of this dissertation journey, it was assumed that the primary research and analysis tools would be traditional "textualism."[8] This assumption was based on a further assumption that the initial rapid progress in the EGA negotiations would quickly produce a text that could be analyzed using textualism. These assumptions did not take into account the risk posed by the conventional practice of maintaining the confidentiality of draft treaties during the negotiating process. Because the EGA text was never finalized and opened to WTO members for ratification, no draft of the EGA text has ever been released to the public. Not even a U.S. Freedom of Information Act[9] submitted to the U.S. Department of State could produce a copy of the draft treaty because the State Department invoked the national security exception to FOIA disclosure. As the years dragged on without any sign of any progress in the negotiations, it slowly became more and more obvious that there no draft treaty text might ever be made available to the public.

In 1892, Sir Arthur Conan Doyle published the Memoirs of Sherlock Holmes, a collection of short stories about the famous detective. This book contains a short story entitled "Silver Blaze,"

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[8] Dongsheng Zang, *One-way Transparency: The "Rule-based" International Trade Order and the Predicament of Its Jurisprudence*, PP305, 2004. "...textualism…mean[s] a way of reading and interpreting legal instruments such as a statute or a trade agreement."

[9] The Freedom of Information Act (FOIA), 5 U.S.C. § 552

in which Holmes is able to solve the mystery of the disappearance of a racehorse and the murder of its jockey by figuring out why the "dog didn't bark." The short story includes this dialogue:

> Gregory [a Scotland Yard detective]: "Is thee any other point to which you would wish to draw my attention?"
> Holmes: "To the curious incident of the dog in the night-time."
> Gregory: "The dog did nothing in the night-time."
> Holmes: "That was the curious incident."

The solution to the murder mystery was that the horse was stolen and the jockey murdered by the dog's owner because had any other person entered the barn at night, the dog would surely have barked a warning that a stranger was present. In academic research, the effort to explain why something that was expected to happen but did not is sometimes described as trying to figure out why the "dog didn't bark" in reference to this short story. While trying to identify causal factors for things that actually happened may be very difficult, the problem of trying to identify causal factors for things that did not happen can be much harder. That difficulty is further compounded by the recognition that the EGA negotiations have never been officially ended, so the analysis in this dissertation must take into account the possibility that they may suddenly restart and achieve a successful conclusion.

The conclusions of this dissertation will, therefore, necessarily be tentative and partial. In addition, they will lack any attempt to attribute definite causes to any currently observable phenomena. Rather, this dissertation will attempt to provide a neutral overview of many possible causal factors and suggest that some factors may be more likely causes than others.

There is also a well-known saying in English that might be relevant here: Necessity is the mother of invention. The necessity of finishing this dissertation has required some inventiveness

in the framing of the analysis presented here. The result is a hybrid, "mixed methods"[10] approach that includes case studies as well as an analysis of commentary on the publicly available information about the negotiations and information disclosed by parties to the negotiation. This dissertation treats the deadlock of the EGA as a case study in international economic law in order to try to identify the challenges and factors that contributed to the deadlock. The deadlock of the EGA will be compared to other successful critical mass negotiations like ITA & ITA-II and Telecommunication Agreement to consider whether the same challenges and factors had a similar impact on the negotiation process for those successful treaties. This case study summarizes past research, links the EGA negotiations to the whole WTO system, and explores the development of EGs trade relating to the EGA negotiations. It also investigates the development of the present status of the EGA deadlock and its studies, uses the identified challenges and factors to compare other agreements' success, and assumes the EGA's future.

III. Research Questions

This dissertation analyses the deadlock of the EGA by exploring these three research questions:

(1) What are the challenges to negotiating an EGs trade agreement within the WTO system?

(2) What challenges and factors contributed to the deadlock of the EGA negotiations?

(3) What are the implications of the EGA deadlock on the EGs trade in particular and international trade generally?

[10] Louise Doyle, Anne-Marie Brady & Gobnait Byrne, *An Overview of Mixed Methods Rsearch*, JOURNAL OF RESEARCH IN NURSING 175 (2009); Jessica T. Decuir-Gunby, *Mixed Methods Research in the Social Sciences*, *in* BEST PRATICES IN QUNTITATIVE METHODS (2007).

A. What are the challenges to negotiating an EGs trade agreement in WTO?

The hypothesis offered in response to the first research question is that there were three major challenges to negotiating an EGs trade agreement in WTO:

1) Uncertainty surrounding the appropriate scope of the term "environmental goods;"
2) The destabilization of the international economic order enshrined in the WTO by the unexpectedly rapid rise of China as a global economic power after it joined the WTO; and
3) The interest among potential EG exporters (mostly advanced economies) in liberalizing trade in EGs greatly exceeded the interest among potential EG importers (mostly emerging economies).

Each of these challenges is sketched out below and then explored in more depth in chapters 3-5.

One long-lived challenge facing the international economic community is how to define the scope of the term "environmental goods." This problem first surfaced decades ago and has never been resolved. Over that time, many approaches have been proposed, but none provided a foundation for a broad-based consensus. The EGA negotiators tried to sidestep this problem by using the list-based approach to nominate a complete list of products. The EGA negotiation became deadlocked because the list-based approach did not resolve the underlying disagreements regarding the appropriate scope of EGs. Different countries proposed different products for the list and objected to products proposed by countries that viewed the scope of EGs differently than they did. While in theory, it might have been possible for the negotiators to achieve consensus around a reasonable definition, in practice, it was not possible because nations were using their

different definitions of EGs as tools to advance their national interests while blocking the national interests of other countries.

The second major challenge is the conflicting economic interests among different countries participating in the negotiations. Conflicts of interest between China and other nations were among the most intense. When China was granted access to the WTO at the end of the 1990s, few would have guessed it would become an economic superpower so quickly. Yet China remained unwilling to be treated as an advanced market economy within the WTO. For example, when China proposed adding electric/electronic bicycles to the list, other countries objected on the grounds that e-bicycles were not EGs. If the parties were genuinely motivated to conclude the EGA, then they could have worked out some kind of compromise on whether e-bicycles were EGs or not. But because the argument over whether e-bicycles belonged on the list was an indirect way for other nations to try to block the threat that the EGA would fuel China's further rise, no agreement could be reached.

The third major challenge is that there was apparently too little benefit to most WTO members from liberalizing trade in EGs to motivate them to conclude the negotiations. In particular, many advanced economies participated in the negotiations, while few emerging economies did.[11] This may have been because emerging economies often resent the pressure put on them by advanced economies to slow down the pace of their economic development to achieve a notion of "sustainable development" articulated by advanced economies when

[11] The 46 EGA negotiating countries are: Australia; Canada; China; Costa Rica; European Union (Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom before Brexit); Hong Kong, China; Iceland; Israel; Japan; Korea; New Zealand; Norway; Singapore; Switzerland; Liechtenstein; Chinese Taipei; Turkey and the United States. See WTO, Environmental Goods Agreement, WTO Official Website: https://www.wto.org/english/tratop_e/envir_e/ega_e.htm (Last visited on Nov 13, 2022)

advanced economies were not pressured the same way when they were at an earlier stage of their own development. This problem is sometimes referred to as advanced economies "kicking away the ladder" or "pulling the ladder up" to prevent emerging economies from achieving their level of prosperity:

> "The rich world which has reached a high level of income largely founded on the use of non-renewable resources is in effect pulling the ladder up after it and leaving low-income countries to fend for themselves."[12]

B. What factors contribute to the deadlock of the EGA negotiations?

The hypothesis offered in response to the second research question is that there were four possible factors that contributed to the deadlock of the EGA negotiations:

1) As noted above in subpart III.A., not enough countries saw a compelling benefit from finalizing the agreement;
2) The switch from conventional modalities (multilateral, hard law, and project-based) to more novel modalities (plurilateral, soft law and list-based) was not enough to resolve the poor alignment of economic interests among member states with regard to EGs trade;
3) There was no single nation or coalition of nations who took a leadership role in pushing the process forward until completion; and

[12] LIAM MCCARTON, THE WORTH OF WATER: DESIGNING CLIMATE RESILIENT RAINWATER HARVESTING SYSTEMS, PP V, (1 ed. 2021).

4) The larger crisis of legitimacy that WTO institutions are suffering as some member states call for fundamental reforms while others do not believe fundamental reforms are warranted.[13]

Each of these factors is sketched out below and then explored in more depth in chapters 3-5.

With regard to the first factor, the unwillingness of any of the participants in the negotiations to make any significant concessions to resolve the deadlock provides strong, if indirect, evidence that the perceived benefits of the EGA were simply inadequate to permit the negotiations to be brought to a successful close.

With regard to the second factor, one way to look at the EGA was as more of an effort to save the Doha Round rather than to promote environmental protection. The choice of modalities appeared to be driven by the desire to avoid the existing problems during the Doha Round and to leverage as much as possible from APEC's successful experience.

With regard to the third factor, the ITA-II negotiations were deadlocked until the U.S. and China assumed leadership roles in completing the negotiations following the Obama-Xi meeting in 2012. After the U.S. and China began leading the negotiations, the ITA-II was able to leave the negotiation deadlock and ultimately achieve successful ratification. After EGA negotiations stopped in December 2016, the U.S.-China relationship has deteriorated to the lowest point in decades, and no other large economy was interested enough in EGs trade to assume a leadership role.

The fourth factor is that the WTO is now in crisis, and the EGA negotiation may not be its top priority for now. Regarding the fourth factor, the escalation of the trade war between the U.S.

[13] See WTO, Members continue push to commence Appellate Body appointment process, WTO Official Website, https://www.wto.org/english/news_e/news22_e/dsb_28mar22_e.htm (Last visited on Nov 13, 2022)

and China in recent years has helped to fuel a widespread perception that the WTO is in crisis. As a result, member states who remain committed to the WTO as the primary framework within which international trade relations can be managed may have more urgent concerns they are trying to address than getting the EGA negotiations restarted. As member states are moving away from the WTO and negotiating more Mega-Regional FTAs like RCEP and CPTPP, the inability of the WTO system to serve as the anchor of world trade has become obvious to everyone. In addition to the EGA negotiation failure, the WTO also faces the challenge of losing its judgment function because the appellate body does not have enough judges.[14]

C. What are the implications of the EGA deadlock on the EGs trade and international trade generally?

The hypothesis offered in response to the third research question is that the EGA deadlock is mainly a reflection of uncertainty surrounding the role of the WTO in the future. The deadlock of the EGA negotiations suggests that the 20th-century international trade law system that is anchored on the WTO may be disintegrating. The current deadlock clearly shows that the WTO currently cannot conclude an EGs trade agreement by using a critical mass plurilateral agreement with a product list. It also suggests the problems with the WTO may run even deeper. In any event, there is no clear path forward for any WTO members committed to finding a way to redesign the WTO and secure its place as the anchor of the international economic order in the future.

[14] See WTO official website, Appellate Body, "Currently, the Appellate Body is unable to review appeals given its ongoing vacancies. The term of the last sitting Appellate Body member expired on 30 November 2020." https://www.wto.org/english/tratop_e/dispu_e/appellate_body_e.htm (Last visited on Nov 6, 2022); See WTO official website news, Members continue push to commence Appellate Body appointment process, https://www.wto.org/english/news_e/news22_e/dsb_28mar22_e.htm (Last visited on Nov 6, 2022)

The recent proliferation of so-called "Mega-Regional FTAs" seems to be eroding the WTO's power, although, in many crucial respects, Mega-Regional FTAs can be viewed as operating within the WTO legal framework. In order for the WTO to continue to lead the international economic system, it will need more support than it currently enjoys from the leading countries, and it will have to maintain the trust of all the minor countries. New forms of trade agreements that are springing up, such as the Digital Economy Partnership Agreement (DEPA), might serve as models for future WTO negotiating rounds. It is not clear whether the WTO can adapt quickly enough to remain relevant as new Mega-Regional FTAs such as the CPTTP might be able to position themselves as a new GATT if they decide to accept applications for membership from outside the Asia-Pacific region.

Since its launch in 1995, the WTO has played an important role in policing the fairness of international trade. If the role of the WTO in the international economic system declines, trading relations may come to depend more on traditional power relations than on a rule-based system of international law. A new system may be emerging, and new technologies may contribute to a new way of governing international trade.

IV. Outline of the Dissertation

In this dissertation, Chapter Two reviews the academic literature on trade governance, WTO redesign discussions, and EGs trade development for the EGA negotiations. This review explores the history and literature before the EGA negotiations and finds its connections to the WTO's crisis to demonstrate that the EGA is just another sign of the crisis. It looks for causes of the EGA deadlock by connecting trade governance with the WTO's negotiation functions. This review points out that the WTO's crisis could be traced back as early as its establishment, but in any event, it was exposed when Doha Round failed. The EGA was another attempt to save the

negotiation function by labeling it as a plurilateral or critical mass agreement, learning from other international soft law agreements, and using the existing ITA's approach. The negotiations were deadlocked for years, and the blames from the western comments were mainly on China's new product list submission at the very end of the last negotiation, which lacks the study of the true intention from China's side of the story. Also, this review notes that although academic research about the EGA deadlock includes legal, trade, and political perspectives, it does not seem to be well connected to real-world events right now. The lack of focus on real-world events among academic commentators on the EGA may help to explain the gap between expectations and the result of the EGA negotiations.

Chapter Three explores the WTO's negotiation function in the Doha Round, highlighting the single-undertaking practice and consensus-based decision-making rule as the first challenge in concluding the negotiations, and notes the rise of neo-mercantilism.

Chapter Four explores the EGA in more depth but considers the history and development of the EGA and the factors that are contributing to the deadlock of the EGA.

Chapter Five compares EGA to ITA-II and the Telecommunication agreement, which are all classified as critical mass agreements. This chapter notes that the negotiation subject is crucial. The success of such limited-scope agreements may depend on the usefulness of their subject matter as well as whether some negotiating parties enjoy a comparative advantage in trade in that area. It is also important to have a convergence of interests among countries leading the negotiations for the negotiations to be concluded successfully. Therefore, while the choice of appropriate modalities may contribute to the success or failure of treaty negotiations, they are not the most important factor.

Chapter Six concludes the dissertation and notes where further research may be needed and highlights the need for an interdisciplinary approach to analyzing issues as complex as the current crisis of legitimacy plaguing the WTO.

Chapter 2 Literature Review: Back to the World Trade Organization

I. Introduction

The deadlock of the Environmental Goods Agreements (EGA) is a sign that a global trade governance winter may be beginning for the World Trade Organization (WTO). If one of the main purposes of the EGA is to help the WTO revive its negotiation function after the failure of the Doha Round, it failed to help because of its own deadlock. Meanwhile, mega-regional free trade agreements (Mega-Regional FTAs) have become a major new trend in international economic cooperation. Thus, the deadlock of the EGA is not the first or only sign that the WTO's future may be problematic.

Since the establishment of the WTO, the discussion of redesigning or fixing WTO has never stopped,[15] but the WTO is still losing its power over global trade governance. On the one hand, the world is constantly changing, and the unexpected speed of China's rise has surprised Western countries, with the WTO eventually becoming collateral damage in the growing trade conflict between the West and China. On the other hand, the WTO has its own problems to solve. For

[15] For examples during 1996-2021, CHALLENGES TO THE NEW WORLD TRADE ORGANIZATION, (Pitou van Dijck & Gerrit Faber eds., 1996); ANNE O. KRUEGER, THE WTO AS AN INTERNATIONAL ORGANIZATION (1998); James Thuo Gathii, *Process and Substance in WTO Reform*, 56 RUTGERS LAW REVIEW 43 (2003); Robert Z. Lawrence, *Rulemaking Amidst Growing Diversity: A Club-of-Clubs Approach to WTO Reform and New Issue Selection*, 9 JOURNAL OF INTERNATIONAL ECONOMIC LAW 823 (2006); REDESIGNING THE WORLD TRADE ORGANIZATION FOR THE TWENTY-FIRST CENTURY, (Debra P. Steger ed., 2010); Bernard Hoekman, *Proposals for WTO Reform: A Synthesis and Assessment*, MINNESOTA JOURNAL OF INTERNATIONAL LAW 324 (2011); Mitsuo Matsushita, *A View on Future Roles of The WTO: Should There be More Soft Law in The WTO*, 17 JOURNAL OF INTERNATIONAL ECONOMIC LAW 701 (2014); Yvan Decreux & Lionel Fontagné, *What Next for Multilateral Trade Talks? Quantifying the Role of Negotiation Modalities*, 14 WORLD TRADE REVIEW 29 (2015); Mark Wu, *The "China, Inc." Challenge to Global Trade Governance*, 57 HARVARD INTERNATIONAL LAW JOURNAL 64 (2016); Rorden Wilkinson, *Back to the future: 'retro' trade governance and the future of the multilateral order*, 93 INTERNATIONAL AFFAIRS 1131 (2017); Robert Basedow, *The WTO and the Rise of Plurilateralism—What Lessons can we Learn from the European Union's Experience with Differentiated Integration?*, 21 JOURNAL OF INTERNATIONAL ECONOMIC LAW 411 (2018); Shuai Guo & Qingjiang Kong, *WTO Reform: Will There Be a Third Option other than a U.S. Withdrawal and a China Expulsion*, 14 ASIAN JOURNAL OF WTO & INTERNATIONAL HEALTH LAW AND POLICY 359 (2019); Henry Gao, *WTO Reform: A China Round?*, 114 PROC. ANNU. MEET. 23 (2020); Bernard Hoekman & Petros C. Mavroidis, *WTO Reform: Back to the Past to Build for the Future*, 12 GLOB POLICY 5 (2021).

example, the decision-making system of the WTO was designed to be fair but inflexible. That inflexibility was intended to make it easier for nations to reach agreements on difficult trade issues. However, because it is not the same world as when the WTO was established, its negotiating modalities might be too inflexible. Therefore, it is important to review the challenges it faces to see what is happening inside the WTO, including what international economic law scholars have suggested the WTO do to address these challenges, and how the deadlock of the EGA suggests that the strategies identified this far may be inadequate to address those challenges.

Moreover, the history of the EGA negotiations must be reviewed to demonstrate that the EGA is a sign of a larger crisis at the WTO. Despite the high expectations that the EGA's success might be a "missing piece of the puzzle"[16] for the WTO to liberalize environmental goods (EGs) trade, the EGA negotiations were deadlocked after December 2016. Since the last round of negotiations, the WTO has not announced either any new rounds or that the effort to negotiate the treaty has failed but seems to have "forgotten" about the EGA.

The first part of this literature review (Section II below) includes a background discussion about the WTO's trade governance and the economic importance of international trade. The second part (Section III below) reviews the Doha Round failure, the WTO in crisis, and academic debates about redesigning the WTO to determine whether any academic commentators foresaw the current WTO crisis and what might have contributed to the WTO's negotiation function becoming dysfunctional. Finally, the third part (Section IV below) deals with the EGA:

[16] Patricia M. Goff, *The Environmental Goods Agreement: A Piece of the Puzzle*, CENTRE FOR INTERNATIONAL GOVERNANCE INNOVATION PAPERS (2015).

EGs trade concepts and history, challenges in EGs trade negotiations, the EGA's importance, and a discussion about the EGA.

The scope of this review is limited to explaining and commenting on the legal perspectives regarding the EGA. Other perspectives are summarized as background for reference only. Moreover, this review focuses on the international trade aspect of EGs. The EGA has almost no connection to international environmental law, more generally because the EGA negotiations did not raise any international environmental law issues.

Several gaps in the existing academic literature emerged as a result of this review:

- First, "critical mass agreement" is separate from "plurilateral agreement", however, the critical mass agreement in the WTO is still plurilateral because plurilateral negotiations mean that the agreement is negotiated by a subset of WTO members instead of all WTO members; therefore, it is still confusing by simply call it critical mass agreement.
- Second, Western commentators have often criticized China for the EGA negotiations' deadlock without considering what other countries might have contributed to the deadlock.
- Third, an analysis of the legal issues raised by the EGA deadlock provides insight into what caused it, but a more comprehensive understanding of the causes of the deadlock must include factors beyond that legal analysis can address.

II. Background: Trade and the WTO

Since its launch in 1995, the WTO has played an essential role in global trade by administering trade agreements, acting as a forum for trade negotiations, settling trade disputes, reviewing national trade policies, building the trade capacity of developing economies, and

cooperating with other international organizations.[17] The WTO law framework is the foundation for international trade, and no other organization can replace it. Moreover, trade is essential to the world economy because it contributes to greater prosperity in trading nations than could be achieved without trade. However, concerns over the WTO's strict policies have been raised because of the changing world, especially China's emergence. Therefore, it is crucial to determine whether the WTO's strict policies hinder its development and threaten global trade development.

A. The Importance of Trade and the WTO

Trade is critical to the economy, and tariffs play an essential role in regulating trade. Guzman suggested that the importance of trade can be demonstrated by comparing growth in trade and income over time. Thus, while income (Figure 2-1, World gross domestic product (GDP) Per Capita 1971–2020) is growing, trade (Figure 2-2 World Exports in Goods and Services) is growing at an even faster rate, as Figures 2-1 and 2-2 demonstrate.[18] In addition, Guzman found that the trend of reducing tariffs contributes to increased trade.[19] For example, Figures 2-2 and 2-3 show that world MFN tariff rates were reduced, while trade increased from 1990 to 2019, excepting two financial crises: 2008 and 2015–2016.[20] Therefore, Guzman emphasized that trade plays an essential role in modern economies, and significant changes to trade law may have a

[17] WTO, WTO Functions, WTO official Website: https://www.wto.org/english/thewto_e/whatis_e/inbrief_e/inbr_e.htm (Last visited on May 5, 2021)

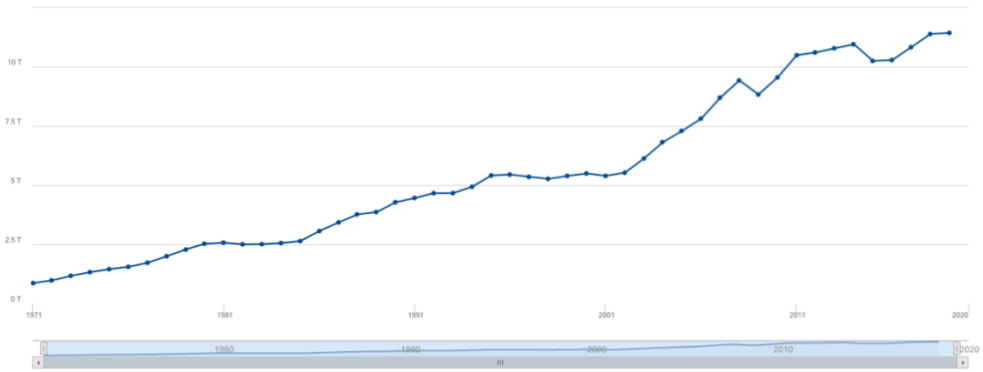
[18] ANDREW T. GUZMAN & JOOST PAUWELYN, INTERNATIONAL TRADE LAW (2. ed ed. 2012).

[19] *Id.*

[20] The financial crisis of 2007–2008, also known as the global financial crisis (GFC). See Wikipedia, Financial crisis of 2007–2008: https://en.wikipedia.org/wiki/Financial_crisis_of_2007%E2%80%932008 (Last visited on Nov 7 , 2022); 2015-2016 Stock market selloff, see Wikipedia, 2015–2016 stock market selloff: https://en.wikipedia.org/wiki/2015%E2%80%932016_stock_market_selloff (Last visited on Nov 7 , 2022.)

far-reaching influence on economic outcomes and people's welfare.[21] Indeed, the organization governed by trade law is important to the world.

Figure 2-1 World GDP Per Capita (Current USD)

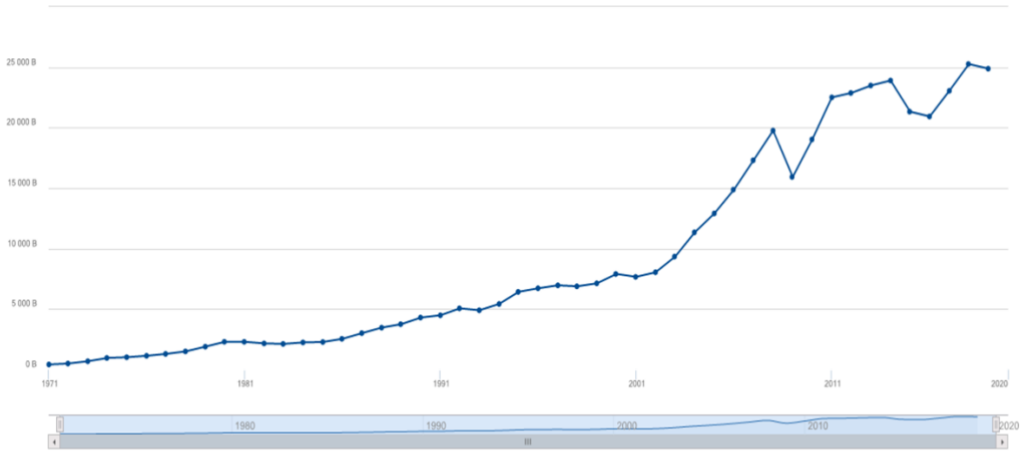


Series : GDP per capita (current US$)
Source: World Development Indicators
Created on: 05/12/2021

Data Source: The World Bank, DataBank, World Development Indicators Online, https://databank.worldbank.org/indicator/NE.EXP.GNFS.ZS/1ff4a498/Popular-Indicators# (Last visited May 12, 2021)

[21] GUZMAN AND PAUWELYN, *supra* note 18, PP4.

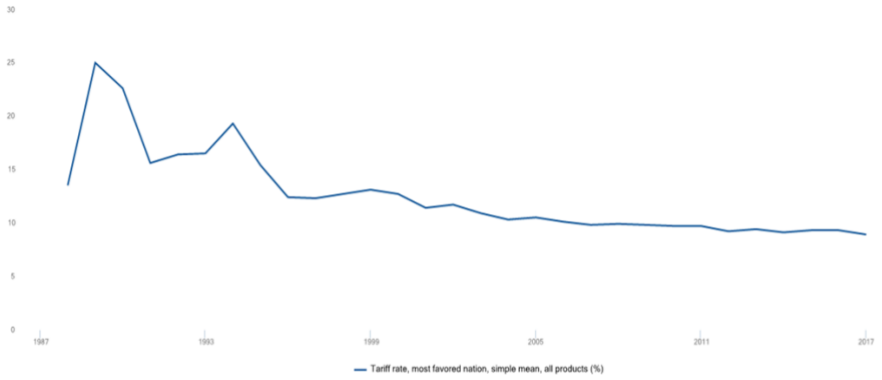
Figure 2-2 Exports of Goods and Services (Current USD)



Series : Exports of goods and services (current US$)
Source: World Development Indicators

Data Source: The World Bank, DataBank, World Development Indicators Online, https://databank.worldbank.org/indicator/NE.EXP.GNFS.ZS/1ff4a498/Popular-Indicators# (Last visited May 12, 2021)

Figure 2-3 World MFN Simple Mean All Products Tariff Rate (%)



Country : World
Source: World Development Indicators
Created on: 05/12/2021

Data Source: The World Bank, DataBank, World Development Indicators Online, https://databank.worldbank.org/indicator/NE.EXP.GNFS.ZS/1ff4a498/Popular-Indicators# (Last visited May 12, 2021)

In addition, international engagement through trade relations has been thought to contribute to world peace. Deputy Director-General of the WTO, Alan Wm. Wolff, underlined that "trade and foreign policy have been intertwined throughout history" and that history has taught us that

failure to maintain openness to trade leads to "instability, and a threat to peace, both internally and internationally."[22] Thus, the WTO is designed for trade liberalization, promoting trade openness, and keeping the world stable and peaceful.

In examining history, the WTO seems to be a derivative product of World War II but serves more significant goals than merely governing trade law. The United States emerged as a dominating political and economic power after World War II and established a new post-second World War international economic system as a lead.[23] Moreover, the International Monetary Fund (IMF) and the World Bank were created at the United Nations Monetary and Financial Conference (1944 Bretton Woods Conference.) After the 1944 Bretton Woods Conference, the United Nations Economic and Social Council conducted multilateral trade negotiations, as countries intended to establish an international organization to develop and coordinate international trade after a resolution to form the International Trade Organization (ITO) in 1946. However, the ITO was never established because the United States withdrew from it.[24]

Nevertheless, a different product from the negotiation rounds, the General Agreement on Tariffs and Trade (GATT),[25] was completed and later evolved into an international organization, the WTO. The GATT was a multilateral agreement containing general trade principles. The GATT served as the basis for eight rounds of multilateral trade negotiations.[26] The Final Act of

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[22] WTO, the early days of trade, Trade and foreign policy have always been intertwined, speech delivered by DDG Wolff, the WTO Website, https://www.wto.org/english/news_e/news18_e/ddgra_09feb18_e.htm (Last visited on Nov 7, 2022)

[23] MITSUO MATSUSHITA ET AL., THE WORLD TRADE ORGANIZATION: LAW, PRACTICE, AND POLICY, PP1-2 (Third edition ed. 2015).

[24] *See* how the ITO failed to ratify: AMRITA NARLIKAR, MARTIN DAUNTON & ROBERT STERN, THE OXFORD HANDBOOK ON THE WORLD TRADE ORGANIZATION, PP95-98 (2012).

[25] General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 [hereinafter GATT].

[26] The eight rounds are the Geneva Round 1947, the Annecy Round 1949, the Torquay Rounds 1951, the Geneva II Round 1956, Dillon Rounds in 1960-61, the Kennedy Round 1964-7, the Tokyo Round 1973-9, and the Uruguay Round 1986-94. See full information about negotiation rounds in the WTO, The GATT years: from Havana to Marrakesh, the WTO official website: https://www.wto.org/english/thewto_e/whatis_e/tif_e/fact4_e.htm#rounds (Last visited on Nov.7, 2022)

the Uruguay Round of negotiations (1986–1994; Uruguay Round) transformed GATT into the WTO, established by the Marrakesh Agreement Establishing the World Trade Organization (Marrakesh Agreement.)[27]

The world's trade has been running smoothly since the WTO's birth. Member governments attempt to sort out trade problems, negotiate trade agreements, and settle trade disputes in the WTO. The WTO organizes trade openings and operates a system of trade rules. Meanwhile, WTO stands for principles of non-discrimination, lowering trade barriers, predictability, and transparency, discouraging "unfair" practices beneficial to less developed countries, and protecting the environment.

The fundamental principles upon which the WTO is based cannot be easily changed to accommodate changing trade and global economic trends. Indeed, the combination of fixed principles and an inflexible decision-making process combined with a growing membership of nations with divergent interests have made it difficult for the WTO to move forward with trade liberalization since 1995. Thus, if the WTO cannot find a way to respond more effectively to changing conditions in the global economy, it seems likely that its power over global trade governance will continue to erode.

B. Trade Governance and the WTO

Although "trade governance" is a term frequently encountered in academic articles and books on international economic law, no clear definition has been given. For example, in "Trade Governance in the Digital Age: World Trade Forum," edited by Burri and Cottier, they "offer a collection of expertise and viewpoints that address both the micro and macro level of trade

[27] Marrakesh Agreement Establishing the World Trade Organization, Apr.15, 1994, 1867 U.N.T.S. 154. [hereinafter Marrakesh Agreement]

governance in the digital age" but no single article defines trade governance.[28] While trade governance may explain how global trade is governed, it is more complicated than these simple words.

From a historical and economic perspective, Cheng explained the study of trade governance as "the study of production relationships, encompassing relationships between entities in global systems, and the evolution of regulations,"[29] which only gives the study of trade governance a scope. However, this scope is enough to begin discussing trade governance from an economic point of view. Cheng stated that global governance theory is an interdisciplinary theory deeply related to globalization, encompassing the fields of economics, international politics, law, and philosophy.[30]

Cheng mainly developed her views from Friedman and Baldwin's globalization and global trade governance perspective.[31] She asserted that a form of "globalization" existed before capitalist globalization, although the term globalization was not used.[32] From the conventional Western point of view, globalization can be considered to have started with Portuguese explorers and Columbus discovering the New World in 1492, followed by the Industrial Revolution, which

[28] TRADE GOVERNANCE IN THE DIGITAL AGE: WORLD TRADE FORUM, (Mira Burri & Thomas Cottier eds., 2012).
[29] DAWEI CHENG, TRADE GOVERNANCE OF THE BELT AND ROAD INITIATIVE: ECONOMIC LOGIC, VALUE CHOICES, AND INSTITUTIONAL ARRANGEMENT (1 ed. 2018).
[30] *Id.*
[31] *Id.*; Richard Baldwin, *WTO 2.0: Governance of 21st century trade*, 9 REV INT ORGAN 261 (2014); THOMAS L. FRIEDMAN, THE WORLD IS FLAT: A BRIEF HISTORY OF THE TWENTY-FIRST CENTURY (2007).
[32] CHENG, *supra* note 29.

the United Kingdom led.[33] After the end of World War II, the United States emerged as the dominant trading nation, first under the GATT and later under the WTO.[34]

According to Baldwin, now is the "new unbundling" stage, which contains rapid development of intra-product trade, global value chain division, and increased intra-region and intra-industry chain associations between companies.[35] Baldwin also found that the WTO's multilateral trade system is now inadequate for coping with the new stage, which creates a dangerous governance gap in the global economy.[36]

In contrast, from a Chinese historical perspective, Cheng claimed that instead of the United Kingdom, the Silk Road in the Han dynasty was the earlier root of globalization, which strengthened production and cultural exchanges among numerous countries, generated a spillover effect for the first globalized system, and adopted restrained military and economic diplomacy.[37] It is a historian's work to argue which globalization was first; therefore, this dissertation only discusses contemporary globalization according to the Western historical perspective.

In addition, Cheng agreed with Baldwin about the governance gap, further stating that the UK's Brexit and the U.S. Trump Administration's "American First" trade policy represented the recession of globalization and global trade governance, leading to a new era of globalization and

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[33] For examples, Rourke & Williamson claims that the word "globalization" was the defining term around 1990s and some world historians attach globalization 'big bang' significance to 1492 and 1498, who are following Adam Smith and believed these were the two most important events; Webb and Coatsworth considered that the first cycle of globalization began in 1492. See K. H. O'Rourke & J. G. Williamson, *When did globalisation begin?*, 6 EUROPEAN REVIEW OF ECONOMIC HISTORY 23 (2002); WALTER PRESCOTT WEBB, THE GREAT FRONTIER (1952); John H. Coatsworth, *Globalization, Growth and Welfare in History*, *in* GLOBALIZATION: CULTURE AND EDUCATION IN THE NEW MILLENNIUM 38 (2004).

[34] CHENG, *supra* note 29; Baldwin, *supra* note 31; THOMAS L. FRIEDMAN, *supra* note 31.

[35] Baldwin, *supra* note 31; CHENG, *supra* note 29.

[36] Baldwin, *supra* note 31.

[37] CHENG, *supra* note 29.

global governance.[38] Cheng claimed that "these efforts not only imply that current multilateral or global system frameworks are poised to undergo changes but also indicate that the core element of global governance, namely regulations, is no longer respected."[39] Meanwhile, Baldwin suggested that the world trade governance is heading toward a two-pillar system: the first is the WTO, which continues to govern trade as usual; the second is "a system where disciplines on trade in intermediate goods and services, investment and intellectual property protection, capital flows, and the movement of key personnel are multilateralized in mega-regionals."[40] However, with the current WTO crisis in negotiations and judgment, it is bound to arouse suspicion over the WTO's ability to govern global trade.

From a legal perspective, trade governance seems to be a blurred concept that has some relationship to ideas of soft law when applied to something other than the WTO legal system. For positivist legal theorists, international law is not law because a law should be issued by a sovereign and has a sanction.[41] Austin claimed that international law is a form of positive morality instead of law because no commands are issued by a sovereign armed with a sanction.[42]

Kelsen conceived that international law is a law; however, it depends on self-help without any centralized power to apply it.[43] Like Kelsen, Hart argued that international law lacks secondary rules to assess the validity of its primary substantive rules. Thus, international law can only constitute a law, not a legal system.[44]

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[38] *Id.*
[39] *Id.*
[40] Richard Baldwin, *The World Trade Organization and the Future of Multilateralism*, 30 JOURNAL OF ECONOMIC PERSPECTIVES 95 (2016).
[41] GREGORY C. SHAFFER, DEFENDING INTERESTS: PUBLIC-PRIVATE PARTNERSHIPS IN WTO LITIGATION (2003).
[42] *Id.* John Austin, *The Province of Jurisprudence Determined*, *in* THE GREAT LEGAL PHILOSOPHERS: SELECTED READINGS IN JURISPRUDENCE (1959).
[43] SHAFFER, *supra* note 15; Hans Kelsen, *The Natural of International Law*, *in* LAW AND PEACE IN INTERNATIONAL RELATIONS: THE OLIVER WENDELL HOLMES LECTURES, 1940-41 (1942).
[44] SHAFFER, *supra* note 41; H.L.A. HART, THE CONCEPT OF LAW (2nd ed. 1994).

Weber suggested that international law has no legal authority to enforce the law, so it should not be law.[45] However, Shaffer found that WTO law could be law under the above strict positivist sense since the WTO has a centralized institution, the WTO Dispute Settlement Body, to enforce its rules and has judicial decisions, which may lead to sanctions if it does not comply.[46] Therefore, for international governance scholars, the WTO law is a "harder" and enhanced legal system than some other international law.[47] Thus, the WTO is the only hard law system inside the trade governance regime.

If "governance" is defined as the power to make rules for institutions and individuals, then from this point of view, trade governance is changing, and the international trade system is "powerfully shifting."[48] As many scholars have identified, the WTO is no longer working as a negotiation forum because no major agreements have been reached on a multilateral level since its launch in 1995, while bilateral and mega-regional negotiations have played a much more critical role in international economic law for decades.[49] Hence, although the WTO will always administer the existing treaties, its fundamental purpose will change if that is its only function because it has lost its negotiation function.

For the WTO to remain at the center of the international economic order, it must act to regain its negotiation function. Therefore, using a term like "trade governance" to suggest that the WTO

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[45] SHAFFER, *supra* note 15; MAX WEBER, FROM MAX WEBER: ESSAYS IN SOCIOLOGY (2013), ProQuest Ebook Central.

[46] SHAFFER, *supra* note 41.

[47] *Id.*

[48] Alberto do Amaral Junior, *Is Trade Governance Changing*, 12 BRAZILIAN JOURNAL OF INTERNATIONAL LAW 371 (2015).

[49] For examples, Susan C. Schwab, *After Doha: Why the Negotiations Are Doomed and What We Should Do About It*, 90 FOREIGN AFFAIRS 104 (2011); Antoine Martin & Bryan Mercurio, *Doha dead and buried in Nairobi: lessons for the WTO*, 16 JOURNAL OF INTERNATIONAL TRADE LAW AND POLICY 49 (2017); Braz Baracuhy, *Running into a Brick Wall: The WTO Doha Round, Governance Gap and Geopolitical Risks: The WTO Doha Round: On Deadlocks and Changes*, 3 GLOBAL POLICY 108 (2012); S. E. Rolland, *Redesigning the Negotiation Process at the WTO*, 13 JOURNAL OF INTERNATIONAL ECONOMIC LAW 65 (2010).

might evolve into a soft law institution instead of a hard law international organization does not resolve the underlying challenges the WTO faces. It is not yet clear whether an international economic order based on bilateral trade agreements, Mega-Regional FTAs and a return to "great power politics" can provide the world with the same level of peace and prosperity it enjoyed when world trade occurred within the WTO system.[50]

C. The WTO as a Negotiation Forum

One of the principal goals of the WTO from its inception was to serve as a forum for trade liberalization negotiations. It is ironic, therefore, that the WTO has not served as a forum for any major multilateral trade liberalization initiatives since its founding. The WTO introduces itself on its website using the straightforward sentiment: "The WTO was born out of negotiations; everything the WTO does is the result of negotiations." [51] This honest self-description helps to explain what the WTO is and what it does, indicating that the negotiation function is a central part of its mission.

The foundations of the WTO can be traced back to a series of trade negotiation rounds launched in the years after World War II. As mentioned in Section II A, the U.S. became a dominant political and economic power and led the establishment of a new post-War international economic system.[52] The IMF and the World Bank were created at the 1944 Bretton Woods Conference. Following the 1944 Bretton Woods Conference, the United Nations Economic and Social Council conducted multilateral trade negotiations.

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[50] See JOHN J. MEARSHEIMER, THE TRAGEDY OF GREAT POWER POLITICS (2001).

[51] See WTO, Understanding the WTO, WTO official website: https://www.wto.org/english/thewto_e/whatis_e/tif_e/tif_e.htm (Last visited on Nov 6, 2022)

[52] MATSUSHITA ET AL., *supra* note 23.

The countries participating in those negotiations intended to set up a third international organization to help develop and coordinate international trade. These efforts led to the Havana Charter being signed in 1948, which if it had been ratified would have established an ITO. The ITO was never coming into being, however, because although the U.S. had led the effort to create it, the U.S. Senate refused to authorize ratification of the Havana Charter.[53] Without U.S. support, the project failed.

What took shape instead was a much more modest framework for international trade liberalization known as the GATT, which was signed in 1947 and began operations in 1948. The GATT was a multilateral agreement containing general trade principles that served as the basis for eight rounds of multilateral trade negotiations.[54] The Final Act of the Uruguay Round of negotiations (1986-94) (Uruguay Round) transformed GATT into the WTO, which had been established by the 1994 Marrakesh Agreement. [55] The history of the WTO shows that it was "born out of negotiations."

"Everything the WTO does is the result of negotiations" is also an accurate description because, under the Marrakesh Agreement, the WTO should "facilitate the implementation, administration, and operation and further the objectives." This 'facilitation' should be the ultimate outcome of the negotiations that the WTO helps to promote. According to the GATT and the Marrakesh Agreement, the WTO performs the critical function of acting as a forum for

[53] *See* how the ITO failed to ratify: AMRITA NARLIKAR, MARTIN DAUNTON & ROBERT STERN, THE OXFORD HANDBOOK ON THE WORLD TRADE ORGANIZATION, PP95-98 (2012).
[54] See *supra* note 26.
[55] Marrakesh Agreement.

negotiating trade agreements.[5657] This function takes place through negotiation rounds, which are programs of multilateral trade talks held by the Ministerial Conference.[58]

Therefore, negotiations and negotiation rounds have been crucial and indispensable for the WTO since its creation process after World War II. The GATT/WTO's most important accomplishment is to significantly reduce the levels of tariffs and non-tariff trade barriers that emerged during the Great Depression of the 1930s. This accomplishment happened mainly through the eight multilateral negotiating rounds.[59] To maintain the WTO's power over global trade governance, the WTO must continue to serve as an effective negotiation forum for trade. However, the next negotiation round, the Doha Round, has seemed to be on the verge of collapse for years, leading to discussions on fixing the WTO's negotiation function.

III. WTO Crisis and WTO Reform

A. Doha Round Failure and the WTO in Crisis

The majority of scholars and media press consider the Doha Round an official failure as of December 2015 after the Tenth Ministerial Conference in Nairobi. [60] The failure of the Doha Round is a crucial sign for the winter of WTO's multilateral system. Indeed, scholars and

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[56] Marrakesh Agreement, Art III; The WTO has four major function under Marrakesh Agreement Art. III: 1) providing a forum for negotiations among members; 2) administering the system of dispute settlement; 3) administering the Trade Policy Review Mechanism; and 4) cooperating as needed with the IMF and the World Bank

[57] MATSUSHITA ET AL., *supra* note 23, pp13.

[58] The Ministerial Conference is the topmost decision-making body of the WTO to take decision on all matters under any of the multilateral trade agreements, which brings together all members of the WTO, all of which are countries or customs unions. Representatives from each member country, making high-level policy decisions while meeting at least once every two years

See WTO official Website: https://www.wto.org/english/thewto_e/minist_e/minist_e.htm

[59] NARLIKAR, DAUNTON, AND STERN, *supra* note 24, pp29.

[60] For examples, *see* Baracuhy, *supra* note 49; Martin and Mercurio, *supra* note 49; Mark Wu, *The WTO Environmental Goods Agreement: from Multilateralism to Plurilateralism, in* RESEARCH HANDBOOK ON CLIMATE CHANGE AND TRADE LAW 279 (2016). *See* also The Doha round finally dies a merciful death, Financial Times: https://www.ft.com/content/9cb1ab9e-a7e2-11e5-955c-1e1d6de94879 (Last visited on Oct 26, 2020); *See also* Global Trade After the Failure of the Doha Round, Opinion, *New York Times*, https://www.nytimes.com/2016/01/01/opinion/global-trade-after-the-failure-of-the-doha-round.html (Last visited on Oct 26, 2020.)

commentators have recognized the Doha Round collapse many times over the past two decades,[61] agreeing that the Nairobi Ministerial Conferences officially buried the Doha Round.[62]

The Nairobi Ministerial Declaration states that the Doha Round was abandoned by the international trade community in 2015. The Declaration also recognized that WTO members should continue to work to integrate emerging economies into the international economic order, and that some members would want to explore new architectures while many members would want to continue working on the Doha structure.[63]

After the Uruguay Round's success, the Doha Round was launched at WTO's Fourth Ministerial Conference in Doha, Qatar, in November 2001. The Doha Round is the most recent round of trade negotiations and intends to reform the international trading system by introducing lower trade barriers and revised trade rules.[64] The Doha Development Agenda (DDA) was agreed to, including a mandate for trade negotiations on a broad range of subjects of particular concern to emerging economies.[65]

However, the WTO members repeatedly postponed the Doha Round's deadlines; for example, its original conclusion year was 2005, but the WTO members failed to conclude that year. Instead, many members have concluded bilateral and regional trade agreements, indicating that key countries have moved away from the Doha Round negotiations.[66]

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[61] For examples, DILIP K. DAS, THE DOHA ROUND OF MULTILATERAL TRADE NEGOTIATIONS : ARDUOUS ISSUES AND STRATEGIC RESPONSES (2005); Schwab, *supra* note 49; Baracuhy, *supra* note 49; Bernard M. Hoekman & Petros C. Mavroidis, *WTO 'à la carte' or 'menu du jour'? Assessing the Case for More Plurilateral Agreements*, 26 EJILAW 319 (2015); Wu, *supra* note 60; Martin and Mercurio, *supra* note 49.

[62] Martin and Mercurio, *supra* note 49.

[63] World Trade Organization, Nairobi Ministerial Declaration, 19 Dec 2015 WT/MIN(15)/DEC

[64] *See* the WTO official Website, the Doha Round page: https://www.wto.org/english/tratop_e/dda_e/dda_e.htm (Last visited on Nov 6 2022)

[65] *See* World Trade Organization, Ministerial Declaration of 14 November 2001, WT/MIN (01)/DEC/1. The topics includes agriculture, market access for non-agricultural products, services, intellectual property, trade and development, trade and environment, trade facilitation, WTO rules revisions, and dispute settlement. See details on these topics: World Trade Organization Annual Report 2009, 15-28.

[66] MATSUSHITA ET AL., *supra* note 23, pp26.

Schwab called for an abandonment of the Doha Round and move to another round or other negotiation approaches to further liberalize trade as early as 2011,[67] while Martin and Mercurio claimed that because the Doha Round was dead and buried in Nairobi in 2015, free trade agreements (FTAs) and plurilateral negotiations could be the subsequent trends of trade policymaking.[68] Moreover, Matsushita, Schoenbaum, Mavroidis, and Hahn believed that the broad "rounds" of global trade negotiations would no longer exist and that future negotiations would be concerned with narrowly focused issues relating to existing trade agreements.[69]

The failure of the Doha Round is not a surprise for three obvious reasons. First, the DDA started with big ambitions: unrealistic deadlines, too much negotiation programme, a single-undertaking negotiation model, and an undetermined "development" goal.[70] Second, agriculture is always the most controversial and important topic for the WTO negotiations since the Uruguay Round, creating conflicts between developed and developing countries.[71] Third, the members forgot the early negotiating momentum, slowly gave up the Doha Round over time, and moved on to other negotiation approaches, like bilateral and regional negotiations.[72]

From the negotiation approach aspect, the WTO's negotiation practices may be one of the most prominent factors for the Doha Round's failure. The WTO negotiations adopted a single-undertaking practice, so nothing was agreed upon until there was unanimity on all aspects of the negotiation. Additionally, all decisions required a general consensus of all WTO members, as this mode of policymaking was utilized under the practice of the GATT in 1947. The Marrakesh

[67] Schwab, *supra* note 49.
[68] Martin and Mercurio, *supra* note 49.
[69] MATSUSHITA ET AL., *supra* note 23.
[70] Martin and Mercurio, *supra* note 49.
[71] *Id.*
[72] *Id.*

Agreement stated that "[t]he body concerned shall be deemed to have decided by consensus if no Member, present at the meeting when the decision is taken, formally objects to the proposed decision."[73]

However, reaching a complete consensus on decisions is time-consuming because of increased diversity and the number of WTO members. A single objection prevents the members from reaching an agreement under the consensus-based decision-making practice, which becomes a problem for the WTO members. The goal of negotiation rounds should be multilateral agreements creating sets of deals, which the Doha Round failed to achieve. As a result, the application of multilateralism is declining, while the adoption of plurilateral agreements and FTAs are rising.

One of the biggest criticisms of the WTO negotiation process is that it is simply not flexible enough. Schwab considered the WTO negotiations should have more flexibility because the Doha Round negotiation's structure and approaches were outdated.[74] Schwab explained that the Doha Round's failure could be attributed to the WTO's outdated structure and negotiating dynamic.[75] Zhang agreed with Schwab that single-undertaking and consensus-based practices are obstacles to the negotiations, believing that flexibility could help EGs trade negotiations.[76]

Moreover, Wu saw greater flexibility as necessary and further explained that the EGA allows WTO members to move from multilateralism to plurilateralism. Wu also suggested that the plurilateral approach may be a more effective way to ensure that rules evolve within the trade

[73] Marrakesh Agreement.
[74] Schwab, *supra* note 49.
[75] *Id.*
[76] *See* Zhongxiang Zhang, *Trade in Environmental Goods, with Focus on Climate-friendly Goods and Technologies.*, *in* RESEARCH HANDBOOK ON ENVIRONMENT, HEALTH AND THE WTO 673 (2013).

regime.[77] Indeed, many other scholars have agreed that plurilateralism may unlock the stalemate.[78]

However, Brazil diplomat and Doha Round negotiator Braz Baracuhy commented that to only blame the endogenous causes, like the single-undertaking approach, would be wrong because the WTO is best prepared to deal with the forces of geoeconomics shifts and their impacts on multilateral negotiating formats because of the flexibility of its decision-making process.[79] Nevertheless, Baracuhy did not explain why the WTO has a flexible decision-making process. He only claimed that multilateralism needs reform to accommodate the balance of interests and concerns between old and new powers.[80] Wolfe considered that the single-undertaking approach is unlikely being eliminated because it is emerged in the interaction structured by the regime.[81]

Some scholars have suggested solutions other than greater flexibility in the WTO's negotiation function may be needed, for example, using more soft law within the WTO,[82] having more FTAs, or using more "mega-regional" free trade agreements.[83] For example, Chaisse and Matsushita suggested a soft law approach to a new agreement,[84] while Martin and Mercurio considered that the Doha Round's failure revealed the end of the WTO's multilateral policymaking level and a new policymaking era by FTAs or other new approaches.[85]

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[77] Wu, *supra* note 60.

[78] Bernard M. Hoekman & Petros C. Mavroidis, *Embracing Diversity: Plurilateral Agreements and the Trading System*, 14 WORLD TRADE REVIEW 101 (2015); Talitha Bertelsmann-Scott et al., *The impact of plurilateral trade agreements on developing countries – to participate or not to participate?*, 25 SOUTH AFRICAN JOURNAL OF INTERNATIONAL AFFAIRS 177 (2018); Basedow, *supra* note 15.

[79] Baracuhy, *supra* note 49.

[80] *Id.*

[81] R. Wolfe, *The WTO Single Undertaking as Negotiating Technique and Constitutive Metaphor*, 12 JOURNAL OF INTERNATIONAL ECONOMIC LAW 835 (2009).

[82] J. Chaisse & M. Matsushita, *Maintaining the WTO's Supremacy in the International Trade Order: A Proposal to Refine and Revise the Role of the Trade Policy Review Mechanism*, 16 JOURNAL OF INTERNATIONAL ECONOMIC LAW 9 (2013).

[83] *See* Martin and Mercurio, *supra* note 49.

[84] Chaisse and Matsushita, *supra* note 82; Mitsuo Matsushita, *supra* note 15.

[85] Martin and Mercurio, *supra* note 49.

Furthermore, Bown identified Mega-Regional FTAs, like TPP (now CPTTP), the Transatlantic Trade and Investment Partnership (TTIP), and the RCEP, as the WTO's new trends.[86] However, it seems unlikely that merely changing the permissive or prescriptive character of trade law rules could solve the problem immediately.

Therefore, solutions designed to make small changes in the current framework run the risk of wasting years of negotiations without success. Moreover, the WTO's negotiation function can be maintained when agreements are negotiated within the WTO. Negotiations for bilateral and FTAs should be compatible with WTO rules, but because such negotiations are conducted outside the WTO's negotiation rounds, they tend to undermine the WTO's authority.[87]

Therefore, this review finds an essential question to be answered before adopting new approaches to the WTO or moving the negotiations outside the WTO: Will a fix, for example, having more flexibility, be sufficient in helping the WTO achieve successful negotiations? Therefore, a case study of the recent deadlock of the EGA is necessary to explore the possible answers to this question.

From the aspect of negotiation contents, the issue of agriculture has taken the most blame because the WTO has been obsessed with agriculture and put the most energy into making outcomes on this topic. However, even WTO members could not reach an agreement for decades.[88] In addition, tensions are rising within the WTO between the old guard of economic powers—including many developed nations in the West—and rising new global economic

[86] Chad P. Bown, *Mega-Regional Trade Agreements and the Future of the WTO*, 8 GLOBAL POLICY 107 (2017).
[87] *See* Mitsuo Matsushita, *supra* note 15.
[88] Martin and Mercurio, *supra* note 49.

powers such as China and India.[89] Both old and new economic powers have played essential roles in the world's economic and political stages.

For instance, from 1995 to 2015, the WTO provided a framework where old and new economic powers could resolve differences and engage constructively. Nevertheless, the commitment of both old and new powers to resolve their differences within the traditional multilateral negotiation process based on ministerial conferences that provide the WTO system's foundation has appeared to be growing weaker. These conflicts between powers also contributed to the Doha Round's failure.[90]

The lessons for the Doha Round failure are that 1) the negotiation approaches, like single-undertaking and consensus-based, may hinder the reaching of agreements by any member so that the decision-making process may need more flexibilities, for example, the critical mass, the plurilateral, and the list-based approaches; 2) the WTO should focus on problem-solving and long-term stability instead of quick outcomes with a fixed topic; and 3) the WTO is turning into an umbrella for trade regulations instead of a negotiation forum.[91]

The Doha Round is not the only failure of the WTO in recent years. The WTO system is now in crisis because it has been slowly losing its power and functions one by one. For example, the dispute system inside the WTO is not working,[92] and without it, it is challenging for the WTO to perform as an authority in the global trade governance and balance the intense international trade relations in the U.S. vs. China. Moreover, a failure of the WTO may indicate some serve

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[89] See Rorden Wilkinson, *Emerging powers in the WTO: Beware the glass ceiling*, 21 INTERNATIONAL NEGOTIATION, 327 (2016); Wu, *supra* note 15; Mark Wu, *Why Developing Countries Won't Negotiate: The Case of the WTO Environmental Goods Agreement*, 6 TRADE L. & DEV 93 (2015).

[90] See DILIP K. DAS, *supra* note 61; Schwab, *supra* note 49.

[91] Baldwin, *supra* note 31.

[92] See WTO, Appellate Body, "Currently, the Appellate Body is unable to review appeals given its ongoing vacancies. The term of the last sitting Appellate Body member expired on 30 November 2020." https://www.wto.org/english/tratop_e/dispu_e/appellate_body_e.htm (Last visited on Nov 6, 2022).

consequences, like a global economic recession or a real war. These topics are discussed more in Chapter 3.

B. Fixing the WTO: Needed Reforms Since Day One

The WTO's crisis began when it was established.[93] One piece of evidence was that scholars began to discuss redesigning or fixing it since its inception.[94] Notably, the WTO was established hurriedly, so many detailed organization settings were missing from the original design. The countries seemed to save the complex problems for the future in the Uruguay Round.

The WTO identified four concerns regarding reform:

- The challenges in initiating, negotiating, and concluding trade agreements
- The need to strengthen the work of the WTO's regular bodies and committees and strengthen notification and transparency disciplines under existing agreements
- The question of whether, and to what extent, the WTO's more advanced emerging economies should take on more significant obligations under the WTO agreements, and whether existing special and differential treatment provisions for developing and least developed countries were sufficient or effective
- Improvements in the functioning of the WTO's dispute settlement system, overcoming the four-year impasse on the appointment of new Appellate Body members.[95]

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[93] See WTO, WTO reform — an overview, the WTO official website, "Almost from the organization's inception, members have been thinking about how the WTO could be improved and respond more effectively to the challenges facing the multilateral trading system." https://www.wto.org/english/thewto_e/minist_e/mc12_e/briefing_notes_e/bfwtoreform_e.htm (Last visited on Nov. 7, 2022)

[94] For examples, CHALLENGES TO THE NEW WORLD TRADE ORGANIZATION, *supra* note 15; ANNE O. KRUEGER, *supra* note 15.

[95] See WTO, WTO reform — an overview, the WTO official website, https://www.wto.org/english/thewto_e/minist_e/mc12_e/briefing_notes_e/bfwtoreform_e.htm (Last visited on Nov. 7, 2022)

Scholars have provided their thoughts on how to reform the WTO. In 2008, after years of entering the WTO, Chinese trade law experts He and Cao wrote in their Chinese textbook that the WTO was facing growing challenges, so several problems needed to be solved, for example, conflicts between the developing and developed countries, traditional advanced economies' domination during the decision-making process, the conflicts between regional trade and global trade, and whether the dispute settlement system would still work in the future.[96] Then, in 2010, Cottier considered that because the GATT and WTO were created at different times for different agendas, they had completed their mission at the time and had reached their limits. Thus, the most important thing was to define the goals of the reform beyond formal or incremental.[97]

In 2014, Wilkinson suggested that fundamentally solving the institutional changing problem required moving beyond the present state without worrying about global power transitions. Thus, it needed to secure the support of major trading powers, convincing them that root-and-branch reform was in their interest and that of the greater good, developing clear and plausible ways forward that were legitimate, transparent, and democratic.[98] In 2015, Matsushita, Schoenbaum, Mavroidis, and Hahn wrote that soft law could be a new solution for the WTO since making new hard law agreements was not going well.[99] However, despite so much research and suggestions, the Doha Round failed after decades of struggle. Thus, it is time to admit that the real world is indeed more complicated than analysis and research.

In addition, some scholars have considered that institutional reform is necessary. As mentioned above, the WTO is one of the three institutions of the world economic system.

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[96] XIAOYONG HE & JIANMING CAO, 世界贸易组织 [WORLD TRADE ORGANIZATION] (2008).

[97] A Two-Tier Approach to WTO decision-making, Thomas Cottier, from REDESIGNING THE WORLD TRADE ORGANIZATION FOR THE TWENTY-FIRST CENTURY, Part II, Chapter 3, *supra* note 15.

[98] RORDEN WILKINSON, WHAT'S WRONG WITH THE WTO AND HOW TO FIX IT (2014).

[99] MATSUSHITA ET AL., *supra* note 23.

However, all three institutions were established in a vastly different world and time compared to now. Meanwhile, the world is still changing fast. Thus, a major challenge is how the international system responds to the dramatic transformation in the global economic and geopolitical landscape.[100]

Steger identified that all three institutions have paramount legitimacy and accountability crises because "their internal voting and decision-making structures do not reflect the realities of the new power relationships in the global economy."[101] As Steger stated, the WTO "does not have an executive body or a management board, a Director-General or Secretariat with real powers to set legislative priorities and propose new rules, a functioning legislative body, formal mechanisms to interact with stakeholders and civil society, or formal structures to approve new rules.[102] Furthermore, many scholars have considered that WTO decision-making could receive help from the critical mass,"[103] working with the MFN basis to reduce the problems caused by free riders while setting an appropriate number of the critical mass. This idea is further discussed in Chapters 4 and 5.

Scholars have suggested how to reform the WTO and determined that reforming it might be extremely challenging or impossible. One important thing is that the Doha Round failed, so the next negotiation round is impossible or unforeseeable in the near future.[104] Therefore, there is no official way to formally reform the WTO without a negotiation round. Moreover, Mega-Regional FTAs, like CPTTP and RCEP, are the main trends for the current global trade, and these

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[100] REDESIGNING THE WORLD TRADE ORGANIZATION FOR THE TWENTY-FIRST CENTURY, *supra* note 15.
[101] *Id.*
[102] *Id.*
[103] *Id. See* Part II, Chapter 4, Manfred Elsig, WTO Decision-making: Can we get a little help from the secretariat and the critical mass?
[104] MATSUSHITA ET AL., *supra* note 23.

agreements may lead world trade in unknown directions. Therefore, whether the WTO would be replaced or just disappear without explanation is unclear.

This dissertation considers that due to the soft law approach in the WTO, it is not foreseeable because of the institutional competition mentioned by Wu.[105] The EGA is learning from APEC's EGs list, and one of the most important changes to these two agreements is that the EGA is a hard law while the APEC's EGs list is a soft law. Therefore, if there were a successful soft law agreement outside the WTO, it would be a waste for the WTO to have the same agreement in soft law.

It is easy to predict that the WTO would be in crisis. However, it is hard to find a way to help the WTO since the WTO is a successor of the GATT and a product of a particular era, where the world was recovering from World War II, the GATT was losing its function due to no institution to perform and supervise the agreement, and the world needed free trade to stimulate the economy before the establishment of the WTO. Therefore, the WTO is not the whole package and has not been able to move forward after its establishment. Nevertheless, academia has remained optimistic about the critical mass agreement as a solution to the WTO's crisis.

The good news is that WTO members are progressing on the reform. For instance, the members' submissions on WTO reform have been discussed in the regular meetings of the General Council and within the various councils and committees where issue-specific proposals have been presented.[106] Furthermore, the Ministers at the 12th Ministerial Conference adopted an MC12 Outcome Document on June 17, 2022, addressing the way forward on WTO reform and a

[105] Wu, *supra* note 60.

[106] See WTO, WTO reform — an overview, the WTO official website, https://www.wto.org/english/thewto_e/minist_e/mc12_e/briefing_notes_e/bfwtoreform_e.htm (Last visited on Nov. 7, 2022)

commitment to having a fully well-functioning dispute settlement system in place by 2024.[107] However, the result of the reform remains unpredictable after years of the WTO crisis.

IV. EGA Deadlock

A. EGs Trade in the WTO

The EGs trade was discussed before the EGA negotiations. At the DDA launch in 2001, WTO members committed to reducing or eliminating tariff and non-tariff barriers to EGs and services in the Doha Declaration. The WTO Committee on Trade and Environment (CTE) met in Special Session. Although all WTO members were involved in the negotiations with the hope of reaching a multilateral agreement for EGs, significant points of division arose between developed and developing countries, so the negotiations of EGs broke down by the late 2000s, like much else of the Doha Round agenda.

The main challenges during that period were no definition specific for EGs in the WTO, so members struggled to decide on a strategy to define them. Therefore, the WTO members must first decide what kinds of products are EGs to fulfill the commitment in the DDA. Although WTO members have been trying to reach a definition of EGs in the Special Session of the WTO CTE, debates have continued as WTO members fail to conclude any definition or scope of EGs.

Wu summarized three challenges for WTO members in limiting the scope of the EGs. First, the WTO members disagree about including environmentally preferable products (EPPs) into the scope of the EGs, which already has EGs in established environmental technologies, as in Howse and Von Bork, or similarly, for environmental services, as in Wu.[108] The Union Nations Conference on Trade and Development (UNCTAD) defined EPPs as products causing

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[107] See WTO, MC12 Outcome Documents, Jun 17 2022, WT/MIN(22)/24.

[108] Wu, *supra* note 60; Robert Howse & Petrus B. van Bork, *Options for Liberalising Trade in Environmental Goods in the Doha Round*, INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (2006).

"significantly less environmental harm at some stage of their life cycle than alternative products that serve the same purpose" or "the production and sale of" products "contributing significantly to the preservation of the environment."[109] WTO members have debated whether the EPPs should be based on process and production methods (PPMs) criteria, which is essential to developing countries' export interests in EPPs.[110]

Second, some EGs, as in EPPs with or without PPMs, may have multiple end-uses or are dual-use goods, so they may not only have environmental uses. For example, these products, which can be environmentally preferable, are used for non-environmental purposes.[111] Therefore, countries may have challenges in identifying the environmental impact of multiple end-uses goods.

Howse and Von Bork argued that while the precise specification of environmental criteria would go some way to eliminating the problem of multiple end-use, countries could also identify environmental products by specifying which subcategory of a harmonized system (HS) code ("ex-out") to liberalize.[112][113] Zhang suggested that one potential way to move the EGs negotiations forward was by amending HS codes and creating ex-headings to clarify product coverage and descriptions.[114] However, Wu considered it difficult to separate the actual use of the multiple end-uses goods at the border, so the "ex-out" is not likely to be effective.[115]

Third, WTO members have struggled to agree on a common approach to assessing environmental impact. This challenge has fallen mainly into an environmental perspective, so

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[109] UNCTAD, Environmentally Preferable Products (EPPs) as a Trade Oppotunity for Developing Coutries,Dec 19 1995, UNCTAD/COM/70.
[110] Wu, *supra* note 60.
[111] *Id.*
[112] Howse and van Bork, *supra* note 108.
[113] *Id.*
[114] Zhang, *supra* note 76.
[115] Wu, *supra* note 60.

this review does not expand on the topic.[116] Therefore, due to the complicated natures of EGs, defining them becomes extremely difficult. Indeed, WTO members have abandoned the traditional ways of giving EGs a definition, which could be clear rules or vague standards. "Lists" are used for all kinds of approaches in defining EGs.

To define EGs, scholars and WTO members have considered different drafting strategies. One of the most popular proposals is a list-based approach, where each interested WTO member submits lists of EGs for tariff reduction based on the HS customs classification. However, during the Doha Round of the First, India proposed a project-based approach, which would temporarily lower the tariffs for products imported into specific environmental projects. Moreover, Argentina proposed a hybrid approach, allowing each WTO member to designate certain public and private entities within their territory as carrying out environmental activities. Finally, many countries proposed a classic approach of "request-and-offer," allowing WTO members to request tariff reductions from each other and agree to extend any concessions multilaterally to all other WTO members.

B. Before the Deadlock

WTO members launched the EGA negotiations in 2014 based on advantages from past experiences. With the challenges in defining EGs, the EGA negotiation chose a list-based approach to scope the EGs with a role model: the APEC list of EGs.

The bright side was that the EGA hoped to save the negotiation function while promoting EGs trade. Thus, EGA negotiations launched with high expectations from multiple perspectives. First, from the WTO perspective, Goff recognized EGs as a piece of the puzzle for the WTO and

[116] *Id.*

considered that establishing the EGA would have challenges.[117] Second, Goff considered that the EGA was one piece of a larger environmental governance puzzle because tariff reduction (or elimination) could facilitate the transfer of climate-friendly technologies by lowering their cost, which could "show that trade agreements can also be beneficial from an environmental perspective."[118] In addition, as stated in the above review, scholars have considered that the EGA's negotiation modalities might indicate the WTO's attempt to adapt to the rapidly changing world.[119]

Second, scholars have high expectations of the EGA because of its potential to promote EGs trade, which they claim can help climate change or sustainable development. For example, Ness and Hermansen claimed the EGA has the potential and some necessary characteristics to be a positive driving force and good initiative to boost the trade of EGs while engaging other countries in the global effort to meet climate change, environmental and sustainability challenges.[120] Monkelbaan Joachim held a similar view on the EGA's positive impact on clean energy.[121]

Meanwhile, scholars have highlighted that it is essential to consider developing countries' involvement in EGs trade negotiations.[122] For example, Howse and Van Bork called for attention to protect developing countries by not "dumping" old or outdated technologies to promote the

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[117] Goff, *supra* note 16.
[118] *Id.*
[119] For examples, Hoekman and Mavroidis, *supra* note 78; Jaime de Melo & Mariana Vijil, *The critical mass approach to achieve a deal on green goods and services: what is on the table? How much should we expect?*, 21 ENVIR. DEV. ECON. 393 (2016).
[120] Johanne Solum Ness, *The Environmental Goods Agreement in the Context of Sustainable Development and Climate Change*, 2015.
[121] Joachim Monkelbaan, *Using Trade for Achieving the SDGs: The Example of the Environmental Goods Agreement*, 51 JOURNAL OF WORLD TRADE 575 (2017).
[122] For examples, Wu, *supra* note 89; Bertelsmann-Scott et al., *supra* note 78.

negotiations.[123] Howse and Van Bork also considered that a broad approach to defining EGs, including EPPs, would attract developing countries' involvement in the negotiations because of their export interests in EPPs that have positive environmental value due to their PPMs.[124]

Zhang stated that creating markets for EGs in developing countries is far more critical than improving associated goods' market-access conditions.[125] Wu further proposed that developing countries, other than the PRC, do not have sufficient interests to join the negotiations because of the lack of export power, tariff benefits from other forms, and avoidance due to a treaty dominated by advanced economies.[126] Wu also recognized that advanced economies can still shape international trade rules, particularly where the PRC is involved.[127] Furthermore, developed countries already have low tariffs on potential EGs, so it is essential to have more developing countries, other than the PRC, join the EGs trade negotiations to have the economic and environmental benefits of the EGs trade.

This review finds that no scholars have rightly predicted the EGA deadlock. Although the scholars have discussed the bright side and potential challenges, they have not considered the failure or deadlock of the EGA negotiations. However, the trade experts mentioned the risks of a lack of interest from small developing economies, but it appears that the negotiating parties do not have enough comparative advantages in the EGA negotiations.

C. Discussion After the Deadlock

The EGA negotiation has been deadlocked for years, so no further development is expected. Most criticism has focused on China's submission of a new product list at the end of the

[123] Howse and van Bork, *supra* note 108.
[124] *Id.*
[125] Zhang, *supra* note 76.
[126] Wu, *supra* note 89; Wu, *supra* note 60.
[127] Wu, *supra* note 60.

negotiations.[128][129] It was said that China proposed a list that was nowhere close to what other countries wanted in a final deal and was less ambitious than the APEC list it had agreed to years earlier.[130] However, from China's side, it was actually proposed with good intentions to close the deal because China considered it would be more acceptable to more developing countries.[131] Thus, this review notices that no research mentioned this Chinese perspective or evaluated whether the list would be more acceptable to developing countries.

Notably, at first, the ITA or EGA was recognized as a plurilateral agreement. For instance, Wu's article classified the EGA as a plurilateral agreement.[132] However, the ITA, EGA, and the Basic Telecommunication Agreement are now recognized as critical mass agreements (CMAs.) Nevertheless, the critical mass approach is not a new kind of agreement; it has been talked about for years.

The 2007 Warwick Commission Report argued that there is more precedent for the critical mass approach. For example, critical mass logic was used in telecommunications and zero-for-zero tariff initiatives considered in the NAMA (non-agricultural market access) part of the Doha Round and the Tokyo Round codes.[133] Moreover, Gallagher and Stoler suggested critical mass as

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[128] See Gary Winslett, *Critical Mass Agreements: The Proven Template for Trade Liberalization in the WTO*, 17 WORLD TRADE REVIEW 405 (2018); WILLIAM A REINSCH, EMILY BENSON & CATHERINE PUGA, *Environmental Goods Agreement: A New Frontier or an Old Stalemate?*, (2021), https://www.csis.org/analysis/environmental-goods-agreement-new-frontier-or-old-stalemate.

[129] See also, Iana Dreyer, Environmental Goods Agreement – why talks faltered, Borderlex, https://borderlex.net/2016/12/06/environmental-goods-agreement-talks-faltered/ (Last visited on Nov 7, 2022); Inside U.S. Trade, Key Lawmaker, EU and Industry All Blame China for Torpedoing EGA Deal, World Trade Online, https://insidetrade.com/daily-news/key-lawmaker-eu-and-industry-all-blame-china-torpedoing-ega-deal (Last visited on Nov 7, 2022)

[130] Winslett, *supra* note 128.

[131] Ministry of Commerce of the People's Republic of China, 中方为推动世贸组织《环境产品协定》谈判做出积极贡献 [China provides positive contributions to promote the EGA] Dec 05 2016, http://www.mofcom.gov.cn/article/ae/ai/201612/20161202069792.shtml (Last visited on Nov 7, 2022)

[132] Gary Winslett, *Critical Mass Agreements: The Proven Template for Trade Liberalization in the WTO*, 17 WORLD TRADE REVIEW 405 (2018).

[133] Report of the First Warwick Commission (2007), see especially pp. 30–32, https://warwick.ac.uk/research/warwickcommission/worldtrade/report/ (Last visited on Nov 17, 2022)

an alternative framework for multilateral trade negotiations, explaining that these agreements helpfully quarantine potentially deleterious effects of non-reciprocity in multilateral trade negotiations. Thus, they asserted that a critical mass approach could be particularly helpful in agriculture in 2009.[134]

Furthermore, Low considered that the outcome of critical mass decision-making might be an option for the future.[135] Winslett offered that the ITA and its expansion were the proven template for trade liberalization in the WTO in 2018.[136] Thus, the ITA is increasingly being called a critical mass agreement after 2016, recognized by most academia from 2018.

Current trade experts believe the sectoral plurilateral critical mass approach could be the best template for future negotiations.[137] Indeed, the critical mass agreement is named after the critical mass requirement of the agreement. The critical mass requirement originally meant that the agreements would be in effect when a critical mass of parties joined or ratified the agreement. For instance, the ITA, ITA-II, EGA, and Basic Telecommunication Agreement could be considered critical mass or plurilateral. These agreements have four features: a narrower scope that does not use a single-undertaking format, a negotiating group that contains many but not all WTO members (plurilateral), an agreement under an MFN basis, and an "open" agreement with a high critical mass requirement to avoid free riders.[138]

This recognition of the critical mass agreement is helpful for the research purpose. Because it is controversial to explain what is a plurilateral agreement inside the WTO and recognize the

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[134] Peter Gallagher & Andrew Stoler, *Critical Mass as an Alternative Framework for Multilateral Trade Negotiations*, GLOBAL GOVERNANCE 375 (2009).

[135] Low, Patrick (2011), WTO decision-making for the future, WTO Staff, Working Paper, No. ERSD-2011-05, World Trade Organization (WTO), Geneva, https://doi.org/10.30875/75543942-en

[136] Winslett, *supra* note 128.

[137] *Id.*; de Melo and Vijil, *supra* note 119.

[138] Winslett, *supra* note 128.

ITA, ITA-II, and Telecommunication Agreement as critical mass agreements, a comparison between them would be more meaningful because the Telecommunication Agreement is different from the other two.

Modalities, or what many scholars have called approaches, factors, or features of CMAs, are plurilateral and single subject, with a critical mass requirement on an MFN basis. CMAs are believed to be successful because this kind of agreement contains fewer parties and narrowed negotiating subjects to avoid the WTO's single-undertaking decision-making hindrance.

V. Conclusion

This chapter observed gaps in the existing research. First, critical mass and plurilateral agreements are only labels that have not changed features and modalities. However, few researchers have considered them in this way. No one has explained why the name has changed from plurilateral agreement to critical mass agreement. Second, Western studies have mostly blamed China for the EGA negotiations' deadlock but have seldom discussed the other side based on research in Chinese academia about EGA negotiations. Third, while legal explanations have not provided more to solve the deadlock, it is important to connect with other factors and live in the real world since there are not enough studies connecting to current events, which are further developed in the following chapter.

Chapter 3: The Precarious World Trade Organization and its Negotiations

I. Introduction

The World Trade Organization (WTO) now seems to be in crisis. Its negotiation function seems to have become dysfunctional, and as a result, the WTO has been unable to extend its legal framework significantly beyond what it was in 1995. Negotiation has been a crucial, indispensable function for the WTO since its predecessor, the General Agreement on Tariffs and Trade (GATT,)[139] was established in 1948. After eight successful trade negotiation rounds under the GATT culminated in the establishment of the WTO,[140] WTO members have not been able to conclude any new multilateral agreements. The failure of the Doha Round suggests that the WTO's most crucial function, the negotiation function, may be more challenging to perform successfully now than it once was. Furthermore, the erosion of its negotiation function is not the only serious challenge the WTO is facing.

This chapter explores the WTO's negotiation functions and finds that two practices could potentially be the culprit for its decline: the single-undertaking practice[141] and the consensus-based decision-making practice,[142] both of which may once have facilitated negation but now seem to be hindering it. Single-understanding and consensus-based decision-making practices mean that all the topics should be agreed upon at once with the WTO members' consensus. In 2022, the WTO had 164 members, making it very difficult to achieve further trade liberalization

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[139] General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 [hereinafter GATT].

[140] The eight rounds are the Geneva Round 1947, the Annecy Round 1949, the Torquay Rounds 1951, the Geneva II Round 1956, Dillon Rounds in 1960-61, the Kennedy Round 1964-7, the Tokyo Round 1973-9, and the Uruguay Round 1986-94. See full information about negotiation rounds in the WTO: https://www.wto.org/english/thewto_e/whatis_e/tif_e/fact4_e.htm#rounds

[141] The single-undertaking practice means that every negotiating subjects should be agreed together or nothing is agreed. More about the single-undertaking practice would be discussed in Section II-A.

[142] The consensus-based decision-making practice means that any decision or motion should be agreed by all the participating members. More about the consensus-based decision-making practice would be discussed in Section II-A.

while applying single-undertaking and consensus-based practice. This chapter points out that there are two ways to facilitate the negotiating process: to reduce the number of negotiation subjects being considered in a negotiation round and to reduce the number of participants or change the decision-making practices with regard to what level of agreement is required.

This chapter identifies some of the conflicts triggered by the recognition of different economic status for some countries resulting in special treatments for those countries. In addition, many emerging economies are vigilant against what they think are attempts at "kicking away the ladder"[143] by holding emerging economies to higher standards than advanced economies faced at a similar level of development. However, many advanced economies resent China's continued insistence that it still should not be treated as an advanced economy. These conflicts between advanced and emerging economies over what level of special treatment emerging economies are entitled to within the WTO framework seem to be giving rise to a resurgence in "mercantilist" attitudes toward international trade.

This chapter will examine some of the factors that contribute to the challenges currently facing the WTO. Chapter 4 will consider the nature of the Environmental Goods Agreement (EGA) and the factors that contributed to the deadlock in EGA negotiations. Only after some of the causes of the current crisis at the WTO and the deadlock of the EGA negotiations have been identified might it be possible to identify strategies that might be used to restore the functioning of the WTO or relaunch the EGA negotiations. The question of what strategies should be adopted in the future to remedy these problems belongs more to the field of international relations than it does to the field of international law. So, the focus of this dissertation will be

[143] See HA-JOON CHANG, KICKING AWAY THE LADDER: DEVELOPMENT STRATEGY IN HISTORICAL PERSPECTIVE (2002).

mostly on describing breakdowns in the current WTO system and identifying possible causes for those breakdowns than on trying to come up with strategies to resolve them.

II. Agreements in the WTO

The GATT and the WTO are the most successful international economic organizations established in the post-First World Period, [144] which established a multilateral trade organization with a dispute settlement system and general trade principles. The WTO's institutional framework is established by the Marrakesh Agreement Establishing the World Trade Organization (Marrakesh Agreement.)[145] For WTO, "multilateral trade systems are the WTO's agreements, negotiated and signed by a large majority of the world's trading economies, and ratified in their parliaments."[146] "Multilateral" is used here to describe not all, but most of the main trading nations are members of the system.[147]

However, the WTO allows not only multilateral agreements but also other kinds of agreements, for examples, plurilateral agreements (PAs), critical mass agreements (CMAs), preferential trade agreements (PTAs), regional trade agreements (RTAs,) and mega-regional free trade agreements (Mega regional FTAs.) Notably, the term "bilateral," "multilateral," and "plurilateral" are used to describe how many parties are in the agreements' negotiations.[148] In this dissertation, when these terms are described as "approaches," "modalities," or "features,"

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[144] NARLIKAR, DAUNTON, AND STERN, *supra* note 24.

[145] Marrakesh Agreement Establishing the World Trade Organization, Apr.15, 1994, 1867 U.N.T.S. 154. [hereinafter Marrakesh Agreement]

[146] See WTO, WTO in Brief, WTO official Website: https://www.wto.org/english/thewto_e/whatis_e/inbrief_e/inbr_e.htm (Last visited on Nov 14, 2022)

[147] "'multilateral' refers to activities on a global or near-global level (in particular among all WTO members). It contrasts with actions taken regionally or by other smaller groups of countries." See WTO, 'Multilateral' trading system, WTO Official Website: https://www.wto.org/english/thewto_e/minist_e/min98_e/slide_e/mts.htm (Last visited on Nov 14, 2022)

[148] Bilateral means two parties are involved; multilateral means more than two parties are involved; and plurilateral means that more than two parties but only a subset of members are involved.

they do not affect the legal definition or well-recognized name for these kinds of agreements inside the WTO. Some of the names are in the Marrakesh Agreement,[149] and some of them are named by trade experts or WTO members. Therefore, it is important to clarify their legal definition and scope with their names.

A. Multilateral Trade Agreements

Multilateral trade agreements are obligatory and annexed to the Marrakesh Agreement Annexes 1, 2, and 3 in the WTO legal order.[150] Such trade agreements are binding for all members as a single body of law because all WTO members must sign these treaties to become part of the WTO.[151] Such multilateral agreements include GATT, the General Agreement on Trade in Services (GATS), the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs), the Agreement on Dispute Settlement Understanding (DSU), and the Agreement on Subsidies and Countervailing Measures (SCM).

B. Plurilateral Agreements (PAs)

PAs, or the Plurilateral trade agreements, are optional and annexed to the Marrakesh Agreement Annex 4 in the WTO legal order.[152] The PAs in Annex 4 are only binding on the members that have accepted them.[153] It requires a consensus of the WTO Ministerial Conference because it must be added to Annex 4 of the Marrakesh Agreement.[154]

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[149] "The WTO shall provide the common institutional framework for the conduct of trade relations among its Members in matters related to the agreements and associated legal instruments included in the Annexes to this Agreement." See Marrakesh Agreement Art.II:1

[150] "The agreements and associated legal instruments included in Annexes 1, 2 and 3 (hereinafter referred to as "Multilateral Trade Agreements") are integral parts of this Agreement, binding on all Members." See Marrakesh Agreement Art.II:2

[151] Id; See also MATSUSHITA ET AL., *supra* note 23.

[152] "The agreements and associated legal instruments included in Annex 4 (hereinafter referred to as "Plurilateral Trade Agreements") are also part of this Agreement for those Members that have accepted them, and are binding on those Members. The Plurilateral Trade Agreements do not create either obligations or rights for Members that have not accepted them." See Marrakesh Agreement Art.II:3.

[153] See Marrakesh Agreement Art.II:3.

[154] Marrakesh Agreement, above note 16, Art. X: 9.

"As the WTO has no general most-favored-nation (MFN) obligation—nondiscrimination requirements are contained in each of the various multilateral trade agreements—the plurilateral agreements contained in Annex 4 of the WTO are examples of what has been termed conditional MFN agreements. Members are free to discriminate against non-signatories. New plurilateral agreements can be appended to the WTO on the basis of consensus."[155]

Therefore, any WTO member retains the power to block the addition of a PA if the benefits do not extend on an MFN basis, even if that party does not participate in the negotiation and has no intention of joining the agreement.[156]

There are four agreements in Annex 4: Agreement on Trade in Civil Aircraft, Agreement on Government Procurement (GPA), International Dairy Agreement and International Bovine Meat Agreement.[157] However, the International Dairy Agreement, and International Bovine Meat Agreement were terminated in 1997.[158]

C. Critical Mass Agreements (CMAs)

CMAs are "a group of countries [that] agrees to specific policy commitments that are inscribed into their WTO schedules and apply on a non-discriminatory basis to all WTO members."[159] It is plurilateral approach but also is "open"[160] because CMAs extend the preferences on an MFN basis to all WTO members.[161] Some commentators have suggested that

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[155] See BERNARD HOEKMAN & MICHEL KOSTECKI, POLITICAL ECONOMY OF THE WORLD TRADING SYSTEM: WTO AND BEYOND (2 ed. 2001). See also, Marrakesh Agreement Article X:9

[156] Wu, *supra* note 60, pp283-284.

[157] See Marrakesh Agreement Annex 4 Plurilateral Trade Agreements

[158] See WTO, Deletion of the International Dairy Agreement from Annex 4 of the WTO Agreement, Decision of 10 December 1997, WT/L/251, 17 December 1997; See also WTO, Deletion of the International Bovine Meat Agreement from Annex 4 of the WTO Agreement, Decision of 10 December 1997, WT/L/252, 16 December 1997.

[159] Bernard Hoekman & Charles Sabel, *Open Plurilateral Agreements, International Regulatory Cooperation and the WTO*, 10 GLOB POLICY 297 (2019).

[160] *Id.*

[161] Wu, *supra* note 60. pp283

these agreements represent a new kind of a plurilateral agreement which they have labeled a "critical mass" agreement. For this type of agreement, any WTO member is free to join at any time, even if they have not participated in the launch or negotiations of the agreement.[162] This kind of agreement does not need to be formally added to Annex 4 of the Marrakesh Agreement and can be adopted simply as a WTO Ministerial Declaration. The examples are Information Technology Agreements and its expansion (ITA/ITA-II), the World Trade Organization Agreement on Basic Telecommunications Services (WTO Telecom Agreement), and the potential Environmental Goods Agreement (EGA.)

One important principle used in the CMAs is the MFN obligation/treatment noted in GATT Article I[163] as one of the non-discriminatory principles. The MFN obligation means that if one member grants another member a special favor, such as a lower tariff, this member should give all other WTO members the same treatment.[164] Once the members signed a CMA in the WTO, the benefits of the CMA would be extended to all the WTO members. Therefore, it requires a "critical mass" of WTO members signs and ratifies it. For example, countries that have ratified the ITA represent approximately 90% of world trade in information technology products.[165] Therefore, it could have less free-rider[166] concerns if a critical mass of members has joined a

[162] *Id.*pp284
[163] See GATT, Art I.
[164] See WTO, Principles of the trading system, WTO Official Website, https://www.wto.org/english/thewto_e/whatis_e/tif_e/fact2_e.htm (Last visited on Nov 14, 2022)
[165] World Trade Organization, Ministerial Declaration on the Expansion of Trade in Information Technology Products Annex para 4, WT/L/956 (2015) [hereinafter ITA-II]
[166] Free-rider: A casual term used to infer that a country which does not make any trade concessions, profits, nonetheless, from tariff cuts and concessions made by other countries in negotiations under the most-favoured-nation principle. See WTO Glossary, free-rider, WTO official website, https://www.wto.org/english/thewto_e/glossary_e/free_rider_e.htm (Last visited on Nov 14, 2022)

CMA, which makes the "critical mass" the most important feature of this kind of agreement and is named after "critical mass."[167]

D. Preferential trade arrangements (PTAs)

PTAs in the WTO mean "unilateral trade privileges such as General System of Preferences (GSP) schemes and non-reciprocal preferential programmes some WTO members implement for products from developing and least-developed countries,"[168] which will not be discussed in this dissertation.

E. Regional trade agreements (RTAs) and Mega-Regional FTAs

One of the foundational principles of the WTO is the principle of non-discrimination among WTO members. One important part of this non-discrimination principle is the MFN principle which means if a WTO member gives a benefit to one WTO member, it is normally required to treat all other WTO members as well as that "most favored nation" is treated. A major exception to the MFN principle is found in the WTO provisions governing RTAs.[169][170] The WTO permits RTAs (also referred to as "free trade agreements" or FTAs) even though this is a derogation from the MFN principle under circumstances that, in principle, should promote free trade generally.[171]

The number of FTAs that WTO member states have entered into force since the WTO was launched in 1995 has grown enormously, causing some commentators to wonder whether they

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[167] Winslett, *supra* note 128.

[168] See WTO, Regional trade agreements and the WTO, https://www.wto.org/english/tratop_e/region_e/scope_rta_e.htm (Last visited on Nov 14, 2022)

[169] GATT Art XXIV, Ad Art XXIV, GATS Article V

[170] RTAs means any reciprocal trade agreement between two or more partners, not necessarily belonging to the same region in the WTO. See WTO, Regional trade agreements and the WTO, https://www.wto.org/english/tratop_e/region_e/scope_rta_e.htm (Last visited on Nov 14, 2022.) It is reported by the WTO that "all 164 WTO members are party to at least one RTA and estimates suggest that close to 20% of global merchandise trade occurs between RTA partners on the basis of preferential tariff rates." See WTO, WTO members review CPTPP at 100th session of Committee on Regional Trade Agreements, WTO Official Website, https://www.wto.org/english/news_e/news21_e/rta_22jun21_e.htm (Last visited on Nov 14, 2022)

[171] See WTO, Regionalism: friends or rivals?, WTO Official Website, https://www.wto.org/english/thewto_e/whatis_e/tif_e/bey1_e.htm (Last visited on Nov 14, 2022)

are all really serving the free trade goals of the WTO.[172] The mega-regional FTAs, like the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the Regional Comprehensive Economic Partnership (RCEP), are the main trend in the development of the RTAs.[173]

III. Fading Multilateralism in the WTO

A. Multilateral Negotiations' Challenges: The Single-undertaking Practice and Consensus-based Decision-making Practice

As mentioned above, the WTO's negotiation function is challenged by its single-undertaking practice and the consensus-based decision-making practice, which seem to be obstacles to multilateral talks in the Doha Round.[174] These practices have been some of the observed challenges during the negotiation round. A single-undertaking practice means that every negotiating subject should be agreed on together, or nothing is agreed upon. A consensus-based decision-making practice means that any decision or motion should be agreed upon by all participating members.

The single-undertaking practice was central to the Uruguay Round and the WTO's creation, and the consensus practice has been used since GATT 1947.[175] These practices are not formal rules[176] and tend to block successful negotiations. The single-undertaking practice means that "nothing is agreed until everything is agreed"; therefore, the negotiation rounds' results must be

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[172] See WTO, Regionalism: friends or rivals?, WTO Official Website, https://www.wto.org/english/thewto_e/whatis_e/tif_e/bey1_e.htm (Last visited on Nov 14, 2022)

[173] Mega-regional FTAs are deep integration partnerships between countries or regions with a major share of world trade and foreign direct investment. See WTO, Regional trade agreements, WTO Official Website, https://www.wto.org/english/tratop_e/region_e/region_e.htm (Last visited on Nov 14, 2022)

[174] For examples, the Environmental Goods Agreement (EGA) is a plurilateral agreement launched in 2014, and the TPP and (The Regional Comprehensive Economic Partnership) RCEP are mega-regional FTAs launched in 2005 and 2012.

[175] NARLIKAR, DAUNTON, AND STERN, *supra* note 24, pp747.

[176] *Id.*pp746

a complete deal.[177] There were about 21 negotiating subjects in the Doha Round; thus, the final result should be a set of signed agreements involving each of these subjects.

The consensus-based decision-making practice involves reaching to a consensus that there is no member opposes a decision; therefore, every WTO member has veto power over every decision.[178] Consensus-based practice is designed to preserve respect for national sovereignty and states' legal equality in the international order.[179] Like the single-undertaking practice, the consensus practice provides every member with a chance to exchange concessions to reach a consensus on all subjects, which may protect non-dominant countries' participation and increase their weight in decision-making. Alternatively, consensus practice can create problems in which a single veto can block any motion or decision, even when there is broad support otherwise.[180] It is difficult for the WTO to manage these two practices, as the WTO now comprises 164 members, complicating the negotiation process.[181]

In suggesting certain "fixes" for these two practices to help the WTO decision-making process, it is crucial to examine whether it is feasible simply by changing the flexibility of these practices. Any "fix" should not be time-consuming or involve increased difficulty in reaching a given decision, which could perpetuate the issues currently seen in the WTO's decision-making process. Moreover, if changes or variations to the negotiation practices would not resolve the recurring negotiation deadlock, it would be better to consider other factors as solutions because these challenges could ultimately be symptoms of a deeper problem.

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[177] *Id.*
[178] MATSUSHITA ET AL., *supra* note 23, pp20.
[179] *Id.*
[180] NARLIKAR, DAUNTON, AND STERN, *supra* note 24.
[181] See WTO, Members and Observers WTO official website: https://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm (Last visited on Nov 7 2022)

B. Can the WTO Negotiation Process Be Made More Flexible?

As mentioned above, multilateral negotiations involve numerous negotiation subjects and all 164 WTO members. Therefore, while applying single-undertaking and consensus-based practice, it is challenging to get all the members to agree on every negotiating subject. There are several ways to facilitate the negotiating process: to reduce the number of negotiation subjects, reduce the number of participants, or change the decision-making practices fundamentally.

First, it may not be feasible to make consensus-based decision-making practices more flexible. According to the Marrakesh Agreement Art IX:1, the WTO can make decisions by consensus or by majority voting.[182] However, because majority voting is highly impractical in an organization like the WTO, consensus becomes the only option as a practical matter.[183] Matsushita, Schoenbaum, Mavroidis, and Hahn suggest that the WTO should be reformed to use new methods of making general decisions, such as using a high-voting majority[184] or a simple majority on decisions other than the crucial decisions of new agreements. They also suggest adopting a weighted system of voting for general decision-making (by using the share of international trade) and establishing an executive committee of members chaired by the director-general, whose task is to debate and prepare proposals for consideration by the entire membership.[185]

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[182] Marrakesh Agreement Art IX:1

[183] MATSUSHITA ET AL., *supra* note 23.

[184] Some treaties, such as the Vienna Convention on the Law of Treaties (VCLT), permit changes based on the agreement of two-thirds of contracting states. According to Vienna Convention on the Law of Treaties (VCLT) Article 9 and Article 10, the text of the treaty will first be adopted by the consent of all the participating States through voting and then be authentic and definitive after the signature procedure. Both the adoption and the signature procedure take place at the end of the negotiations of the text. At least two-thirds of the participating states must vote for approving the treaty contents to adopt the treaty.

[185] MATSUSHITA ET AL., *supra* note 23.

A similar suggestion is to facilitate the negotiation of a new plurilateral agreement on regulatory matters.[186] It is unlikely that such regulatory changes would be successful, as they would require all members' consensus. These kinds of changes could create a time-consuming and problematic cycle within the decision-making process. Even if possible, regulatory changes are not suitable practices to remove from the WTO, as they are designed to protect fair trade and ensure member participation in shaping future trade rules. Therefore, this dissertation considers that although single-undertaking and consensus-based decision-making practices are strict in concluding negotiations, they are potentially a fundamental and necessary challenge required to maintain credible, successful trade negotiations in the WTO.

Second, potential ways to resolve the challenges resulting from the single-undertaking practice could include having fewer negotiating subjects or negotiating only one specific issue area. Fewer issues in the decision-making process could result in a consensus on the matter, as opposed to the dreaded deadlock. Following the failure of the Doha Round, the WTO was able to successfully complete the Trade Facilitation Agreement (TFA) because it was so much narrower in scope.[187] Additionally, many scholars believe that a plurilateral agreement could improve current negotiations[188] because such agreements usually have only one specific topic, such as the ITA for information technology.

After the TFA, WTO members tried to reach more agreements by launching a round of negotiations to produce a plurilateral agreement on environmental goods (EGs). As discussed

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[186] Hoekman and Mavroidis, *supra* note 78.

[187] Editorial Board, Opinion: Global Trade After the Failure of the Doha Round, New York Times, January 1, 2016 https://www.nytimes.com/2016/01/01/opinion/global-trade-after-the-failure-of-the-doha-round.html (Last visited on Nov 14, 2022)

[188] Wu, *supra* note 60; Hoekman and Mavroidis, *supra* note 78; Martin and Mercurio, *supra* note 49; Hoekman and Mavroidis, *supra* note 61.

above in Chapters 1 and 2, however, the deadlock of the EGA suggests that the plurilateral approach or an agreement with only one issue area may not be the immediate solution to the negotiation function. Even narrowing the focus of negotiations to one topic and fewer participants and adopting consensus-based practice may not be enough to negotiate a new treaty successfully.

The strategies of plurilateral rather than multilateral agreement or narrowing the focus to a single issue are not new strategies but well-established strategies that have been used successfully in the past. To claim that such a strategy could resolve the current impasse at the WTO would be like "putting new wine in old bottles."[189]. For example, the EGA can be considered "new wine" in an "old bottle" regarding plurilateralism. The ITA was a plurilateral agreement in 1996 and later expanded with a second plurilateral agreement, the ITA-II, in 2015. Between 2013 and 2015, negotiations for ITA-II appeared to be deadlocked. However, that deadlock was ultimately resolved through political resolve to complete the negotiations at a meeting between President Xi and President Barack Obama at the 2014 APEC Summit, where a comprehensive list of products to liberalize was agreed upon. The plurilateral ITA-II was signed in 2015, the same year as the recognized failure of the multilateral Doha Round.

C. Moving Away from the WTO: Bilateral or Mega-Regional FTAs

Some scholars point out that the leading countries tend to move away from the WTO because some countries have shifted their focus away from WTO Ministerial Conferences as a forum for seeking increased trade liberalization.[190] The first strategy such countries might use is to continue

[189] Peter Egge Langsæther & Rune Stubager, *Old wine in new bottles? Reassessing the effects of globalisation on political preferences in Western Europe*, 58 EUROPEAN JOURNAL OF POLITICAL RESEARCH 1213 (2019).

[190] Martin and Mercurio, *supra* note 49; Wu, *supra* note 60; Gary Clyde Hufbauer & Cathleen Cimino-Isaacs, *How will TPP and TTIP Change the WTO System?*, 18 J INT ECONOMIC LAW 679 (2015); Mitsuo Matsushita, *supra* note 15.

creating more bilateral agreements registered under the WTO framework that are not negotiated in the WTO negotiation rounds. The second strategy such countries might use to move away from the WTO is negotiating mega-regional FTAs. Because most nations participating in negotiations to launch mega-regional FTAs are already WTO members, mega-regional FTAs would be deemed to comply with the WTO trade-law framework. This kind of negotiation is also held outside WTO negotiation rounds.

One example of this is the Trans-Pacific Partnership (TPP,) which evolved into the CPTTP in 2018. The TPP was expected to be established according to Article XXIV of GATT 1994 and Article V of GATS.[191] It was also expected to become the world's largest free trade deal, covering 40% of the global economy, and it was the centerpiece of President Obama's strategic pivot to Asia. The TPP could therefore be understood as advancing the WTO's primary mission of liberalizing international trade. After President Donald Trump withdrew the U.S. from the TPP in 2017, the TPP was concluded by other members in January 2018 and initiated the CPTTP, which had a shrunk influence due to the withdrawal of the U.S.

New powers, such as China, are also engaged in the negotiations of mega-regional FTAs. The RCEP is a proposed mega-regional FTA in the Asia-Pacific region between the 10 member states of the Association of Southeast Asian Nations (ASEAN), and the PRC is participating in RCEP negotiations. The RCEP was signed on November 15, 2020, and it will take effect 60 days after it has been ratified by at least six ASEAN and three non-ASEAN signatories.[192]

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[191] The Trans-Pacific Partnership (TPP), Art.1.1;

[192] The 15 members are Australia, Brunei, Cambodia, China, Indonesia, Japan, Laos, Malaysia, Myanmar, New Zealand, the Philippines, Singapore, South Korea, Thailand, and Vietnam. According to the BBC news and ASEAN, the 15 member countries account for about 30% of the world's population (2.2 billion people) and 30% of global GDP ($26.2 trillion) as of 2020, making it the biggest trade bloc in history. See BBC News, RCEP: Asia-Pacific countries form world's largest trading bloc, Nov 2020: https://www.bbc.com/news/world-asia-54949260 (Last visited on Nov 6, 2022); see also RCEP website, https://rcepsec.org/about/ (Last visited on Nov 6, 2022)

Although these mega-regional FTAs may look promising, they are new, and their impact on free trade is unknown. Because President Trump's trade strategies were so unpredictable, the U.S. is no longer the leader of such efforts. Following the withdrawal of the U.S., the TPP negotiations did not simply fail but instead evolved into CPTTP without the U.S. The RCEP was signed in November 2020, but it still awaits ratification. In 2022, it is still too early to say whether the mega-regional FTAs will be as successful in promoting free trade as the WTO has been. However, even if mega-regional FTAs are not as successful in promoting free trade, the effort that major trading nations invest in them tends to undermine the WTO's negotiation function because they are negotiated outside the WTO framework

IV. Beyond the Negotiations: Neo-mercantilism and a Development Perspective

Negotiations are never only about negotiations. One important factor to consider is that the developing economies may worry that the advanced economies are kicking away the ladder and making it difficult for them to raise the standard of living of their people by manipulating the developing economies' domestic laws and policies to serve the interests of advanced economies through institutions like the WTO. In 2021, Reinsch, Benson, and Puga summarized the problem in these terms:

> Developing countries, except for China and Costa Rica—and eventually Turkey—did not participate, in part because they felt the wealthy countries negotiating had less at stake. The average applied tariff among negotiating countries on goods on the APEC list was around 0.5 percent, meaning APEC countries did not have much to give up, compared with developing countries who had much higher average applied rates. Major economies like Brazil and India did not participate over fears of a spike in cheaper, foreign imports.[193]

[193] REINSCH, BENSON, AND PUGA, *supra* note 128.

In addition, at the same time that trading relations between the U.S. and China have become more adversarial, it seems that interest in neo-mercantilist policies may also be rising in many countries around the world.[194]

A. Special and Differential Treatment in the WTO

One crucial factor in the conflicts between developing and developed economies is the Special and Differential Treatment in the WTO. The Marrakesh Agreements contain treatment provisions that give developing economies special rights.[195] The special and differential provision was added to GATT in 1947 through the enactment of the "Enabling Clause," officially called "Decision on Differential and More Favorable Treatment, Reciprocity, and Fuller Participation of Developing Countries," which grants preferential market access to developing countries.[196] In December 2013, the Bali Ministerial Conference established a mechanism to review and analyze the implementation of special and differential treatment provisions.[197]

Whether a WTO member is entitled to special and differential treatment is claimed by themselves, taking into account the findings of other international organizations, such as the World Bank.[198] Therefore, the question of whether a WTO member's economic status qualifies

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[194] See Milton Mueller, Why we need to start talking about neo-mercantilism, Internet Governance Project, August 4, 2021 https://www.internetgovernance.org/2021/08/04/why-we-need-to-start-talking-about-neo-mercantilism/ (Last visited on Nov 14, 2022)

[195] See Marrakesh Agreement.

[196] Temitope O Adeyemi, *A "Critical Mass" Approach to Negotiations in the WTO: A Case Study Analysis*, 2021, https://ir.lib.uwo.ca/etd/8139.

[197] See WTO, Special and differential treatment provisions, https://www.wto.org/english/tratop_e/devel_e/dev_special_differential_provisions_e.htm (Last visited on Nov 7. 2022)

[198] See WTO, Who are the developing countries in the WTO?, "There are no WTO definitions of "developed" and "developing" countries. Members announce for themselves whether they are "developed" or "developing" countries. However, other members can challenge the decision of a member to make use of provisions available to developing countries." https://www.wto.org/english/tratop_e/devel_e/d1who_e.htm (Last visited on Nov 7, 2022)

them for special and differential treatment is not a purely legal one. While there may have been consensus surrounding which countries were entitled to special and differential treatment in 1995, countries have developed at different rates since then, making their current economic status controversial. For example, the U.S. always disagrees with China's claims to be entitled to the economic status of a developing country because China has become one of the biggest economies in the world but retains a developing economy status at the WTO, so it enjoys some special and differential treatment. The U.S. claims that China is taking advantage of the vagueness of the criteria used to distinguish developing from developed economies to enjoy privileges it is not entitled to.

B. Kicking Away the Ladder

According to the famous book *Kicking Away the Ladder* by Ha-Joon Chang, advanced economies continue to exploit developing countries—often their former colonies—by claiming to provide them with policy guidance that advanced economies believe is appropriate. However, the advanced economies seem to have forgotten that no one required them to follow similar policies as they made the transition from developing to developed, and they do not want to acknowledge how much of a barrier to economic growth their policy recommendations may be for developing countries[199] Chang argues that it is important to give countries policies appropriate to their development stages and other conditions, and that advanced economies at least should let the developing countries know and use the same development policies that the advanced economies themselves used in the past.[200] While Chang's argument may be very logical and more ethical, the idea of allowing developing economies to engage in practices today,

[199] HA-JOON CHANG, *supra* note 143.
[200] *Id.*

such as the theft of intellectual property just because advanced economies engaged in widespread theft of IP when they were at a similar level of development is not likely to ever garner much support from advanced economies.

One example is China's developing status conflict. From China's perspective, China has requested a developing economy status since its first application for the GATT or the WTO, and even after years of developing and becoming one of the most powerful economies in the world, China still considers itself a developing country. For the Chinese government, it is not fair for China to have more obligations, not only in trade but also in environmental protection, because the advanced countries have had their terms, and they should not kick away the ladder.

However, the U.S. has never considered China a developing country within the WTO context and argues that China should stop receiving privileges as one. From a trade perspective, the U.S. considers that China is taking an unfair advantage because of its developing economy status. From an environmental perspective, the U.S. believes that China should put more into environmental protection because the Chinese government can now afford to protect the environment.

After China joined the WTO, the advanced countries expected China to take its role in trade governance as a leader of developing countries and speak for them. But China took decades to learn how to become involved in globalization, so it has pursued its national interests in the WTO, and not served as a leader for the developing countries, and the advanced economies were disappointed.[201] In 2012, Gao found that China was not leading WTO negotiations because China was not familiar with the WTO negotiations and had to learn first; Gao pointed out that

[201] Henry Gao, *China's Participation in Global Trade Negotiations*, *in* CHINA JOINS GLOBAL GOVERNANCE: COOPERATION AND CONTENTIONS 57 (2012).

China played a low-profile role after joining the WTO, only becoming a key player after 2008. Gao further predicted that China would not assume a leading role in the talks if China was still learning how the system worked or if it would add to China's own obligations in the WTO without any corresponding benefits.[202]

While Western countries may have expected China to take more responsibility and help other developing economies, when China actually does that, they may criticize it anyway. During the EGA negotiations, China spoke out for developing countries by proposing a product list, but this led to Western countries blaming China for the EGA deadlock because they did not like the product list it nominated.[203] One explanation for Western criticism of China no matter what it does at the WTO, is that China has not used a Western model of economic development, so Western countries may fear the spread of the Chinese development model.[204]

This situation is increasingly resembling the world before the establishment of the GATT and the WTO, which were full of mercantilism and trade protectionism, and scholars are concerned about neo-mercantilism.[205] Mercantilism was an economic system of trade that spanned the 16th to the 18th century and was designed to maximize exports and minimize imports for an economy. Then, Adam Smith proposed the absolute advantage theory, in which a producer can provide a good or service in greater quantity for the same cost or the same quantity at a lower

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[202] *Id.*

[203] See Iana Dreyer, Environmental Goods Agreement – why talks faltered, Borderlex, https://borderlex.net/2016/12/06/environmental-goods-agreement-talks-faltered/ (Last visited on Nov 7, 2022); Inside U.S. Trade, Key Lawmaker, EU and Industry All Blame China for Torpedoing EGA Deal, World Trade Online, https://insidetrade.com/daily-news/key-lawmaker-eu-and-industry-all-blame-china-torpedoing-ega-deal (Last visited on Nov 7, 2022)

[204] Wu, *supra* note 15.

[205] Milton Mueller & Yik C. Chin, *Platform governance by competing systems of political economy: The United States and China*, 14 POLICY & INTERNET 240 (2022); Milton Mueller, *Back to the future: Asia and digital neo-mercantilism*, 14 EAST ASIA FORUM QUARTERLY 10 (2022).

cost than its competitors.[206] After that, the leading theory to explain modern international trade was the theory of comparative advantage theory first advanced by David Ricardo but adjusted to allow support for developing economies.[207] Following decades of ever-greater trade liberalization and growth in international trade, neo-mercantilism[208] or protectionism appears to be on the rise again.

V. Conclusion

The WTO's negotiation function is a core element of the modern international trade system. It has become increasingly dysfunctional and cannot be rehabilitated merely by making its negotiation processes more flexible. Single-undertaking practices and consensus-based decision-making practices are crucial for WTO members to protect fair trade by giving every member a chance to form the trade rules. These two practices are almost impossible to revise because the revision will still need a general consensus of all members. Therefore, the real challenges are hidden behind these two practices.

Plurilateralism, or a critical mass approach, is not an innovation but a regression to the earlier forms of trade negotiations before the Uruguay Round. Thinking that such old strategies might save the WTO today has been criticized as putting old wine in new bottles by some commentators. This could reduce the number of negotiation parties and the issues addressed in negotiation rounds, which does not represent increased flexibility. This can be seen from the fact that the EGA negotiations have been deadlocked for over four years, even though the EGA negotiations do not involve all WTO members and have a narrow focus on a small number of

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[206] Smith, Adam. 1910. The Wealth of Nations. London: J.M. Dent.

[207] Kalim Siddiqui, *David Ricardo's Comparative Advantage and Developing Countries: Myth and Reality*, 8 IN INTERNATIONAL CRITICAL THOUGHT (2018).

[208] Paul F. Cwik, *The New Neo-Mercantilism: Currency Manipulation as a Form of Protectionism: iea economic afairs*, 31 ECONOMIC AFFAIRS 7 (2011).

issues. Thus, a greater emphasis on plurilateral agreements may not be enough to rehabilitate the WTO's negotiation function.

The mega-regional FTAs negotiated outside the WTO are symbols of the decline of the WTO legal framework because they are negotiated outside the WTO. These mega-regional FTAs could fulfill the WTO's principles but would do so by undermining the viability of the current WTO institutions and framework. Furthermore, the impact of these mega-regional FTAs is unknown because they have all been recently signed or ratified and do not yet have a track record in practice. Therefore, mega-regional FTAs are a way to promote trade outside the WTO rather than a method of rehabilitating the WTO's negotiation function.

One crucial factor contributing to negotiation conflicts is that developing and developed economies disagree about development, especially economic status recognition and benefits. The comparative advantage becomes smaller, and neo-mercantilism may soon become dominant.

Therefore, it is questionable whether the WTO's challenges can be fixed by making the single-undertaking method more flexible or by moving away from multilateralism. A question more important than what mechanisms might resolve the WTO's current challenges is what causes the underlying deadlock among WTO members. Examining the causes of the deadlock in EGA negotiations may help provide some insight into the underlying challenges facing the WTO system more generally. These issues will be discussed further in Chapter Four.

Chapter 4 Environmental Goods Agreement

I. Introduction

The Environmental Goods Agreement (EGA) represents an attempt to restore the negotiation function of the World Trade Organization (WTO) to help protect the environment and promote sustainable economic development. In the Doha Declaration in 2001, WTO members committed to reducing or eliminating tariff and non-tariff barriers to environmental goods (EGs) and services.[209] In 2014, WTO members seized the opportunity to launch negotiations for a new EGs trade agreement using the Asia-Pacific Economic Cooperation (APEC) List of Environmental Goods (APEC EGs List) model.[210]

Using a plurilateral agreement, the EGA aims to eliminate tariffs on many environment-related products on a most-favored-nation (MFN) basis. If the trade of these products and services can be increased, then the protection of the environment might also increase. Second, the EGA is designed to be a "living agreement,"[211] referring to a revision clause that allows the list of goods to be updated without revising the treaty.

The EGA will eventually address environmental services and non-tariff barriers.[212] According to the World Economic Forum Joint Statement on Environmental Goods Trade in 2014, the goal

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[209] World Trade Organization, Ministerial Declaration of 14 November 2001, WT/MIN (01)/DEC/1, 41 I.L.M. 746(2002), [hereinafter Doha Declaration].

[210] "The EGA aims to build on the commitment that Leaders of the Asia-Pacific Economic Cooperation (APEC) made to reduce tariffs on a list of 54 environmental goods by the end of 2015, by taking the next step of eliminating tariffs on these 54 goods and expanding product coverage to include additional environmental technologies." *See* the Office of the United States Trade Representative, Environmental Goods Agreement, https://ustr.gov/trade-agreements/other-initiatives/environmental-goods-agreement (Last visited on Feb 28, 2022)

[211] See WTO, Several WTO members call for further work on trade and climate policy coherence, https://www.wto.org/english/news_e/news16_e/envir_30jun16_e.htm (Last visited on January 24, 2022); See also, Fratinivergano Trade Perspectives, Issue Number 18: 9th October 2015: Ninth round of negotiations concluded on the Environmental Goods Agreement, http://www.fratinivergano.eu/static/upload/1/1/15.10_.09_TP_Issue_18_.pdf (Last visited on January 24, 2022)

[212] "In the long term, the EGA is envisaged as a 'living agreement' that will expand to add new products in response to changes in technology and eventually address environmental services and non-tariff barriers to trade." See, Fratinivergano Trade Perspectives, *supra* note 3.

of the EGA is to create "a future-oriented agreement able to address other issues in the sector and to respond to changes in technologies in the years to come that can also directly and positively contribute to green growth and sustainable development."[213] Success in negotiating dynamic and flexible trade agreements might help save the WTO's negotiation function by establishing an alternative path for trade agreement negotiations.

Although there was great expectation for the EGA's success, the negotiations ended in a deadlock after its last round in December 2016. This chapter explores the factors of the EGA negotiation's deadlock and suggests that examining the causes may help provide some insight into the underlying challenges facing the WTO system more generally.

A brief history of the WTO's EGA and EGs trade negotiations is provided in Section II. Next, this chapter finds that the most apparent cause of the deadlock was the inability to decide on a process for how all negotiating parties could accept the modification of the APEC EGs List.[214] In addition, some challenges caused by the inability to achieve a consensus about the definition of an EG are discussed in Section III.

Another factor contributing to the current deadlock in EGA negotiations is the possible incompatibility between the modalities of trade negotiations and the challenges posed by the EGA negotiations. This factor is discussed below in Section IV from a legal perspective. The process of negotiating the EGA includes three important modalities:

1. A shift from the multilateral modality of the Uruguay Round to a plurilateral modality,[215]

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[213] World Economic Forum Joint Statement on Environmental Goods Trade, World Economic Forum in Davos, January 24, 2014, [*hereinafter* Davos Environmental Goods Trade Statement]

[214] Jamie De Melo & Jean-Marc Solleder, *The EGA Negotiations: why they are important, why they are stalled, and challenges ahead*, 54(3) JOURNAL OF WORLD TRADE 333 (2020).

[215] In international law generally, "multilateral" refers to a treaty with multiple parties, whereas the bilateral refers to a treaty with a finite number (two for bilateral, three for trilateral) In the language of international law generally, a plurilateral trade agreement is an example of a multilateral treaty. Within the WTO framework, however, "plurilateral" and "multilateral" have slightly different meanings. Plurilateral refers to agreements

2. The choice to use a "list-based" approach rather than a "project-based" approach advocated by some countries,[216] and
3. A choice of a hard law rather than a soft law approach with the APEC List of EGs.[217]

First, choosing a plurilateral negotiation modality appeared to help overcome the challenge of single-undertaking and general consensus-based negotiation practices, which require every subject to be agreed upon simultaneously, with total member consensus. These two practices were supposed to contribute to a fair, transparent, free trade system; however, these practices often resulted in difficulties concluding negotiations among WTO members. Therefore, the plurilateral approach reduces the number of the participating parties required to agree and limits the number of subjects in the negotiations that must be agreed upon. Nevertheless, even with this narrowed scope, the EGA negotiations could not be successfully concluded.

Second, the choice in drafting strategy of a list-based approach was supposed to overcome the challenge of defining EGs. Before EGA negotiations were launched, different WTO members proposed various strategies (described below in Section III.B), but none achieved widespread support.[218] Thus, countries participating in EGA negotiations eventually decided to use the list-based approach following the successful example of the APEC List of Environmental Goods.[219]

Nonetheless, after WTO members nominated different lists for voting during the EGA negotiations, it became clear that the list-based approach might not solve the problem. Although

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negotiated with fewer than all the WTO members whereas multilateral refers to agreements negotiated with all WTO members. This dissertation uses the terms "plurilateral" and "multilateral" as they are used in international trade law, not as they are used in international law generally.

[216] See Special Session of the Committee on Trade and Environment, An Alternative Approach for Negotiations under Paragraph 31(iii): submission by India, TN/TE/W/51, (June 3, 2005.)

[217] P. L. Hsieh, *Reassessing APEC's role as a Trans-Regional Economic Architecture: Legal and Policy Dimensions*, 16 JOURNAL OF INTERNATIONAL ECONOMIC LAW 119 (2013).

[218] Wu, *supra* note 60.

[219] Goff, *supra* note 16.

the list-based approach was intended to simplify negotiations, the freedom of nomination complicated the process. Therefore, EGA participating members could not agree on a final product list during negotiations, contributing to the deadlock.

Third, hard law is a natural choice for the WTO's legal framework. The WTO's agreements always use a hard law approach. Moreover, its dispute settlement system is widely considered one of the most successful international resolution systems.[220] Because of its success in the hard law approach and international resolution system, it is unsurprising that little consideration has been given to the role of soft law in supporting the functions and promoting the organization's core objectives.[221]

Nonetheless, this hard law choice could hinder the EGA negotiations because the original model of the EGA product list was a soft law agreement: the APEC List of EGs. Hence, it is crucial to acknowledge that soft law has less binding power than hard law, thus indicating that soft law negotiations could be easier to conclude than hard law negotiations. Nevertheless, they are also associated with a greater risk of non-compliance.

The soft law undertaking reducing tariffs on EGs has proven successful, with 19 out of 21 APEC countries coming into compliance by 2021.[222] Indeed, a soft law agreement may be feasible in a regional trade association such as APEC. However, in the politically divisive context of WTO negotiations after the Doha Round's failure, the switch from a hard to soft law approach would probably be infeasible.

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[220] See WTO, A Handbook on the WTO Dispute Settlement System
Second Edition, https://www.wto.org/english/res_e/publications_e/dispuhandbook17_e.htm (Last visited on January 24, 2022)

[221] Patrick Low, Strengthening the Global Trade and Investment System for Sustainable Development, World Economic Forum (October 2015) https://e15initiative.org/wp-content/uploads/2015/09/E15-Services-Low-Final.pdf (Last visited on January 24, 2022)

[222] See Market Access Group, APEC Advances Environmental Goods Tariffs Cut, APEC News Releases, (11 March 2021) https://www.apec.org/Press/News-Releases/2021/0311_MAG (Last visited on January 24, 2022)

After analyzing the modalities, Section IV explores deeper problems affecting EGA negotiations. The choices of the plurilateral and list-based approaches apparently did not contribute as much to the success of the EGA as hoped. The inability to conclude the negotiations with these choices suggested substantial conflicts of interest among the countries negotiating.

One possible factor contributing to the stalemate could be that WTO members do not believe they stand to gain enough from concluding an EGA to make the compromises necessary to finish the negotiations. In addition, the growing fragmentation and polarization of international economic relations outside the context of WTO negotiations may deter the completion of the EGA. For example, Mega-Regional FTA, the CPTPP and RCEP, would fragment the world trade system into regions. China's Belt and Road initiative is another example of the polarization of international economic relations. Thus, even with the brilliant solution proposed by trade experts and economists to optimize EGA negotiations,[223] relaunching the negotiations may not be possible until the WTO system can adapt to cope with these factors. After analyzing factors contributing to the EGA negotiation deadlock, this chapter concludes by suggesting that the EGA deadlock can be seen as a case study of many economic and political tensions undermining the WTO system more generally.

II. A Brief History of the Environmental Goods Agreement

Environmental protection has become an increasingly important topic with increasing concerns over global climate change. As a result, WTO members promised to promote environmental protection during the Doha Round. However, if increased trade is often associated

[223] Jaime de Melo & Jean-Marc Solleder, *Barriers to trade in environmental goods: How important they are and what should developing countries expect from their removal*, 130 WORLD DEVELOPMENT 104910 (2020); REINSCH, BENSON, AND PUGA, *supra* note 128.

with environmental degradation, then agreements that increase trade volume may not be the most effective way of helping the environment.

The EGA's history began with the Doha Development Agenda (DDA) launch in 2001. WTO members committed to reducing or eliminating tariff and non-tariff barriers to EGs and services outlined in the Doha Declaration.[224] The WTO Committee on Trade and Environment (CTE) met in Special Session to discuss EGs and their trade. Although all WTO members were involved in the negotiations with the hope of reaching a multilateral agreement for EGs, significant points of division appeared between developed and developing countries, so the negotiations for EGs broke down by the late 2000s.[225]

A turning point appeared in 2012 when APEC leaders voluntarily committed to reducing tariffs on the products in the APEC List of EGs.[226] WTO members considered the APEC List of EGs a successful model list for an EGs trade agreement negotiation. Therefore, in January 2014, 14 WTO members announced the launch of a new initiative to eliminate tariffs on EGs at the World Economic Forum in Davos, Switzerland.[227] On July 8, 2014, these 14 members launched plurilateral negotiations for the EGA in the WTO.[228] During the negotiation rounds, the parties expanded to 18 members, representing 46 WTO members and 90% of all global exports of EGs.[229]

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[224] Doha Declaration.

[225] Wu, *supra* note 60.

[226] APEC, Leaders' Declaration of 08 September 2012, ANNEX C - APEC List of Environmental Goods (Sept.8, 2012)(see APEC official website: https://www.apec.org/Meeting-Papers/Leaders-Declarations/2012/2012_aelm/2012_aelm_annexC.aspx) [*hereinafter* APEC List of EGs]

[227] The fourteen WTO members launching the EGA: Australia, Canada, China, Costa Rica, the European Union, Hong Kong, Japan, Korea, New Zealand, Norway, Singapore, Switzerland, Chinese Taipei and the United States Davos Environmental Goods Trade Statement. See Davos Environmental Goods Trade Statement, *supra* note 5

[228] WTO, Azevêdo welcomes launch of plurilateral environmental goods negotiations, 2014 News Item in Trade and Environment, (July 8, 2014), https://www.wto.org/english/news_e/news14_e/envir_08jul14_e.htm (Last visited on January 24, 2022)

[229] The eighteen WTO members in the EGA negotiations: Australia; Canada; China; Costa Rica; European Union; Hong Kong, China; Iceland; Israel; Japan; Korea; New Zealand; Norway; Singapore; Switzerland;

As of February 2022, 18 rounds of EGA negotiations had been completed since the first round on July 8, 2014, in Geneva.[230] During the first seven rounds, the negotiations began with nominations and discussions about categories and products in the lists. Then, in rounds 8, 9, and 15, the participants discussed the specific text of the EGA. Unfortunately, the negotiators struggled with the product list in the previous negotiation rounds and ultimately failed to settle on a final list in the 18th round on December 4, 2016, and there have been no further negotiations since then.

Though EGA participants launched the negotiations with high expectations, they suddenly abandoned the negotiations without any formal explanation, which was highly unusual. Since 2016, the EGA has rarely been mentioned in the news or academic publications. However, the negotiations were never officially terminated.

Some people still believe in the EGA's potential. For example, James Bacchus, an American attorney who served two terms as a judge on the WTO appellate panel, described the potential of the EGA to expand the horizons of international trade law in the following terms:

The EGA presents an opportunity for out-of-the-box thinking on how to craft the rules of trade agreements so that they are dynamic and responsive to changes in the global economy. [231] Indeed, this approach would do much to avoid the challenges of re-negotiating deals and instead encourage ongoing dialogue between countries on improving the coverage and implementation of the agreement to serve the best shared environmental goals.[232]

Liechtenstein; Chinese Taipei; Turkey; United States. Check the list at WTO, EGA, https://www.wto.org/english/tratop_e/envir_e/ega_e.htm (Last visited on Feb 28, 2022))

[230] *Id.*

[231] James Bacchus and Inu Manak, Free Trade in Environmental Goods Will Increase Access to Green Tech, Free Trade Bulletin No.80, CATO Institution, (June 8, 2021) https://www.cato.org/free-trade-bulletin/free-trade-environmental-goods-will-increase-access-green-tech#dynamic-versus-static-approach (Last visited on January 24, 2022)

[232] *Id.*

Some trade experts believe the EGA negotiations could be successfully relaunched by expanding negotiation to environmental services and non-tariff barriers and entrusting an independent committee of experts.[233] However, while the political and economic foundations of half a century of successful trade liberalization began to crumble in the years following the Global Financial Crisis, it became unclear whether the potential Bacchus described will ever be realized given the current stalemate in EGA negotiations.

III. Defining Environmental Goods (EGs)

Efforts to achieve a widespread consensus regarding the definition of what constitutes an EG have not yet succeeded. One reason in the context of the EGA negotiations is that there is not a clearly defined "environmental goods" economic sector outside the context of trade negotiations. A significant challenge here is practical. [234] Although the WTO uses the Harmonized Commodity Description and Coding System (HS) to list all the products, there is not a single chapter in the HS on EGs specifically.[235] While negotiations for other WTO agreements could draw on historical antecedents to establish a framework, EGA negotiations could not. Because the effort to craft a new definition for a new category of trade law occurred in the highly contentious atmosphere of DDA, it is not surprising that countries negotiating the EGA found themselves mired in disagreements they could not resolve.

A. Three Challenges to Define EGs

Before the launch of EGA negotiations, WTO members attempted unsuccessfully to define EGs for many years.[236] To fulfill the commitment to the DDA, WTO members must decide what

[233] Jamie De Melo and Jean-Marc Solleder, *supra* note 214; REINSCH, BENSON, AND PUGA, *supra* note 128.
[234] James Bacchus and Inu Manak, *supra* note 229
[235] *Id.*
[236] Wu, *supra* note 60.

kinds of products are EGs. However, the WTO CTE's efforts to define EGs in words[237] have yet to yield positive results.

For a nation's commitments under an EGA to be verifiable by third parties, national customs administrators must be able to determine which goods are eligible for tariff reductions as EGs and which are not. Mark Wu highlighted three challenges in devising a definition of EGs that would be feasible to administer.[238] First, some EGs may have multiple end-uses or are considered dual-use goods, meaning they may have other uses than environmental ones.[239] For example, product X, which might be environmentally preferable and could be used as part of an environmental project, might also be suitable for a non-environmental project. Therefore, Customs would have difficulty distinguishing among the different possible uses of product X while reviewing imports or exports of the product.[240]

By contrast, Howse and Von Bork argued that the precise specification of environmental criteria would eliminate the problem caused by multiple end-use.[241] They also considered that countries could identify environmental products by specifying which subcategory of the HS code should "ex-out" to liberalize EG trade. An "ex-out" refers to when the WTO further subdivides a tariff line in the HS into two or more lines using additional digits in the tariff heading.

Next, the WTO should designate the subdivided tariff line with an "EX" in its tariff schedule to reflect the fact that it has two or more duties, and these lines with an ex would be called "ex-headings."[242] Zhang explained that one way to move EGs negotiations forward would be to

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[237] Howse and van Bork, *supra* note 108.
[238] Wu, *supra* note 60.
[239] *Id.*
[240] *Id.*
[241] Howse and van Bork, *supra* note 108.
[242] In the HS, the normal used code is six digits. The broadest categories of products are identified by two-digit "chapters". These are then sub-divided by adding more digits: the higher the number of digits, the more detailed the categories. Such kind of product is narrowly defined by the WTO. EX-heading code is used in WTO databases to

amend HS codes and create ex-headings to clarify product coverage and descriptions.[243] However, Wu elaborated on the practical challenges of separating actual uses of multiple end-use goods at the border, which means that the "ex-out" would not likely be effective.[244]

Second, WTO members disagree about including environmentally preferable products (EPPs) on the list of EGs.[245] The Union Nations Conference on Trade and Development (UNCTAD) defined EPPs as products causing "significantly less environmental harm at some stage of their life cycle than alternative products that serve the same purpose," or "the production and sale of products contributing significantly to the preservation of the environment."[246] WTO members debated whether EPPs should be based on process and production methods (PPMs) criteria, which might increase developing countries' interest in EPPs.[247]

Third, WTO members struggled to agree on a common approach to assessing environmental impact.[248] Paragraph 33 of the Doha Declaration asked members to share their experiences.[249] Hence, several countries described environmental reviews, environmental assessments, and sustainability impact assessments of WTO negotiations and other major trade agreements.[250] However, these countries only "shared" the experiences but disagreed on a uniform environmental impact assessment standard. Moreover, after 2010, no further updates to this

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reflect the fact that this narrowly defined kind of products further subdivided because it has two or more duties. The import statistics will be for the product as a whole, not for each subdivision.

See WTO, WTO Tariff Analysis Online (TAO), https://www.wto.org/english/tratop_e/tariffs_e/tao_help_e.pdf (Last visited on Feb 28, 2022):

[243] Zhang, *supra* note 76.

[244] Wu, *supra* note 60.

[245] *Id.*

[246] U.N. UNCTAD Secretariat, environmentally preferable products (EPPs) as a trade opportunity for developing countries Rep. by the UNCTAD Secretariat. [TD/] UNCTAD/COM/70 (December 19, 1995)

[247] Howse and van Bork, pp8, *supra* note 29.

[248] Wu, *supra* note 60.

[249] Doha Declaration.

[250] See WTO, Sharing experience on environmental reviews, https://www.wto.org/english/tratop_e/envir_e/reviews_exper_e.htm (Last visited on January 24, 2022)

topic's section of the WTO website have been available, suggesting that even the sharing of information might have stopped.

Due to the uncertainties surrounding the notion of EGs, defining them has become difficult. As a result, WTO members abandoned the traditional approach of giving EGs a definition in the text of the agreement. Instead, they used a list of nominating products to define EGs.

B. Different Drafting Strategies to Define EGs

To define EGs, scholars and WTO members have considered different drafting strategies. During the Doha Round, WTO members raised three possible approaches in addition to the list-based approach.

First, India proposed a project-based approach, temporarily lowering tariffs for products imported in specific environmental projects.[251] India defined that such a project should meet specific criteria considered by a designated national authority.[252] Second, Argentina proposed a hybrid/integrated approach of project-based and list-based, reinforcing the multilateral approach by identifying project areas and linking them to a list of goods.[253] Third, many countries proposed a classic approach of "request-and-offer," "which would allow WTO members to

[251] Wu, *supra* note 60. see also An Alternative Approach for Negotiations under Paragraph 31(iii): submission by India, paras. 6-10, *supra* note 8; see generally Matthew Stillwell, Advancing the WTO Environmental Goods Negotiations: Options and Opportunities, Economics Occasional Papers Series, No.08-1 (January 2008), https://www.ecolomics-international.org/eops_08_1_matthew_stilwell_wto_ctess_environmental_goods_negotiations1.pdf. (Last visited on January 24, 2022)

[252] An Alternative Approach for Negotiations under Paragraph 31(iii): submission by India, *supra* note 8; See also, U.N. The WTO Negotiations on Environmental Goods and Services: A Potential Contribution to the Millennium Development Goals, UNCTAD/DITC/TED/2008/4, pp 9.

[253] See WTO, Special Session of the Committee on Trade and Environment, Integrated Proposal on Environmental Goods for Development: submission by Argentina, TN/TE/W/62, (14 October 2005.) See also, U.N. The WTO Negotiations on Environmental Goods and Services: A Potential Contribution to the Millennium Development Goals, UNCTAD/DITC/TED/2008/4, pp 9.

request tariff cuts from each other bilaterally and then agree to extend any concessions multilaterally to all other WTO members."[254]

The ultimately selected approach was list-based, where each interested WTO member submits lists of EGs for tariff reduction based on the HS customs classification.[255] A list-based approach may be positive or negative. A positive list-based approach means all listed products receive favorable treatment, such as eliminating a tariff, while a negative approach restricts trade in the products on the list. The EGA, ITA/ITA-II, and the APEC List of the EGs all use a positive list approach with a single list of products.[256] Moreover, the ITA embraced a list-based approach to eliminate tariffs on specific technology and telecommunications products by signatory countries.[257] At the Nairobi Ministerial Conference in December 2015, over 50 members participated in the expansion of the agreement, which now covers an additional 201 products valued at over $1.3 trillion per year.[258] As a result, the ITA successfully adopted the list-based approach; however, there has been difficulty in expanding the product list.

While exporters of EGs preferred to use the list-based approach, importers of EGs had serious reservations, which made it difficult to reach an agreement.[259] Zhang concluded that the HS system did not provide classifications corresponding to the notion of EGs.[260] Thus, to build consensus regarding the definition of EGs, it would be essential to have explicit HS

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[254] Wu, *supra* note 60.

[255] Howse and van Bork, *supra* note 108. Harmonized System is the World Customs Organization classification scheme used by WTO members to designate their tariff commitments. The HS uses six-digit sub-heading and beyond. HS-6 refers to subheadings set at the six-digit level, which is the level at which WTO members make their tariff commitments.

[256] Zhang, *supra* note 76.

[257] Michael Anderson & Jacob Mohs, *The Information Technology Agreement: An Assessment of World Trade in Information Technology Products*, 3 J. INT'L COM. & ECON 109 (2011).

[258] See WTO, ITA: https://www.wto.org/english/tratop_e/inftec_e/inftec_e.htm (Last visited on January 24, 2022)

[259] Wu, *supra* note 60.

[260] Zhang, *supra* note 76.

classifications and descriptions and clear ex-outs.[261] This approach is crucial to clarify product coverage, yet the issue remains unresolved.

WTO members' previous proposals and discussions seemed to have little to do with the choice of the list-based approach in the EGA negotiation. Instead, the list-based approach was apparently chosen based on the positive experience of using one with the APEC list of EGs[262] and the ITA.

C. Environmental Goods (EGs) Trade Outside the WTO

The world outside the WTO is also concerned about the EGs trade. Although the classification of "environmental goods" is not recognized by the HS, it does not mean there are no examples of how to define EGs in international law today. For instance, the Organization for Economic Co-operation and Development (OECD) and APEC have worked on a list of products on EGs. WTO members referred to these two lists in the EGs negotiation sessions before the launch of the EGA and the APEC List of EGs.[263]

APEC was the first to single out a category for trade liberalization purposes.[264] Thus, APEC launched the APEC Early Voluntary Sector Liberalization Initiative (EVSL) in 1997. The APEC list in EVSL started with nominations by APEC members. It was limited to specific goods that customs agents could readily distinguish and treat differently for tariff purposes.[265]

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[261] *Id.*; Howse and van Bork, *supra* note 108.

[262] Wu, *supra* note 60.

[263] Ronald Steenblik, *Environmental Goods: A Comparison of the APEC and OECD Lists*, No. 2005/04 OECD TRADE AND ENVIRONMENT WORKING PAPERS, OECD PUBLISHING (2005), https://doi.org/10.1787/274615168441. (Last visited on January 24, 2022)

[264] Mahesh Sugathan, *Lists of Environmental Goods: An Overview*, INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (2013). https://www.ictsd.org/sites/default/files/downloads/2013/12/info_note_list-of-environmental-goods_sugathan.pdf (last visited Feb 28, 2019)

[265] Steenblik, *supra* note 263.

In the early 2000s, before the WTO's EGs trade agreement began to form, the WTO created the basis for the APEC List of EGs by giving scope and focus to its CTE. In 2012, the APEC leaders declared a list of EGs to reduce the tariff aimed to take effect before the end of 2015. Then, in 2012, they negotiated from March through September. Finally, at the end of 2012, they declared and committed to reducing the tariff on the products from the APEC List of EGs. This success may be one explanation for the confidence of the WTO members to launch EGA negotiations.[266]

The OECD completed the OECD List of EGs in 1998.[267] This list intended to illustrate the scope of the "environmental industry" for analytical purposes[268] and had a broader range of products than the APEC list in EVSL because it had no particular policy consequences. Similarly, the World Bank established a 43 climate-friendly goods list in 2007, while the International Centre for Trade and Sustainable Development (ICTSD) created an ICTSD climate-friendly goods list.

The APEC List of EGs gained the WTO members' attention and maybe caused institutional competition for further developing the list of EGs.[269] The negotiations were launched when it was apparent that the Doha Round might fail before the Trade Facilitation Agreement was reached. Thus, WTO members were looking for opportunities to break out of the apparent stalemate in the Doha Round.

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[266] Wu, *supra* note 60.

[267] OECD, Joint Working Party on Trade and Environment, Future Liberalization of Trade in environmental goods and services: ensuring environmental protection as well as economic, COM/TD/ENV(98)37/FINAL.

[268] Steenblik, *supra* note 263.

[269] Wu, *supra* note 60.

IV. EGA Negotiations

A. EGA Negotiation Deadlock

When WTO members launched the EGA negotiations in 2014, they tried to learn from experience and incorporate the lessons learned from the APEC List of EGs and the past EGs negotiations inside the WTO. With the risk of collapse of the Doha Round, the EGA negotiation moved away from multilateralism to plurilateralism to avoid the challenges of conventional "single-undertaking" and "general-consensus-based" WTO negotiation principles. The list-based approach had been successful with the ITA and ITA-II, which also involved plurilateral negotiations.

Although no further rounds of EGA negotiations have occurred since December 2016, the WTO has not officially announced the failure of EGA negotiations. Thus, it remains possible that the negotiations may one day be restarted. However, it is unclear when it might be possible to declare the EGA negations a failure. For example, ITA-II negotiations were considered deadlocked in 2012, but with President Xi's and President Obama's meeting in 2014, the negotiations were restarted and then successfully concluded.[270]

The current status of the EGA negotiations falls somewhere between failure and success, fairly be described as deadlock or stalemate. According to Faure and Cede, one should consider negotiations' polymorphous and subjective character in determining whether negotiations have succeeded or failed.[271] For example, a negotiator could call the negotiation a failure because the original goals were not achieved, while others might consider the negotiation successful if it

[270] See Adam Behsudi, U.S., China reach tech trade breakthrough, Politico, (November 11, 2014 12:43 AM EST) https://www.politico.com/story/2014/11/us-china-reach-ita-breakthrough-112768 (Last visited on January 24, 2022)

[271] GUY OLIVIER FAURE & FRANZ CEDE, UNFINISHED BUSINESS: WHY INTERNATIONAL NEGOTIATIONS FAIL (2012).

produced a treaty. Still, others might consider the negotiation a failure if they believe its long-term consequences outweigh its benefits. Therefore, whether something is a failure might be a question of fact in some situations or a normative judgment in others.[272]

The "failure" of a treaty may be viewed as a "fact" in the following scenarios: (1) if the negotiations for a treaty end with either no successfully agreed-upon treaty or a deadlock, it is considered a failure; (2) if the negotiations end with a specific announcement of a failure to enter a treaty, it is considered a failure; or (3) if the treaty is signed but never becomes effective, the negotiations are considered a failure (e.g., the TPP and the Comprehensive Nuclear-Test-Ban Treaty of 1996). In addition, the failure of a treaty may be considered a matter of normative judgment in the following scenarios: (1) if the negotiation rounds are perceived as unfair, the negotiations could be considered a failure whether a treaty is signed, or (2) if conflicts continue after the treaty is signed which the treaty's purpose was to resolve (e.g., treaties between the U.S. and American Indian Nations, 1778–1871). Thus, whether the EGA treaty negotiations can be considered to have "failed" depends on the context where the conclusion is being offered and the factors upon which it is based.

For the EGA, the official goal was to reduce EGs tariffs and other trade barriers; however, the negotiation stopped before much progress was made. Although it may appear to external observers that WTO members have forgotten the EGA negotiations, the WTO has never publicly acknowledged defeat. Nonetheless, as long as the negotiations are halted, it may be difficult for participants to achieve their goals regarding the trade of EGs. Because it was unclear in 2022, when this chapter was written, whether the EGA negotiations would ever be successfully concluded, they are described as "deadlocked" in this chapter rather than deemed a failure.

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[272] *Id.*

While there may have been one primary official goal for the EGA negotiations, it is important to remember that negotiations may fulfill more than one function simultaneously and thus serve other purposes besides reaching an agreement.[273] For example, negotiations may be a channel for communicating, collecting information, maintaining contact, pursuing a longer-time activity, engaging in a permanent activity, acting as the surrogate of a regime, or being a tactical tool within a much broader strategy.[274] Unfortunately, due to the current deadlock in EGA negotiations, they do not appear to fulfill any other goals. Hence, the EGA negotiations could serve these additional functions only with another breakthrough, such as the one President Obama and President Xi achieved in 2014.

B. Modalities

The Oxford English Dictionary defines modality as "an arrangement or condition; a procedure or method; a means for the attainment of the desired end." The WTO's website explains how the term is used in trade law.

"Modalities" are ways or methods of doing something. The ultimate objective of these modalities is for member governments to reduce tariffs and subsidies, and make binding commitments in the WTO. The "modalities" tell them how to do it, but first, the "modalities" must be agreed upon.[275]

In the context of the EGA, "modalities" refers to ways or methods of negotiating the agreement rather than how member states will implement it. However, the current deadlock of the EGA negotiations suggests that merely choosing appropriate negotiation modalities will not

[273] *Id.* pp 5-6
[274] *Id.*
[275] WTO, what are "modalities"? https://www.wto.org/english/tratop_e/dda_e/modalities_e.htm (Last visited on January 24, 2022)

be enough to overcome divisions among WTO member states exacerbated by major international trade system changes.

a. Negotiation Modality Shifting: Multilateralism to Plurilateralism

The EGA has a modality of plurilateralism instead of multilateralism, while most WTO agreements utilize multilateralism under the WTO framework. As explained in Chapter 3, Section II, the EGA adopts a plurilateral way to negotiatie, which means that the negotiations include a subset of WTO members and a single subject. Also, EGA, like ITA/ITA-II, is recognized as Critical Mass Agreement (CMA.) The critical mass has been discussed in the previous chapters, therefore, this part focus on the plurialteral approach.

The failure of the Doha Round may indicate that fundamental changes in the WTO framework more generally are needed to restore the WTO to its former role at the apex of the world trade system. The EGA's plurilateral approach may represent tentative steps toward identifying what fundamental changes may be required to save the WTO system. For instance, Wu suggested that the WTO has been exploring the possibility of moving away from multilateralism toward plurilateralism in EGs trade in response to the success of the APEC List of EGs.[276] He also suggested that the WTO may have to abandon the multilateral approach because one-size-fits-all trade rules may no longer work across the board under the complexities of the global economy.[277] Zhang agreed that the WTO needs an approach with a high degree of flexibility to accommodate different situations and stakes in the liberalization of trade in EGs.[278]

The rise in regional trade agreements such as the Asia-Pacific Economic Cooperation (APEC) forum, the North American Free Trade Agreement, and its successor, the United States-Mexico-

[276] Wu, *supra* note 60.
[277] *Id.* pp291
[278] Zhang, *supra* note 76.

Canada Agreement, at the expense of the WTO, has also contributed to the shift from multilateral to plurilateral negotiation modalities in the WTO.[279] The pressure on the WTO to maintain relevance with the EGA negotiations arises from the APEC List of the EGs and a proliferation of regional free trade agreements.

Thus, these agreements may weaken the WTO legal framework by establishing rules outside the WTO's authority. As the authority of the WTO recedes, its negotiation function becomes less important. If the WTO places greater emphasis on plurilateral, single-topic negotiations going forward in a bid to maintain its relevance, the action may be seen as a return to its roots in the GATT.

Although a plurilateral process might be easier to manage than a multilateral process that requires consensus among all participants, it does not suggest that any document produced by a plurilateral process will be more flexible in its application than one produced by a multilateral process. In American jurisprudence, it is conventional to distinguish between "rules" and "standards" based on how ambiguous the process is of determining whether a norm applies in a particular situation.[280] Under this distinction, a rule is detailed, specific, concrete, and the scope of its application is determinate, while a standard is broad, vague, general, and the scope of its application is imprecise. Because standards are less precise, they allow decision-makers more flexibility, while rules allow less. An agreement negotiated using a multilateral process that incorporates standards might be quite flexible in its application to different situations, while an agreement negotiated using a plurilateral process that incorporates bright-line rules might be applied rigidly and mechanically. Thus, whether the EGA would be rigid or flexible in its

[279] The World Bank, Regional Trade Agreements, https://www.worldbank.org/en/topic/regional-integration/brief/regional-trade-agreements, (Last visited on January 24, 2022)

[280] FREDERICK F. SCHAUER, THINKING LIKE A LAWYER: A NEW INTRODUCTION TO LEGAL REASONING (2009).

application may depend more on whether the norms it contains are expressed as rules or standards, not just on whether WTO members have the freedom to accede to the agreement.

b. Drafting Strategy: List-Based Approach

WTO members decided to try a list-based approach for describing what constitutes an EG after being unable for many years to achieve consensus regarding a formal written definition. During the negotiations, WTO members decided that participants could nominate goods to include in the list. For example, in the negotiations for the APEC List of Environmental Goods, APEC members managed to agree on a list of 54 goods. However, as the EGA negotiations progressed, the list swelled to hundreds of goods, making it impossible for the countries negotiating to achieve consensus on the scope of what was an EG and what was not.[281]

The list-based approach means that the agreement uses a list of products to define the scope of the target product. The products in the list are enumerated in the six-digit tariff lines in HS codes. For example, the list-based approach is also used in the ITA and ITA-II. The ITA's list of products contains IT-related products but does not include non-tariff issues.[282] The ITA has 203 products using six-digit tariff lines under HS 1996, covering seven broad categories: computers, semiconductors, semiconductor manufacturing equipment, telecommunication apparatus, instruments and apparatus, data-storage media and software, and parts and accessories.[283]

In 2016, 201 products were added by the ITA-II using HS 2007, covering five broad categories: (1) equipment for the manufacturing of printed circuit/wiring boards, flat-panel display devices, and capacitors; (2) additional assembly and testing equipment; (3) additional

[281] Bacchus and Manak, *supra* note 23

[282] See WTO, Ministerial Declaration on Trade in Information Technology Products, https://www.wto.org/english/docs_e/legal_e/itadec_e.htm (Last visited on January 24, 2022)

[283] See WTO, ITA, https://www.wto.org/english/news_e/brief_ita_e.htm (Last visited on January 24, 2022)

manufacturing and testing equipment; (4) parts of products already included in the ITA that were not covered by the agreement; and (5) a variety of other miscellaneous products.[284]

By any measure, the ITA was a success, signed by 29 participants at the Singapore Ministerial Conference in December 1996. Subsequently, the number of participants grew to 82,[285] representing approximately 97% of world trade in IT products.[286] As a result, world exports of IT products almost tripled in value between 1996 and 2010.[287] With an annual average growth rate of 7% over this period, global exports of IT products reached U.S.D 1.4 trillion in 2010, becoming one of the most important product categories in world trade.[288]

With the rapid pace of technological innovation, the original list of products covered by the ITA needed expansion. Thus, the ITA-II negotiation was launched in June 2012, aiming to expand the coverage of information and communications technology (ICT) products while addressing classification issues.[289] The negotiation lasted for two years but then deadlocked until the United States and China made progress at the 2014 APEC Summit by agreeing on a comprehensive list of products.[290] After the meeting, President Obama and President Xi announced that they had "reached agreement on the ITA expansion negotiations, and we are ready to work together for the early conclusion of relevant plural-lateral talks."[291] Then, at the

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[284] See WTO, 15 Years of the Information Technology Agreement: Trade, innovation and global production networks, pp33, https://www.wto.org/english/res_e/publications_e/ita15years_2012full_e.pdf (Last visited on January 24, 2022) See also: ITA Expansion Product List, https://ustr.gov/sites/default/files/ITA-expansion-product-list-2015.pdf (Last visited on January 24, 2022)

[285] See WTO ITA Participants: https://www.wto.org/english/news_e/brief_ita_e.htm (Last visited on January 24, 2022)

[286] See WTO, ITA Introduction: https://www.wto.org/english/tratop_e/inftec_e/itaintro_e.htm (Last visited on January 24, 2022);

[287] Id.

[288] Id.

[289] See PIIE, ITA-2 Success in Nairobi, https://www.piie.com/blogs/trade-investment-policy-watch/ita-2-success-nairobi (Last visited on January 24, 2022)

[290] Id.

[291] See The White House, Office of the Press Secretary, Immediate Release, November 12, 2014, "Remarks by President Obama and President Xi Jinping in Joint Press Conference", (November 12, 2014)

Nairobi Ministerial Conference in December 2015, over 50 members concluded the expansion of the agreement, covering an additional 201 products valued at over $1.3 trillion per year.[292]

Before the EGA negotiations, WTO members proposed different kinds of list-based approaches other than a single list approach. The U.S. and the PRC proposed "double-list" approaches but with different double lists. The U.S. proposed a core list for tariff elimination and a complementary list from which members would select a certain percentage of tariff lines.[293] In contrast, the PRC proposed a common list and a development list (drawn from the common list) for an exemption or lower tariff reductions to reflect the principle of "less than full reciprocity."[294] The U.S. approach favored developed countries, while the PRC approach benefited developing countries.[295]

Balineau and De Melo considered that the double-list approach reflects that a reduced list of EGs is needed to start the negotiations. Moreover, negotiations should consider special and differential treatment using different lists or treatments on a common list.[296] However, neither the U.S. nor the PRC could achieve a consensus supporting a double-list approach.

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https://obamawhitehouse.archives.gov/the-press-office/2014/11/12/remarks-president-obama-and-president-xi-jinping-joint-press-conference (Last visited on January 24, 2022) See also, Joint Statement by Trade Ministers of China and U.S. on the Expansion of WTO Information Technology Agreement, (December 16, 2015) https://ustr.gov/about-us/policy-offices/press-office/press-releases/2015/december/joint-statement-trade-ministers (Last visited on January 24, 2022)

[292] See WTO, the Information Technology Agreement, WTO official website: https://www.wto.org/english/tratop_e/inftec_e/inftec_e.htm (Last visited on Nov 7, 2022)

[293] Special Session of the Committee on Trade and Environment, Liberalizing Environmental Goods in the WTO: Approaching the Definition Issue, TN/TE/W/34, (Jun.19 2013.); and Special Session of the Committee on Trade and Environment, Market Access for Non-Agricultural Products: U.S. Contribution on an Environmental Good Modality, TN/TE/W/38, (Jul.7 2003.)

[294] Special Session of the Committee on Trade and Environment, Statement by China on Environmental Goods at the Committee on Trade and Environment Special Session (CTESS), TN/TE/W/42, (Jul.6 2004.)

[295] Gaëlle Balineau & Jaime De Melo, *Removing barriers to trade on environmental goods: an appraisal*, 12 WORLD TRADE REVIEW 693 (2013).

[296] *Id.* pp696

With the successful experience of the list-based approach in ITA and ITA-II in mind, while using the same nomination process as the APEC List of the EGs, the EGA negotiations started with nominations. Nonetheless, the result was not the same as for the APEC List of EGs because its scope was limited to specific goods that customs agents could readily distinguish and treated differently for tariff purposes.[297] However, the parties to the EGA negotiations did not show the same restraint, and the scope of the EGA quickly expanded as a result. Thus, the participating parties in the EGA negotiation proposed over 650 tariff lines for the list, representing over 2,000 products.[298] As the potential scope of the EGA grew, it became more difficult to achieve the necessary consensus.

Some skeptics questioned whether it made sense to consider many of the nominated goods as "environmental goods" at all.[299] For example, bicycles and their parts ranked among the most contentious products on the proposed tariff relief list: China supported their inclusion, while the European Union opposed them.[300] Furthermore, various countries brought very different lists, increasing the chances of disagreements in the negotiations. For example, China characterized the last list it nominated near the end of the 18th round of negotiation as a positive contribution,[301] while the EU criticized China for "bringing in totally new elements of perspective" so late.

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[297] Zhang, *supra* note 76.

[298] Wu, *supra* note 60.

[299] For example, the ceiling Fan, See Matt Roessing, Greed is (an Environmental) Good, roessinglawblog.com, (June 27, 2014) https://roessinglawblog.com/2014/06/27/greed-is-an-environmental-good/ (Last visited on January 24, 2022)

[300] See Reuters, EU blames China for WTO environmental trade talks collapse, (December 4, 2016) https://www.reuters.com/article/us-trade-environment-idUSKBN13T0MX (Last visited on January 24, 2022) See also, Environmental Goods Agreement negotiations stall, (December 7, 2016) https://www.bicycleretailer.com/international/2016/12/07/environmental-goods-agreement-negotiations-stall#.YRREkdNudhE (Last visited on January 24, 2022)

[301] See Ministry of Commerce People's Republic of China, China Makes Positive Contributions to Promoting WTO EGA Negotiation, (December 7, 2016, 09:00 BJT)

The difficulty in agreeing on what constitutes an EG is related to the difficulty in agreeing on what causes "climate change" and what constitutes an appropriate national response to that threat. Presumably, this idea includes consuming less and increasing efficiency nation by nation. If the EGA contributes to such purposes, it might be considered a positive contribution to addressing climate change. However, any effort to promote buying more "goods" is, at some level, incompatible with consuming less and increasing efficiency unless the EGs being traded can also be recycled.

Because of the lack of clarity about what constitutes an "environmental good," a country could try to nominate for tariff reductions goods that they wanted to export in larger quantities. Thus, the lack of a clear global consensus surrounding the definition of an EG remains a major obstacle to further progress in negotiating the EGA.

c. Choice of Hard Law: From APEC to WTO

Because the WTO rests on a framework of hard law, the choice of hard law for a new treaty might seem obvious. However, because the APEC List of EGs was originally a soft law agreement, it could not be used as a template for the EGA without first being converted into a hard law agreement. Nevertheless, as soon as it is converted into a hard law document, many of the key factors contributing to the success of the APEC List of EGs may be lost.

Although the terms "hard law" and "soft law" are widely used in international law, the definitions of the terms are controversial.[302] Indeed, the number of academic publications analyzing hard and soft law is so large that it is impossible to describe it in detail in this

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http://english.mofcom.gov.cn/article/newsrelease/significantnews/201612/20161202103559.shtml (Last visited on January 24, 2022)

[302] Gregory C Shaffer & Mark A Pollack, *Hard vs. Soft Law: Alternatives, Complements, and Antagonists in International Governance*, 94 MINN. L. REV., 706 (2010).

chapter.[303] Therefore, academic work is divided into three main categories—legal positivist, rationalist, and constructivist[304]— to discuss general approaches to the question of how hard and soft law differ.

Some legal scholars have used a binary binding or nonbinding divide to distinguish hard from soft law.[305] Legal positivists tend to deny that "soft law" even counts as a law because, by definition, the law should be binding.[306] Thus, Shaffer and Pollack concluded that the positivist considers hard law a legal obligation of a formally binding nature and soft law as a nonbinding instrument.[307] In contrast, constructivist scholars consider more about the effectiveness of law at the implementation stage and claim that the binary distinctions between binding hard law and nonbinding soft law are misleading.[308] However, rational institutionalist scholars, like Lipson, consider that the binary binding or nonbinding division is not the same idea as what is meant by the terms hard law or soft law.

Using a rational choice theory to explain how international law works, Guzman distinguished hard law from soft law differently. He first claimed that international actors value their

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[303] In a search in Google Scholar, by using "Hard Law" + "Soft Law", there are 246,000 results. (Last searched on January 31, 2022)

[304] Trubek, David M. and Cottrell, M. Patrick and Nance, Mark, 'Soft Law,' 'Hard Law,' and European Integration: Toward a Theory of Hybridity (November 2005). Univ. of Wisconsin Legal Studies Research Paper No. 1002, http://dx.doi.org/10.2139/ssrn.855447 (Last visited on January 24, 2022)

[305] *See* COMMITMENT AND COMPLIANCE: THE ROLE OF NON-BINDING NORMS IN THE INTERNATIONAL LEGAL SYSTEM (Dinah Shelton ed., 2000) [*hereinafter* COMMITMENT AND COMPLIANCE]. Wolfgang Reinicke & Jan Martin Witte, Interdependence, Globalization, and Sovereignty: The Role of Non-binding International Legal Accords, in COMMITMENT AND COMPLIANCE, ("'[S]oft' law as used herein means normative agreements that are not legally binding."); Francis Snyder, Soft Law and International Practice in the European Community, in THE CONSTRUCTION OF EUROPE: ESSAYS IN HONOUR OF EMILE NOEL 197, 198 (Stephen Martin ed., 1994) (("'[S]oft law' . . . mean[s] 'rules of conduct which, in principle, have no legally binding force but which nevertheless may have practical effects.'). *See also* Jan Klabbers, The Redundancy of Soft Law, 65 NORDIC J. INT'L L. 167, 168 (1996) (advocating retention of the "traditional binary conception of law").

[306] Id.

[307] Shaffer and Pollack, *supra* note 302.

[308] *Id.*

commitments because non-compliance entails reputational costs.[309] Guzman then identified three ways to increase costs for a state to violate international law: reputation, reciprocal non-compliance, and retaliation. He further claimed that these three ways might promote international cooperation.[310]

According to Guzman, multilateral agreements, like the WTO, work because of the threats of reputation cost. Guzman also considered that soft law and hard law agreement only has a fuzzy line between "mere norms" and customary international law.[311] Therefore, the critical difference between soft and hard law is that the expectation of compliance increases, meaning the softer the law, the lower the risk of lost reputation.

Abbott and Snidal, as rationalist theorists, provided another way to distinguish hard law from soft law. They suggested evaluating the nature of the law and not simply classifying it as legally binding or not. Abbott and Snidal claimed that most international law is soft in a distinctive way, especially compared to most domestic law. Moreover, they defined the legalization in international relations with three dimensions: the precision of rules, the obligation, and the delegation to a third-party decision-maker. They further concluded that these three dimensions could be used to evaluate the level of hardness or softness of the legal character.[312]

Abbott and Snidal define hard law as legally binding obligations that are precise (or can be made precise through adjudication or the issuance of detailed regulations) and delegate authority for interpreting and implementing the law. In contrast, soft law is weakened along with one or

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[309] ANDREW T. GUZMAN, HOW INTERNATIONAL LAW WORKS: A RATIONAL CHOICE THEORY (2008).
[310] *Id.*
[311] *Id.*pp213
[312] Kenneth W Abbott et al., *The Concept of Legalization*, 54 INTERNATIONAL ORGANIZATION 401 (2000); Kenneth W. Abbott & Duncan Snidal, *Hard and Soft Law in International Governance*, 54 INTERNATIONAL ORGANIZATION 421 (2000).

more dimensions of obligation, precision, and delegation.[313] Therefore, Abbott and Snidal's notation (O, P, D) referenced O as obligations, P as precision, and D as delegation. Abbott and Snidal also used upper-case letters (O, P, D) to express high levels, while lower-case letters (o, p, d) expressed moderate levels. Finally, they used dashes (–) to express low levels.[314]

Shaffer and Pollack suggested that international trade law comes closest to the most commonly understood meaning of hard law.[315] Quoting Abbott and Snidal, "Hard law refers to legally binding obligations that are precise (or can be made precise through adjudication or the issuance of detailed regulations) and that delegate authority for interpreting and implementing the law."[316] Abbott and Snidal further considered that "[t]he realm of 'soft law' begins once legal arrangements are weakened along with one or more of the dimensions of obligation, precision, and delegation."[317] Shaffer and Pollack supported this interpretation, explaining that the first option of Abbott and Snidal is preferred when considering from an ex-ante negotiation perspective, while the second option of binding/nonbinding dichotomy is preferred when considering from an ex-post enforcement perspective.[318] The deadlock of the EGA negotiations falls into the ex-ante negotiation perspective.

Shaffer and Pollack believe that hard and soft law interactions contain alternatives, complements, and antagonists.[319] To explain alternatives, Abbott and Snidal considered that hard law or soft law instruments should be selected depending on the characteristics of the issue and the negotiating and institutional context in question.[320] A complement means that hard and soft

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[313] Abbott et al., *supra* note 312.
[314] Abbott and Snidal, *supra* note 312.
[315] Shaffer and Pollack, *supra* note 302.
[316] Abbott and Snidal, *supra* note 312.
[317] *Id.*
[318] Shaffer and Pollack, *supra* note 302.
[319] *Id.*
[320] Abbott et al., *supra* note 312.

law can interact and rely on each other as complementary tools for international problem-solving.[321]

Shaffer and Pollack contended that the interaction of hard and soft law depends on the key players (e.g., powerful states).[322] They concluded that the first two interactions (alternatives and complements) only exist when powerful states broadly agree on the aims and terms of international law. On the other hand, if the states have distributive conflicts, states and other actors will strategically use different hard law and soft law instruments to advance their respective aims in the international arena. In this case, the interaction of antagonists appears, which means that hard law may become softer or soft law may become harder.

The increased binding power on the EGs product list is beneficial to the EGA itself; however, it hinders the success of negotiations. From the enforcement perspective, it would be better to have strong binding power to ensure the agreement could affect every member to keep its promises. However, from the negotiation perspective, agreement on hard law is challenging because the negotiating parties consider every issue in more detail and fight harder against anything they find disadvantageous.

C. Problems in the Negotiations

This chapter described the legal framework of the EGA, which is not very innovative and may not be enough to save it. Given that the choice of negotiating modalities does not seem to explain the deadlock in EGA negotiations, it is necessary to consider more general political and economic factors possibly contributing to the deadlock.

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[321] Shaffer and Pollack, *supra* note 302.
[322] *Id.*

First, there are not enough comparative advantages in the EGA negotiations. Thus, developing countries may be afraid they are not being treated fairly. Hence, Howse and Van Bork called for attention to protect developing countries by not "dumping" old or outdated technologies to promote the negotiations. Instead, they suggested a broad approach to defining EGs, including EPPs, to attract developing countries to the negotiations because they may be able to export EPPs that could have positive environmental value due to their PPMs.

In addition, developing countries may also lack markets for EGs. Zhang stated that creating markets for EGs in developing countries is far more critical than improving market-access conditions for associated goods.[323] Wu further proposed that developing countries other than the PRC do not have sufficient interests at stake to join the negotiations because they cannot compete in global markets for EGs.[324] However, Wu also recognized that advanced economies could still shape international trade rules, particularly the PRC.[325] Even some developed countries may lack interest in the EGA if they already have very low tariffs on those EGs, most likely to be covered by the EGA. Therefore, it is essential to have more developing countries, other than the PRC, join the EGs trade negotiations for the current participants to obtain significant economic and environmental benefits from the liberalization of EGs trade.[326]

Second, another possible reason for the deadlock is the shift in power within the WTO after the PRC joined, culminating in a trade war between the U.S. and China. The rising level of trade conflicts among WTO members seemed to signal a return to some form of mercantilism and a decline in the commitment of WTO members to the pursuit of comparative advantage. For

[323] Zhang, *supra* note 76.
[324] Wu, *supra* note 89.
[325] Wu, *supra* note 60.
[326] Howse and van Bork, *supra* note 108; Wu, *supra* note 60.

example, in 2001, when China joined the WTO, China only shared 4.4% of the global export of goods. However, in 2020, China was responsible for 14.7%, making China the leading global exporter.[327] Indeed, the other major economies did not expect this kind of economic growth before China joined the WTO.[328]

In addition, China's unique economic structure, which Wu referred to as "China, Inc.," may weaken the WTO.[329] Scholars like Wu[330] and Paul Blustein[331] have considered the unique features of China's economic structure that poses a threat to global trade governance: "China's economic structure is *sui generis*, having evolved in a manner largely unforeseen by those negotiating WTO treaty law."[332]

In certain ways, the current WTO system may not be complimentary or even compatible with China's economic policies in the 2020s. Whether the WTO could craft a predictable and fair set of legal rules to address China's behavior, it would be weakened if it turned away the largest economy, China, or other key countries.[333] Thus, key countries in the EGA negotiations, like the European Union and the U.S., may be extremely cautious in considering China's nomination of the list to prevent further unforeseen challenges to themselves. Moreover, other negotiating parties may resist China's preference because they fear further strengthening "China Inc."

Therefore, disagreements over the contents of the list of EGs may be more of a symptom than a cause of the current deadlock in EGA negotiations. Indeed, the fact that EGA negotiations are stalled might suggest that the whole WTO system might be stalled as well.

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[327] See Alessandro Nicita and Carlos Razo, China: The rise of a trade titan, UNCTAD, (April 27, 2021) https://unctad.org/news/china-rise-trade-titan (Last visited on January 24, 2022)
[328] Wu, *supra* note 15.
[329] *Id.*
[330] PAUL BLUSTEIN, SCHISM: CHINA, AMERICA AND THE FRACTURING OF THE GLOBAL TRADING SYSTEM (2019).
[331] Wu, *supra* note 15.
[332] *Id.*
[333] *Id.*

V. Conclusion

The process of negotiating treaties is not public, so it may never be possible to know the real reason for the deadlock. Nevertheless, the negotiation modalities—plurilateral rather than multilateral, a list-based approach to defining EGs, and converting the APEC List of EGs from a soft to hard law agreement—appear appropriate under the circumstances. Moreover, proposals to relaunch the EGA are not likely to succeed as "too little too late" because, from a legal perspective, there was no reason for failure in the first place.

The deadlock may instead be due to more fundamental factors, such as the crumbling of the international economic order that prevailed from the end of World War II to the beginning of the 21st century in the years following the Global Financial Crisis. In a global environment of growing political and economic tensions among major world trading partners, it has proven impossible to overcome problems that might have been solvable 20 or 30 years ago, such as the lack of an established definition of EGs in the HS of Tariffs. In the absence of a consensus regarding the scope of EGs, the process of nominating goods to be added to the list became a simple contest for national advantage disguised as a discussion about addressing climate change and protecting the environment.

Furthermore, Mega-Regional FTAs, like the RCEP and CPTPP, suggest that the WTO is stalled, so members are trying other ways to develop trade. Therefore, this kind of mega-regional trade agreement may be a possible way to save part of the old WTO trade system. However, it may also fragment the WTO system and regional mercantilism.

Indeed, EGA negotiations may not resume for years due to the massive economic changes caused by the current global pandemic, which began in 2020 and created more uncertainty than ever. Thus, a relaunch of the negotiations became less likely. For example, the leaders may have

fewer in-person meetings because of the travel limits, and the leaders may consider other issues have higher priority than EGs trade.

The current deadlock of EGA negotiations suggests that it may no longer be possible to successfully negotiate multilateral or plurilateral agreements involving more than two countries within the WTO framework. However, analyzing possible causes of the deadlock of the negotiations can shed light on fundamental challenges facing the WTO system as a whole. Therefore, Chapter 5 compares the challenges arising during the EGA negotiations with the current challenges facing the WTO system more generally.

Chapter 5 Comparisons of ITA & ITA-II, EGA and WTO Telecom Agreement

I. Introduction

The Environmental Goods Agreement (EGA) deadlock was unexpected, so it is important to determine what factors other than its negotiation modalities have contributed to its deadlock to help future agreements negotiations. One way to isolate some of the factors that may help to explain why the EGA became deadlocked might be to compare the EGA to other similar World Trade Organization (WTO) agreements. This chapter compares three critical mass agreements (CMAs) in the WTO: the Information Technology Agreement and its expansion (ITA and ITA-II, together counted as one agreement here), the World Trade Organization Agreement on Basic Telecommunications Services (WTO Telecom Agreement), and the EGA.

This chapter first discusses the notion of a CMA. Then it considers the commonalities and differences among these three agreements and how the process of negotiating them unfolded. This chapter highlights differences in three areas: participant members, negotiation subjects, and circumstances. This comparison reveals that negotiation parties, subjects, and circumstances may have a greater impact on the ultimate success or failure of these agreements than the modalities or approaches used in the negotiations and the agreements. What this analysis reveals is that the success or failure of efforts to conclude different agreements cannot be explained by choice of modalities alone (multilateral vs. plurilateral, project-based vs. list-based structure, hard vs. soft law, etc.). Decisions with regard to modalities are made by member states before the first negotiation round opens for a particular agreement and thus are locked in for the duration of the negotiations. The circumstances surrounding trade negotiations may vary widely while the negotiations are taking place. Negotiating schedules are somewhere in between: the WTO

members commit to deadlines, but as the failure of the Doha Round shows, they may find themselves unable to meet those deadlines.

II. Modalities: Critical Mass Agreements (CMAs)

As noted in Chapter 3 above, a CMA represents a narrower commitment by WTO members than the broad commitments required by the foundational WTO agreements such as GATT or GATS. For a CMA, a "group of countries agrees to specific policy commitments that are inscribed into their WTO schedules and apply on a non-discriminatory basis to all WTO members."[334] By contrast, a plurilateral agreement creates obligations only for the member states that sign them but can only be added to the WTO framework by the consensus of all member states.[335] When a plurilateral agreement is added to the WTO framework, it is inscribed in Annex 4 of the Marrakesh Agreement.[336]

A CMA within the WTO framework is similar to a plurilateral agreement in that it requires a commitment of less than all WTO members to become effective. Unlike plurilateral agreements, however, there is no formal definition of "critical mass agreement" in the WTO treaties. In their 2001 treatise on international trade law, Hoekman and Kostricki use the term "critical mass" only once and do not use the term "critical mass agreement" at all. A critical mass agreement requires parties to the agreement to grant concessions to all member states whether or not they have ratified it, but it only becomes effective after a 'critical mass" of member states have committed to the agreement. Consensus is easier to achieve than for a multilateral agreement

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[334] Bernard Hoekman & Charles Sabel, *Open Plurilateral Agreements, International Regulatory Cooperation and the WTO*, 10 GLOB POLICY 297 (2019), p. 15.

[335] Marrakash Agreement II:3; Marrakash Agreement IX:1; Marrakash Agreement X:9.

[336] There has been a total of four plurilateral agreements inscribed in Annex 4: Agreement on Trade in Civil Aircraft; Agreement on Government Procurement; International Dairy Agreement (terminated); and International Bovine Meat Agreement (terminated).

because fewer than all member states need to commit to the agreement, but those that do commit are protected from "free riding" (accepting a benefit without offering a reciprocal benefit in return) by requiring all member states likely to receive a significant benefit to commit before anyone is bound.[337] Main CMAs negotiated after the Uruguay Round include the International Technology Agreement (ITA; December 1996), the Agreement on Basic Telecommunications, and the Agreement on Financial Services.

The Oxford English Dictionary defines "critical mass" as "the minimum amount of resources . . . needed to start or support a project or an activity, or the minimum size that a project or activity needs to be in order to be successful." In the WTO, trade experts use "critical mass" to describe the minimum number of members (or minimum percentage of specific trade volumes) to negotiate a plurilateral agreement with an MFN basis, which could help promote successful negotiations while reducing free rider concerns.

Critical mass agreements have four distinctive features:

1. CMAs have a narrowed subject for negotiation to avoid the difficulties of a single-undertaking negotiation approach[338] using a single industry or product category; instead, the negotiating parties do not have to agree on a massive amount of content at once.
2. CMAs have a plurilateral negotiation approach: the negotiations do not involve all WTO members, only a subset.

[337] BERNARD HOEKMAN AND MICHEL KOSTECKI, *supra* note 154, pp284.

[338] Single undertaking approach means that putting all the issues on the table and it was only settled when every one of them was agreed.

3. CMAs are "open" plurilateral agreements, so the agreements signed by a critical mass of major producers and importers of a product class are extended to all WTO members on an MFN basis.[339]
4. The "critical mass" required to finalize an agreement is set at a high level to keep free riding to a minimum.[340]

Some international trade law scholars do not use the term CMA but refer to these agreements as a type of plurilateral agreement.[341] Sabel and Hoekman have suggested that these agreements can be thought of as "open" plurilateral agreements rather than "closed" (i.e., those under the formal WTO definition of plurilateral). Other scholars do not appear to be very focused on the label. For example, Wu referred to the EGA as a plurilateral agreement in 2016[342] but later referred to the EGA as a CMA in 2019.[343]

CMAs are now a rising hope for the future of the WTO because they may be more flexible than the single-undertaking, general-consensus decision-making negotiation approaches. For example, Winslett claimed that CMAs, like the ITA, are the proven template for trade liberalization in the WTO in 2018.[344] Moreover, a group of scholars agreed that a critical mass approach, specifically to negotiate sectoral market access on trade in goods and services, is preferable for trade liberalization and could help reinvigorate the WTO's negotiation function in 2019,[345] three years after the EGA deadlock.

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[339] Winslett, *supra* note 128.
[340] *Id.*
[341] For example, Wu, *supra* note 60.
[342] *Id.*
[343] David Laborde et al., *Reinvigorating the WTO as a Negotiating Forum*, https://www.g20-insights.org/wp-content/uploads/2019/06/reinvigorating-the-wto-as-a-negotiating-forum-1560503686.pdf.
[344] Winslett, *supra* note 128.
[345] Laborde et al., *supra* note 343.

However, there are still concerns over CMAs. First, Winslett explained that according to the successful ITA-II, the EGA negotiation should avoid non-tariff barriers, especially regulatory differences, as a CMA. Thus, employing phase-outs and minimizing the extent to which nationalistic concerns about relative gains become a central sticking point are crucial to liberalizing trade in environmental goods (EGs).[346] Therefore, if this template is used, the agreement would be minimal and only focus on tariffs, which are already low in many countries. Therefore, it is doubtful that having so many limitations on CMAs would help liberalize trade in EGs.

Second, Adeyemi explained that without dominating countries like the U.S. as champions of these disciplines, CMAs are unlikely to succeed because of a lack of qualified critical mass.[347] As U.S. support for the WTO system has declined, and while it remains unclear whether any other leading trading nations, such as Japan, will be able to take the lead in negotiating CMAs in the future, it is unclear how much the CMA strategy can contribute to revitalizing the WTO system.[348]

Third, with no new CMAs signed recently, it is questionable whether the current CMA settings are still suitable for future negotiations. Hence, it is crucial to determine the differences between the deadlock of the EGA and the success of the ITA/ITA-II and the WTO Telecom Agreement. Therefore, this dissertation compares these three agreements because they are CMAs inside the WTO and may help to understand the EGA deadlock.

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[346] Winslett, *supra* note 128.
[347] Adeyemi, *supra* note 196.
[348] *Id.*

III. Success vs. Failure: The ITA/ITA-II and WTO Telecom Agreement vs. the EGA

A. Negotiation Background and Results

a. WTO Telecom Agreement

Negotiations for telecommunications services officially began in 1986 during the Uruguay Round.[349] The WTO Telecom Agreement was successfully concluded on February 15, 1997, after three years of extended negotiations of the General Agreement on Trade in Services (GATS).[350] Notably, 69 countries, accounting for over 90% of the estimated $600 billion in revenues of telecommunication services providers, joined. Hence, the WTO Telecom Agreement entered into force on February 5, 1998.[351] Moreover, it was annexed as the Fourth Protocol to the GATS.[352]

b. ITA/ITA-II

The ITA and its expansion, the ITA-II, were negotiated and signed at different times. First, the ITA was signed by 29 participants at the Singapore Ministerial Conference in December 1996. Currently, there are 82 members in the ITA, representing approximately 97% of the world's trade in IT products.[353] The ITA came into force on April 1, 1997. Then, ITA-II, the expansion of the ITA, was concluded by 24 participants (53 countries) at the Nairobi Ministerial

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[349] Chantal Blouin, *The WTO Agreement on Basic Telecommunications: a reevaluation*, 24 TELECOMMUNICATIONS POLICY 135 (2000).

[350] General Agreement on Trade in Services, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1B, 1869 U.N.T.S. 183, 33 I.L.M. 1167 (1994) [hereinafter GATS]; See WTO Official website, The WTO Negotiations on Basic Telecommunications, https://www.wto.org/english/news_e/pres97_e/summary.htm (Last visited on Sept 30, 2022)

[351] Phillip L. Spector, *The World Trade Organization Agreement on Telecommunications*, THE INTERNATIONAL LAWYER, SUMMER 1998, VOL.32, NO.2, INTERNATIONAL LEGAL DEVELOPMENTS IN REVIEW: 1997 (SUMMER 1998) 217.

[352] See GATS

[353] See WTO, the Information Technology Agreement, WTO official website: https://www.wto.org/english/tratop_e/inftec_e/inftec_e.htm (Last visited on Nov 7, 2022)

Conference in December 2015, covering an additional 201 products valued at over $1.3 trillion per year.[354] The ITA-II came into force on July 1, 2016.

c. EGA

Eighteen participants representing 46 WTO members were engaged in the EGA negotiations from July 2014 to December 2016.[355] As discussed above in Chapter 4, the EGA was designed to promote EGs trade by eliminating tariffs on several essential environment-related products.[356] As of 2022, when this dissertation was completed, there had been no EGA negotiations since 2016.

B. Similarities among CMAs

a. Critical Mass

All three agreements have a critical mass approach, with high requirements for the agreements to be signed and entered into force. The benefits of the agreement are extended to other members who are not part of the critical mass. Therefore, the required percentage of the specific market should be as high as possible to keep free riding to a minimum.[357] The critical mass should be at least as high as in the WTO Telecom Agreement[358] and the ITA/ITA-II.[359] Therefore, the EGA should have a critical mass of more than 90% of the EGs trade.

However, the WTO Telecom Agreement and ITA/ITA-II succeeded in having this approach, while the EGA negotiations were deadlocked. Therefore, this dissertation considers whether having a CMA is not that important to an agreement's success. Instead, the critical mass approach is more like a requirement to ensure a fair-trade agreement for all WTO members.

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[354] Id.

[355] See WTO, the Environmental Goods Agreement, WTO Official Website: https://www.wto.org/english/tratop_e/envir_e/ega_e.htm (Last visited on Nov 7, 2022)

[356] Id.

[357] Winslett, *supra* note 128.

[358] The WTO Telecom Agreement's parties account for more than 90 percent of the estimated $600 billion in revenues of telecommunication services providers.

[359] The ITA's parties represent about 97 per cent of world trade in IT products

b. Plurilateral Approach: A Subset of Members and a Single Subject

All three agreements have a plurilateral approach requiring fewer than all member states to ratify the agreement and focusing on only a single subject. As mentioned above, the plurilateral approach is much more flexible than the multilateral approach in the WTO, designed to solve the challenges caused by the single-undertaking and general-consensus approach. Although the EGA adopted this type of plurilateral modality, that alone was not enough to prevent deadlock in 2016.

c. Hard Law Agreement in the WTO

The hard law choice is vital to the EGA because its inspiration, the APEC List of EGs, is a soft law approach. Even though the original inspiration for the EGA—the APEC List of EGs—is a soft law agreement, the EGA takes a hard law approach because that is the default modality of the larger WTO system. All three of the above agreements are hard law choices in the WTO. The WTO Telecom Agreement and the ITA/ITA-II were successful, perhaps in spite of imposing hard law obligations on the countries that ratified them. Given the apparently lower level of interest in the EGA, the constraint of seeking hard law commitments may have contributed to the deadlock in its negotiations.

d. Challenging Negotiation Processes

All three agreements faced challenges during the negotiations. The WTO Telecom Agreement was negotiated for three more years after the GATS had been finalized, while the ITA-II faced a deadlock before it was ultimately successfully concluded. The EGA negotiations seemed initially to be less challenging than the WTO Telecom Agreement negotiations or the ITA II negotiations but ultimately turned out to be more challenging.

e. Tariff Reductions and Schedules

All three agreements are designed to have tariff reductions and schedules. Although the text of the EGA has not been released, the ITA is the model for EGA negotiations, so the EGA has a great chance of tariff schedules. Because the WTO Telecom Agreement and the ITA and ITA-II are successful, but the EGA is now deadlocked, the tariff reductions and schedules may not be important for negotiation.

C. Differences Among CMAs

a. Subject

One crucial difference is that the three agreements have different subjects to negotiate. For example, the WTO Telecom Agreement's negotiating subject is telecommunication services, the ITA/ITA-II's negotiating subject is information technology products, and the EGA's negotiating subject is EGs.

The different negotiating subjects create additional differences. First, the WTO Telecom Agreement's subject is services, while the ITA/ITA-II and EGA's subject is products or goods. Therefore, the WTO Telecom Agreement defines that all qualified telecommunication services should have tariff reductions while opening the market under schedules. In contrast, the ITA/ITA-II and EGA use a product list with HS tariff lines to decide which products should have tariff reductions.

Second, different subjects have various needs in every country, creating varied comparative advantages and interests for each. These advantages and interests significantly impact the economic development of the countries, affecting negotiations. For example, telecommunication services and information technology products are essential to modern society. However, environmental protections oppose trade and economic development. These differences lead to

different results for the negotiations. Notably, the WTO Telecom Agreement and the ITA/ITA-II concluded even with challenges, but the EGA was deadlocked and has not been revived for years. Therefore, the negotiating subject is indeed a critical factor in successful negotiations.

b. Participating Members

Another difference is the number and composition of participating members. As mentioned above, the subjects make the difference, reflected by the participating members in the agreements. With better subjects like telecommunication services and information technology products, the agreements would have had more members join the negotiations. For reference, WTO Telecom Agreement had 69 countries, while the ITA and ITA-II had 82 and 53 countries, respectively, but the EGA had only 46. This comparison shows that fewer countries are interested in EGs trade.

Nevertheless, the difference between the participating members is not only about numbers. On the one hand, developing countries are not well-represented in the EGA's negotiations,[360] while on the other hand, in 2022, there were no leading powers in the EGA's negotiations because no dominant countries wanted to revive them. In contrast, the WTO Telecom Agreement and the ITA/ITA-II had dominant countries leading the negotiations. Therefore, the number of participating members could be a factor in determining whether enough countries are interested in the negotiations due to comparative advantages and whether dominant countries in the negotiations could impact the results.

c. MFN and its Exemption

As explained above, CMAs should have an MFN basis. However, the WTO Telecom Agreement's MFN had exemptions, while the ITA/ITA-II and EGA had an MFN basis for all the

[360] Wu, *supra* note 60; Zhang, *supra* note 76; Wu, *supra* note 89.

WTO members. Moreover, the WTO Telecom Agreement was annexed as the Fourth Protocol to the GATS, while the ITA and ITA-II were adopted as a WTO Ministerial Declaration.

However, this factor may not impact negotiaitons because the WTO Telecom Agreement and ITA/ITA-II are different concerning MFN practices with a formal process for agreement in the WTO, where they were both signed and concluded. While the ITA/ITA-II and EGA share the same MFN practices and formal processes for agreement in the WTO, the ITA/ITA-II succeeded, but the EGA was deadlocked.

d. Timing of the Negotiation

The timing of the negotiations must also be considered. After the Uruguay Round (before 2000), the WTO Telecom Agreement and ITA were negotiated. At that time, the world was in a new free trade era with the establishment of the WTO. Furthermore, telecommunication and information technologies were new and useful, as Western countries, especially the U.S., led the world. Developed economies dominated advanced technology products, so if developing countries wanted smooth economic development, they had to embrace these new technologies.

The ITA-II and EGA negotiations occurred between 2012–2016. By that time, China had been in the WTO for over a decade, becoming one of the biggest economies in the world. China had a very different development route, which worried the older powers. The U.S. was not the only dominating power in the WTO or the negotiations. They both faced deadlock. However, as mentioned above, the ITA-II was signed after an agreement was reached between the U.S. and China. However, the EGA remains deadlocked.

Notably, the timing of the negotiations may be critical because the international environment changes when relations between countries become intense, a hindrance to negotiating. However, this factor is less important than the dominant countries' support and negotiating subjects'

impacts because the ITA-II was signed with the support of the U.S. and China, but the EGA has remained deadlocked.

IV. Analysis

First, the features common to all CMAs had little to no impact on the EGA deadlock. These factors were mostly about modalities and approaches for negotiating the agreement, including the critical mass requirement, the plurilateral approach, hard law choices, tariff reductions, and tariff schedules. Thus, the results of the negotiations might not be connected with specific challenges because each agreement had unique challenges with different negotiation results. Second, the differences might have impacted the deadlock of the EGA, except for MFN practices and the formal process of agreeing in the WTO. For example, different subjects led to varied comparative advantages and concerns, possibly impacting participating members. Moreover, the number and composition of the participating members could have impacted the comparative advantages and interests in negotiations. Finally, the leading powers might have directly impacted the process and result of the negotiations.

V. Conclusion

In conclusion, the modalities or approaches, especially regarding the legal settings of the negotiations, may not have significantly impacted the negotiating results in the WTO. Therefore, even though the EGA negotiations were as same as for the ITA/ITA-II, they were deadlocked because of other factors. Even though CMAs have more flexibility than traditional multilateral negotiations, they might not be flexible enough to help the WTO recover its negotiation function in the absence of sufficient economic and political benefits to motivate member states to pursue negotiations until an agreement can be reached.

It is also important to realize that the long-term negotiation process or deadlock may not imply a negotiation failure. Other factors could change the direction and results of the negotiations. Indeed, the most decisive factor might turn out to be the choice of the negotiating subject rather than the range of subjects or how many are selected. If so, then this would suggest what really matters is the features of the subject: whether it is useful or helpful to the negotiating parties, whether it can create comparative advantages for the negotiating parties, and whether the subjects can attract dominant countries to promote a successful agreement.

Because the focus of this dissertation is on the legal issues raised by the EGA, not on international relations, economics or politics, it can only suggest that the most important factors contributing to the breakdown of the EGA negotiations or the current weakness of the WTO system more generally are not legal factors. The most important takeaway from this comparison is that the flexibility of the modalities may not be as impactful as some international trade law scholars have suggested.

Chapter 6 Conclusion

The deadlock of the Environmental Goods Agreement (EGA) negotiation may provide a wake-up call to World Trade Organization (WTO) members that the time may soon come to decide on the WTO's fate. The deadlock of EGA provides a framework through which some possible future of WTO may be viewed. The different modalities recognized within international trade law are important but not essential to successful negotiation. The real-world impact decides the direction of agreement negotiations and the development of an organization like the WTO. As supporters of the WTO system watch the rise of mega-regional free trade agreements (Mega-Regional FTAs) with dismay, they will have to find something more powerful than changes in modalities to make it possible for the WTO to recapture its former place at the center of the world trade system.

The WTO has not admitted publicly that the EGA is a failure, but in 2022, it did not look very likely that the EGA negotiations could be successfully revived. Many factors contributed to the deadlock of the EGA. First, although the negotiation modalities are appropriate for the EGA negotiations, they alone are not enough to ensure the negotiations can be completed successfully. The modalities are appropriate because that kind of critical mass agreement is allowed within the WTO. It is undoubtedly the most flexible way to negotiate an agreement within the WTO legal framework for now. The plurilateral agreement approach, the product list approach, the critical mass agreement approach, and the living agreement approach ensure that the EGA has a smaller subject to negotiating, fewer conflicts to adding new products in the future and making sure revisions in the future are not difficult.

Second, after comparing the Information Technology Agreement and its expansion (ITA /ITA-II) and the World Trade Organization Agreement on Basic Telecommunications Services

(WTO Telecom Agreement) to the EGA negotiation, it appears that broader political and economic factors trumped legal factors in explaining success or failure. The benefits of the ITA/ITA-II and WTO Telecom Agreement are more obvious to most WTO members than the benefits the EGA would have conferred. There is no comparative advantage in the EGA's trade agreement for many countries. In addition, the ITA-II's negotiations had a better international political situation than the EGA's negotiation situation. According to the most recent experience in the ITA-II's negotiation, it takes at least two of the most dominant countries to agree with each other and have communications before the agreement is signed. With the U.S.-China trade war, it is difficult for the EGA to recover from the deadlock. Also, with the flame of the beginning of the world economic crisis, neo-mercantilism may rise, such that trade harmony may continuously decrease.

Third, it is important to admit that the mega-regional free trade agreement is playing an important role in the international trade. The WTO should not only support these kinds of agreements but also ensure they comply with the WTO's principles. Even without many functions in the WTO, the WTO should still work for its original goals of providing and promoting free trade worldwide.

This dissertation has provided answers to all three research questions, but those answers have not been complete. In order to provide more complete answers, additional interdisciplinary research will be required. This dissertation answers Research Question One about the challenges to negotiating an Environmental Goods (EGs) trade agreement in the WTO. This dissertation finds out the challenges to negotiating an EGs trade agreement in the WTO are defining the EGs, conflicts between the countries, and the lack of comparative advantages.

This dissertation answers Research Question Two about the factors that contribute to the deadlock of the EGA negotiations. First, the negotiation subject is very important to success because negotiating parties must find comparative advantages, or it should be a very useful subject for countries' development. Second, the modalities used in the EGA negotiations are appropriate but not useful to solve the challenges; the critical mass agreement is more like a label than a solution. Third, no leading countries are interested in the EGA negotiations and promoting its revival. Fourth, the failure of the negotiation function happened not only due to the EGA but also to a system failure inside the WTO. The old WTO system could not cooperate with the current development, and the old and new powers inside the WTO are not cooperating.

This dissertation answers Research Question Three about the implications of the EGA deadlock on the EGs trade in particular and international trade in general. The deadlock of the EGA negotiations revealed that the WTO members knew the challenges and tried to solve them within the WTO legal framework but failed. The WTO members could do less about the developing crisis inside the organization, especially in recent years. It is clear that the legal framework is appropriate from a legal perspective, and it serves the WTO's original goal to promote free and fair trade through a hard law system. More flexibility in reforming the WTO would fundamentally change the functions and role of the WTO, so this dissertation does not recommend that. Therefore, this dissertation considers that the deadlock of the EGA negotiations implies that the 20th-century international trade law system (WTO) is disintegrating. It is challenging for WTO members to decide whether to reform or redesign its system because either way may lead to fragmentation in the world trade system.

This dissertation realizes that the legal factors alone are not enough to explain the deadlock and tries to point out and explain why this is so. It also considers that further interdisciplinary

research with economic or political studies is needed. This dissertation is limited because it is without the text of the EGA draft agreement, and further research should be done with the actual draft of the EGA once it is revealed to the public.

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