by this pandemic¹⁴ led to a series of renewed calls for reshoring the supply of critical goods, ¹⁵ which used to be frowned upon. Nonetheless, not many companies have made such moves yet. ¹⁶ During this pandemic, concerns over national security appear to have risen in almost all aspects of trade, including in medical and equipment products, agricultural goods, raw mineral materials, electronics, software, hardware, and next-generation high-tech goods and services. These concerns have raised alerts of potential abuse. ¹⁷ Oversight and supervision of foreign investments during the pandemic have been enhanced to protect critical industries and infrastructure from predatory acquisition. ¹⁸ These trends reflect the changing dynamics in international trade and investment governance.

¹⁴ Henry Farrell & Abraham Newman, *Will the Coronavirus End Globalization as We Know It?*, FOREIGN AFFS. (Mar. 16, 2020), https://www.foreignaffairs.com/articles/2020-03-16/will-coronavirus-end-globalization-we-know-it [https://perma.cc/GFZ7-VQVR].

¹⁵ For example, French President Emmanuel Macron, in a March 2020 speech, reportedly argued that "[w]e must produce more in France, on our soil" and called to "rebuild [France's] national and European sovereignty." Romain Houeix, France's Renault Highlights Obstacles to Reshoring Industries, FRANCE24 (May 31, 2020), https://www.france24.com/en/20200531-france-s-renault-highlights-obstacles-to-reshoring-industries [https://perma.cc/6EEL-FNWY]. Across the Atlantic, calls for reshoring have also been made in the United States. Andrea Shalal, Alexandra Alper & Patricia Zengerle, U.S. Mulls Paying Companies, Tax Breaks to Pull Supply Chains from China, REUTERS (May 17, 2020), https://www.reuters.com/article/us-usa-china-supply-chains/u-s-mulls-paying-companies-tax-breaks-to-pull-supply-chains-from-china-idUSKBN22U0FH [https://perma.cc/3VQX-XAA9]. In Asia, reshoring has also attracted attention. Japan Starts Paying Firms to Cut Reliance on Chinese Factories, BLOOMBERG (July 19, 2020), https://www.bloomberg.com/news/articles/2020-07-18/japan-to-pay-at-least-536-million-for-companies-to-leave-china?sref=Yspa2Kpl [https://perma.cc/P2TC-B5GM].

¹⁶ Brendan Murray, Reshaping Pips Reshoring of Global Supply Chains, HSBC Says, BLOOMBERG (July 20, 2020), https://www.bloomberg.com/news/articles/2020-07-20/-reshaping-pips-reshoring-of-supply-chains-hsbc-survey-says?cmpid=BBD072120_TRADE &utm_medium=email&utm_source=newsletter&utm_term=200721&utm_campaign=trade &sref=Yspa2Kpl [https://perma.cc/7FF4-8VYN] (finding two-thirds of survey respondent companies prioritized increasing supply chain control and only seventeen percent indicated shrinking the geographic coverage as the appropriate method).

¹⁷ See Kathleen Claussen, Trade's Security Exceptionalism, 72 STAN. L. REV. 1097, 1097 (2020); see also J. Ben Heath, The New National Security Challenge to the Economic Order, 129 YALE L. REV. 924, 924 (2020).

¹⁸ Coronavirus: Commission Issues Guidelines to Protect Critical European Assets and Technology in Current Crisis, EUR. COMM'N (Mar. 25, 2020), https://trade.ec.europa.eu/doclib/press/index.cfm?id=2124 [https://perma.cc/GS4H-AHNL]. In June 2020, the Australian Government announced major reforms to the Foreign Acquisitions and Takeovers Act 1975. Major Reforms to Australia's Foreign Investment Review Framework, FOREIGN INV. R. BD., https://firb.gov.au/about-firb/news/major-reforms-australias-foreign-investment-review-framework. India also introduced investment review/screening mechanism to curb "opportunistic takeovers/acquisitions." Review of Foreign Direct

When the COVID-19 pandemic is eventually brought under control and life goes back to normal, the rules governing trade and investment will inevitably change.¹⁹ It is hard to imagine the exact changes that may take place as governments are still digesting and reflecting on lessons learned from this current pandemic and beginning to prepare for the next one.²⁰ Governments could formulate and adopt a new set of rules or best practices to deal with the next global health emergency or pandemic. Governments may also agree to refrain from resorting to uncoordinated, unilateral actions at the expense of others when the next health emergency or pandemic hits. This Article argues that it is time to formulate a new set of rules governing measures imposed when responding to health emergencies and/or pandemics that affect services trade under the General Agreement on Trade in Services (GATS).

This Article proceeds in five parts. Part I sets out the current contours of global services trade as a result of the pandemic, situating it in current global trade systems. Part II then examines and analyzes relevant GATS provisions, in particular, Articles III, X, XIV, and XIV bis, which appear to be unable to protect states from subsequent WTO challenges were they to occur. Part III analyzes the International Health Regulations (2005) (IHR 2005)—the international instrument governing the control of the international spread of disease that is legally binding upon all Members of the World Health Organization (WHO), whose Membership overlaps (to a significant degree) with that of the WTO—

Investment (FDI) Policy for Curbing Opportunistic Takeovers/Acquisitions of Indian Companies Due to the Current COVID-19 Pandemic, GOV'T OF INDIA MINISTRY OF COM. & INDUS. DEP'T FOR PROMOTION OF INDUS. & INTERNAL TRADE FDI POL'Y SECTION, (Apr. 17, 2020), https://dipp.gov.in/sites/default/files/pn3_2020.pdf. See Investment Screening in Times of COVID—and Beyond, ORG. FOR ECON. COOP. & DEV. (June 23, 2020), https://www.oecd.org/investment/Investment-screening-in-times-of-COVID-19-and-beyond.pdf for detailed documentation of investment screening/review mechanisms introduced during the COVID-19 pandemic.

19 DDG Wolff: Time to Start Planning for the Post-Pandemic Recovery, WTO (Apr. 9, 2020), https://www.wto.org/english/news_e/news20_e/ddgaw_09apr20_e.htm [https://perma.cc/N4D4-U2P4].

20 In late June 2020, scientists identified a new strain of swine flu in China that has the potential to become a pandemic, although it has not yet posed a big threat. Michelle Roberts, Flu Virus With 'Pandemic Potential' Found in China, BBC (June 29, 2020), https://www.bbc.com/news/health-53218704 [https://perma.cc/N65L-7VF4]. Most recently, WHO Director-General wrote in Bloomberg to urge countries to better prepare for the next pandemic. Tedros Adhanom Ghebreyesus & Michael R. Bloomberg, Stopping the Next Pandemic Starts Now, BLOOMBERG (Feb. 3, 2021, 6:00 AM), https://www.bloomberg.com/opinion/articles/2021-02-03/tedros-adhanom-ghebreyesus-and-michael-bloomberg-on-stopping-the-next-covid-19?cmpid=BBD020321_OAS&utm_medium=email&utm_source=newsletter&utm_term=210203&utm_campaign=openasia&sref=Yspa2Kpl [https://perma.cc/A3Q5-4U9L].

and draws references from it. Part III also discusses the interplay between GATS and IHR 2005. It further examines provisions contained in major preferential trade agreements and investment agreements between major trading Members and identifies their shortcomings. Part IV proposes a set of new rules—the "science-based" approach—to safeguard WTO Member states' regulatory authority while also facilitating coordinated action amongst WTO Members. This part will discuss the procedural aspect and substantive aspect of the proposed rules and make analogies with the Sanitary and Phytosanitary Agreement (SPS Agreement). It will also examine past WTO disputes challenging measures brought during a declared public health crisis invoking GATS and the SPS Agreement. Part V sets forth some challenges to the proposed rules and responds to those challenges.

IMPACTS OF COVID-19 ON THE GLOBAL SERVICES TRADE

Even before the pandemic, international trade has seen a constant decline in overall growth rates, falling from the peak of two times the rate of GDP growth between 1990 and 2007 to below the rate of GDP growth after 2007. Despite the lukewarm performance in growth rate, the services trade has grown approximately sixty percent faster than the goods trade since 2008. According to the projection of the WTO Global Trade Model, the share in global trade of the services sector could increase by fifty percent by 2040. For example, international tourist arrivals—consumption abroad, one form of services trade covered under GATS—were expected to reach 1.8 billion by 2030, according to the World Tourism Organization's (UNWTO) long-term forecast before the current pandemic. The Fourth Industrial Revolution, marked by fifth-generation technology, like additive manufacturing (also known as 3D printing), blockchains, robotics and automation, and

²¹ Susan Lund et al., Globalization in Transition: The Future of Trade and Value Chains, MCKINSEY & Co. 1, 5 (2019), https://www.mckinsey.com/~/media/mckinsey/featured%20 insights/innovation/globalization%20in%20transition%20the%20future%20of%20trade%20and%20value%20chains/mgi-globalization%20in%20transition-the-future-of-trade-and-value-chains-full-report.pdf [https://perma.cc/84AK-VBUP].

 $[\]label{lem:condition} \begin{tabular}{ll} 22 World Trade Report 2019: The Future of Services Trade, WTO 1, 6 (2019), https://www.wto.org/english/res_e/booksp_e/01_wtr19_0_e.pdf [https://perma.cc/PAX6-Q2TX]. \end{tabular}$

²³ Id. at 7.

²⁴ Tourism and Travel-Related Services, WTO, https://www.wto.org/english/tratop_e/serv_e/tourism_e/tourism_e.htm [https://perma.cc/M2JW-9U3A] (citing the UNWTO forecast).

the internet of things, will further highlight the importance of services trade.²⁵ Recent trends also show that services trade has shifted away from the traditional categories of transport and travel-related services toward telecommunications; computer and information services; business services; financial services; audiovisual services; and smaller scale, customized services.²⁶ Meanwhile, goods continue to rely on transportation services for delivery within the complicated web of global supply chains. Apart from supporting trade in goods, trade in services correlates with Foreign Direct Investments (FDI) through the presence of business establishments of one country in the territory of any other country (also known as commercial presence).²⁷ Since services trade underscores nearly every corner of the global trading system, excessively imposing uncoordinated measures aimed at countering and containing the virus beyond what is required by science risks further damaging investment flows.²⁸

The ubiquitous nature of services trade is further evidenced in a recent WTO report, which states that in the first quarter of 2021, "global services trade fell 9% year-on-year after posting a 21% decline for the full year of 2020."²⁹ The downward trend continued in the second quarter as Members continued their efforts to contain the

²⁵ See generally KLAUS SCHWAB, THE FOURTH INDUSTRIAL REVOLUTION (2017) (explaining the Fourth Industrial Revolution and describing the transformation, opportunities, and challenges it brings).

²⁶ Trade in Services in the Context of COVID-19, Information Note, WTO 1, 2 (May 28, 2020), https://www.wto.org/english/tratop_e/covid19_e/services_report_e.pdf [https://perma.cc/Y7UP-65L9].

²⁷ It has been well recognized that trade and investment are two sides of the same coin. Press Release, WTO, Foreign Direct Inv. Seen as Primary Motor of Globalization, Says WTO Dir.-Gen., (Feb. 13, 1996).

²⁸ Sergio Puig, *The Merging of International Trade and Investment Law*, 33 BERKELEY J. INT'L L. 1 (2015) (analyzing how and why international trade and international investment laws are merging and the impacts); UNCTAD, *World Investment Report 2020, International Production Beyond the Pandemic*, at 1, U.N. Doc. UNCTAD/WIR/2020 (2020), https://unctad.org/system/files/official-document/wir2020_en.pdf [https://perma.cc/GW6D-TYLS] (forecasting that because of the pandemic, supply, demand, and policy shock brought by measures countering the pandemic, global FDI flows are to decrease by up to forty percent in 2020, falling below \$1 trillion for the first time since 2005). A recent report updates the previous forecast, stating that in the first half of 2020, global FDI inflows were down fortynine percent year-on-year. UNCTAD, *Investment Trends Monitor*, U.N. Doc. UNCTAD /WEB/DIAE/IA/INF/2020/5 (2020), https://unctad.org/system/files/official-document/diaeiainf2020d4_en.pdf?utm_source=World+Investment+Network+%28WIN%29&utm_campaign=2f7ec81332-EMAIL_CAMPAIGN_2017_05_22_COPY_01&utm_medium=email&utm_term=0_646aa30cd0-2f7ec81332-70651957 [https://perma.cc/HQ5E-FQZK].

²⁹ First Quarter 2021 Trade in Services, WTO (July 23, 2021), https://www.wto.org/english/res_e/statis_e/daily_update_e/serv_latest.pdf [https://perma.cc/4FJM-PMX3].

pandemic,³⁰ plunging thirty percent year-on-year.³¹ This plunge is worse than the estimated twenty-three percent decline and is significantly worse than the nine percent decline during the Financial Crisis of 2007–2008.³² Some sectors plummeted even more dramatically, such as the tourism sector, which dropped by seventy-four percent.³³ Services trade fell twenty-four percent in the third quarter of 2020,³⁴ representing a slight uptick from the second quarter. Partly due to the connection between FDI and services trade, in 2020 global FDI flows were down forty-two percent, which is slightly better than previous estimations, but a continued downtrend was expected in 2021.³⁵

Thus, as statistics suggest, nonmedical intervention measures imposed by governments to prevent the transmission of a communicable disease, such as limitations on the movement of people and goods, contributed to the significant changes to services trade.³⁶ However, as research shows, such changes are unevenly felt. For example, during the current pandemic, e-commerce—defined as the production, distribution, marketing, sale, or delivery of goods and services by electronic means—has risen sharply because of consumers' reaction to nonmedical

³⁰ WTO: Services Trade Continues Decline, but Likely 'Stabilizing,' WORLD TRADE ONLINE (Sept. 17, 2020), https://insidetrade.com/trade/wto-services-trade-continues-decline-likely-'stabilizing' [https://perma.cc/723B-QXLX] (quoting the WTO's Services Trade Barometer that shows services trade is below trend and lower than that read in March 2020).

³¹ Services Trade Drops 30% in Q2 as COVID-19 Ravages International Travel, WTO (Oct. 23, 2020), https://www.wto.org/english/news_e/news20_e/serv_22oct20_e.htm [https://perma.cc/2JZC-S5U4].

³² Trade Shows Signs of Rebound from COVID-19, Recovery Still Uncertain, WTO (Oct. 6, 2020), https://www.wto.org/english/news_e/pres20_e/pr862_e.htm [https://perma.cc/E6GQ-FTHX].

^{33 2020:} Worst Year in Tourism History with 1 Billion Fewer International Arrivals, UNITED NATIONS WORLD TOURISM ORG. (Jan. 28, 2021), https://www.unwto.org/news/2020-worst-year-in-tourism-history-with-1-billion-fewer-international-arrivals/ [https://perma.cc/3ZNJ-38VT] (describing 2020 as "the worst year in tourism history" and attributing the decline to "widespread travel restrictions").

³⁴ Services Trade Recovery Not Yet in Sight, WTO (Jan. 26, 2021), https://www.wto.org/english/news_e/news21_e/serv_26jan21_e.htm [https://perma.cc/M3PC-83MH].

³⁵ Investment Trends Monitor, at 1, UNCTAD, U.N. Doc. UNCTAD/WEB/DIAE/IA /INF/2021/1/ (Issue 38), (Jan. 24, 2021), https://unctad.org/system/files/official-document/diaeiainf2021d1 en.pdf [https://perma.cc/THQ9-GENY].

³⁶ See Cross-Border Mobility, COVID-19, and Global Trade (Information Note), WTO (Aug. 25, 2020), https://www.wto.org/english/tratop_e/covid19_e/mobility_report_e.pdf [https://perma.cc/S8MQ-GZRB].

intervention measures.³⁷ Other fields have also risen sharply such as internet-enabled and related computer and data services in areas including education, health, media, and finance.³⁸ On the other hand, nonmedical intervention measures have also resulted in disruptions in transportation and logistics, causing lengthier delivery time and higher transport costs.³⁹ Ninety-three measures affecting services in trade, either in a trade-restrictive or facilitating manner, have been recorded by the WTO Secretariat.⁴⁰ Among economies imposing trade-affecting measures, G20 economies implemented sixty-five measures linked to COVID-19 that have a trade facilitating effect and twenty-eight measures linked to COVID-19 that have trade-restrictive effect.⁴¹ In light of the many sectors in services trade that experienced steep

³⁷ E-Commerce, Trade and the COVID-19 Pandemic Information Note, WTO 1, 1 (May 4, 2020), https://www.wto.org/english/tratop_e/covid19_e/ecommerce_report_e.pdf [https://perma.cc/FF5H-2HMM]; see also Investment Trends Monitor, supra note 35.

³⁸ *Id.* at 3–5.

³⁹ Id. at 2.

⁴⁰ COVID-19: Measures Affecting Trade in Services, supra note 1. As of January 30, 2021, Australia recorded three entries affecting sectors, including financial services and health and food services, among others. Brazil recorded two entries affecting financial services and health services. Canada recorded six entries affecting financial services and investment review mechanisms (may indirectly affect commercial presence). China recorded three entries affecting air transport services, financial services, and investment review mechanisms (may indirectly affect commercial presence). France recorded four entries affecting health services, financial services, and investment review mechanisms (may indirectly affect commercial presence). Germany recorded two entries affecting financial services and investment review mechanisms (may indirectly affect commercial presence). India recorded four entries affecting telecommunication services, financial services, and investment review mechanisms (may indirectly affect commercial presence). Indonesia recorded four entries affecting health services, financial services, and the taxation on internet and other network-enabled services. Italy recorded three entries affecting financial services and investment review mechanisms (may indirectly affect commercial presence). Japan recorded one entry affecting financial services. The Republic of Korea recorded two entries affecting financial services. Russia recorded one entry affecting air transport services. Saudi Arabia recorded two entries affecting communication services and telecommunication services. South Africa recorded two entries affecting health services and telecommunication services. Turkey recorded one entry affecting financial services. The United Kingdom recorded five entries affecting telecommunication services, health services, air transport services, financial services, and others. The United States recorded eight entries affecting movement of natural persons, telecommunication services, health services, air transport services, and others. The European Union recorded ten entries affecting investment review mechanisms (may indirectly affect commercial presence), air transport services, financial services, road transport services, environmental services, maritime transport services, and others. Argentina and Mexico have no recorded entries on this WTO website.

⁴¹ Angel Gurría et al., *Joint Summary on G-20 Trade and Investment Measures (Mid-October 2019 to Mid-May 2020)*, WTO 1, 2 (June 29, 2020), https://www.wto.org/english/news_e/news20_e/g20_joint_summary_jun20_e.pdf [https://perma.cc/45HZ-3STP].

declines in 2020,⁴² and of governments' commitments to curbing the spread of the disease,⁴³ it may be safe to assume continued economic impacts of governmental measures.

AFTER COVID-19: THE NEED FOR NEW RULES IN THE SERVICES INDUSTRY

The vast development of services trade itself—the increasing value, volume, and importance of trade in services—calls for changes in the services trade rules to accommodate this new reality. Existing WTO rules also enable and encourage governments to update trade rules to reduce trade barriers. ⁴⁴ Under the WTO framework, governments have committed to achieving "progressively higher levels of liberalization of trade in services through successive rounds of multilateral negotiations aimed at promoting the interests of all participants on a mutually advantageous basis." ⁴⁵ Since trade barriers are easy to erect and hard to remove, ⁴⁶ it is time to update GATS through lessons learned from this COVID-19 pandemic to further enhance collaboration and liberalization and to reduce negative externalities of unilateral measures taken during a health emergency. Ideally, such amendments would be made at the multilateral level since one crucial shortcoming of addressing the issue at the regional level is the lack of inclusion

⁴² Investment Trends Monitor, supra note 35.

⁴³ Isabelle Icso, *G20 Trade Chiefs to Do 'Whatever It Takes' to Curb COVID-19 Disruptions*, WORLD TRADE ONLINE (Sept. 22, 2020), https://insidetrade.com/daily-news/g20-trade-chiefs-do-%E2%80%98whatever-it-takes%E2%80%99-curb-covid-19-disruptions [https://perma.cc/TJ7S-NYPR].

⁴⁴ For example, the purpose and objective of the WTO is to reduce barriers to trade, including services trade. Marrakesh Agreement Establishing the World Trade Organization, Apr. 15, 1994, 1867 U.N.T.S. 154, pmbl. [hereinafter Marrakesh Agreement]. ("The *Parties* to this Agreement . . . [b]eing desirous of contributing to these objectives [raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, etc.] by entering into reciprocal and mutually advantageous arrangements directed to the substantial reduction of tariffs and other barriers to trade and to the elimination of discriminatory treatment in international trade relations . . . [a]gree ").

⁴⁵ General Agreement on Trade in Services, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1B, 1869 U.N.T.S. 183, pmbl. [hereinafter GATS].

⁴⁶ Gurría et. al., *supra* note 41 (pointing out that only thirty-six percent of the COVID-19 trade restrictions implemented by G20 economies had been repealed by mid-May 2020 and "the stock of such measures implemented since 2009 and still in force continues to grow – now affecting an estimated 10.3% of G20 imports (USD 1.6 trillion)").

of all critical players, such as the United States, the European Union, China, India, and Brazil, among others. Turther complicating the issue is the tangled web of PTAs to which these countries belong. However, a solution at the plurilateral level is second-best optimal if progress is too difficult to obtain in the multilateral context. For example, a plurilateral solution would be second-best in the unfortunate event that an impasse over WTO reform cannot be overcome. It should not be forgotten that the intricacy and complexity inherent in the services trade sector have historically made service trade rule negotiations difficult. For example, progress achieved through a multiparty regional trade agreement such as the Regional Comprehensive Economic Partnership (RCEP) or the Comprehensive and Progressive Trans-Pacific Partnership Agreement (CPTPP) would

⁴⁷ However, history has suggested difficulties in negotiating services trade rules in the formation of GATS, Juan A. Marchetti & Petros C. Mavroidis, *The Genesis of the GATS, (General Agreement on Trade in Services)*, 22 Eur. J. of Int'l L. 689 (2011), and in negotiating Trade in Services Agreement (TiSA) at the WTO platform. *See generally* DAVID A. GANTZ, LIBERALIZING INTERNATIONAL TRADE AFTER DOHA: MULTILATERAL, PLURILATERAL, REGIONAL, AND UNILATERAL INITIATIVES (2013).

⁴⁸ See generally CHRIS BRUMMER, MINILATERALISM: HOW TRADE ALLIANCES, SOFT LAW, AND FINANCIAL ENGINEERING ARE REDEFINING ECONOMIC STATECRAFT (2014) (analyzing how the proliferation of regional preferential trade agreements changes global multilateralism).

⁴⁹ Marchetti & Mavroidis, *supra* note 47 (describing the negotiation process of GATS and difficulties in reaching consensus due to diversified interests of negotiating states).

⁵⁰ Regional Comprehensive Economic Partnership (RCEP), ASS'N OF SE. ASIAN NATIONS, https://asean.org/?static_post=rcep-regional-comprehensive-economic-partnership [https://perma.cc/45M7-W6H5].

be welcome.⁵¹ Alternatively, given the WTO's negotiation function,⁵² a discussion on the proposed rules at the multilateral forum may help Members settle differences and formulate good practices.

The proposed rule change seeks to minimize the possibility of undue interference with or restriction upon regulatory authorities that governments have enjoyed and exercised in the past twenty-five years.⁵³ GATS reserves policy space for governments in its preamble, structure, provisions governing exceptions (Article XIV, for example), and specific commitments.⁵⁴ In particular, governments' right to "regulate . . . the supply of services . . . to meet national policy objectives" is recognized in both the preamble and the provision on the negotiation of specific commitments.⁵⁵ Structurally, GATS presupposes that there is no market access unless governments undertake to grant it,⁵⁶ presumably based upon considerations of national objectives that governments plan to achieve. In furtherance of national objectives,

⁵¹ The United Kingdom has expressed its willingness to join the CPTPP post-Brexit, UK Approach to Joining the CPTPP Trade Agreement, DEP'T FOR INT'L TRADE (June 17, 2020), https://www.gov.uk/government/publications/uk-approach-to-joining-the-cptpp -trade-agreement, and formally requested to commence the accession process on February 1, 2021, Formal Request to Commence UK Accession Negotiations to CPTPP, DEP'T FOR INT'L TRADE (Feb. 1, 2021), https://www.gov.uk/government/news/formal-request-to -commence-uk-accession-negotiations-to-cptpp. The UK has released a policy paper detailing its approach to joining the CPTPP in June 2021. UK Approach to Joining the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), DEP'T FOR INT'L TRADE (June 22, 2021), https://www.gov.uk/government/publications /uk-approach-to-joining-the-comprehensive-and-progressive-agreement-for-trans-pacific -partnership-cptpp, on the same day it started the accession negotiation, William James, Britain Begins Negotiations to Join Trans-Pacific Trade Deal, REUTERS (June 22, 2021), https://www.reuters.com/business/britain-begins-negotiations-join-trans-pacific-trade-deal -2021-06-21/ [https://perma.cc/V6F4-G4M9]. China has also voiced interest in joining the CPTPP. China Open to Joining CPTPP, XINHUA (Nov. 19, 2020), http://www.xinhuanet .com/english/2020-11/19/c 139528206.htm [https://perma.cc/REZ9-FJK8]. China officially requested an accession on September 16, 2021. China Officially Applies to Join CPTPP, MOFCOM (Sept. 20, 2021), http://sg.mofcom.gov.cn/article/chinanews/202109/20210903 200484.shtml [https://perma.cc/SDB8-7ZN2].

⁵² Marrakesh Agreement, *supra* note 44, art. III(2).

⁵³ Concerns over undue restraints over government regulatory authority have long existed and the WTO has specifically addressed those concerns. *GATS: Fact and Fiction, Misunderstandings and Scare Stories*, WTO, https://www.wto.org/english/tratop_e/serv_e/gats_factfictionfalse_e.htm#:~:text=The%20GATS%20does%20not%20involve,review%20by%20their%20trading%20partners [https://perma.cc/44K9-JD2F].

⁵⁴ GATS, *supra* note 45, art. XIX(2). ("The process of liberalization shall take place with due respect for national policy objectives and the level of development of individual Members, both overall and in individual sectors.").

⁵⁵ Id. pmbl., art. XIX(2).

⁵⁶ *Id.* art. XVI.

governments may provide preferential treatment to domestic services and service suppliers and set forth conditions for foreign services and service suppliers as long as those limitations and conditions are inscribed in the schedule.⁵⁷ Governments may also rely on general exceptions⁵⁸ and the national security exception⁵⁹ to justify measures taken to protect the health of their citizens and to guard national security that may otherwise be considered inconsistent with GATS principles. Moreover, governments can support service sectors via preferential government procurement arrangements during and after a health emergency. Such arrangements are exempted from the most-favored-nation (MFN), market access, national treatment commitments of GATS,⁶⁰ and the jurisdiction of the Subsidy and Countervailing Measures Agreement.⁶¹

Despite all the regulatory space reserved and autonomy accorded to governments, GATS offers little guidance in helping governments make science-based decisions in times of health emergencies. For example, terms such as "science," "scientific," or "risk" are not written in the texts of GATS. Without such guidance, the COVID-19 pandemic has shown that one state's well-intended unilateral action may result in unintended exponential consequences. Thus, coordinated action is preferred to combat future crises; global challenges call for global solutions. The scientific, evidence-based approach proposed in this Article seeks to create a buffer zone between the "liberalism" and "protectionism" dichotomy whenever a transnational emergency occurs, where governments can regulate based on science-oriented

⁵⁷ Id. art. XVII. Under Article XVII(1), governments can prescribe "any" conditions on national treatment in their respective schedule. See Panel Report, China—Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Products, ¶ 7.950, WT/DS363/R (adopted Aug. 12, 2009) ("A Member's obligations on . . . national treatment are determined with reference to any such limitations inscribed in its schedule.").

⁵⁸ GATS, supra note 45, art. XIV.

⁵⁹ Id.

⁶⁰ Id. art. XIII.

⁶¹ Panel Report, United States—Measures Affecting Trade in Large Civil Aircraft (Second Complaint), ¶¶ 7.968, 7.689, WTO Doc. WT/DS353/R (adopted Mar. 31, 2011).

⁶² See generally GATS, supra note 45.

⁶³ See supra notes 29-37, 44.

⁶⁴ However, as observed by scholars, the pandemic also exposes a paradox. This "pandemic paradox" consists of patriotism, borders, and (in)equality, and much-needed global coordination was resisted by popular sovereignty. Peter G. Danchin et al., *The Pandemic Paradox in International Law*, 114 AM. J. INT'L L. 598, 598–99 (2020).

precautionary mechanisms.⁶⁵ Thus, the proposed rule aims to enhance trust, predictability, transparency of governmental measures, and coordination between Member states, while preserving governments' legitimate authority in preserving and protecting their citizens.

III JUSTIFICATIONS FOR GATS RULE CHANGES

Bearing in mind the urgent need and the breadth of the problem, this Part now provides justifications for its proposal by offering a comprehensive textual analysis of GATS.

A. Shortcomings of Current GATS Rules

This pandemic, like other health emergencies, exposes shortcomings of current multilateral services trade rules, but the pandemic also sheds light on bright spots of the current rules. The pandemic highlights the urgency for changes to service trade rules. For example, the spike in e-commerce trade due to the nonmedical intervention measures that aim to contain the spread of SARS-CoV-2 may be a catalyst for a stalled negotiation on e-commerce rules in the WTO platform.⁶⁶ However, the complexity of services trade rules, which emphasizes specific commitments and delivery modalities, compounds potential rule changes absent which Members are under no legal obligations to act.⁶⁷

Article III of GATS obliges governments to promptly publish all relevant measures of general application that pertain to or affect the operation of GATS except in emergencies.⁶⁸ Article III also obliges governments, via established inquiry points, to respond promptly to all requests by any other Member for specific information relating to the

⁶⁵ Coincidentally, Pascal Lamy, former Director-General of the World Trade Organization, used "precaution-ism" when referencing measures taken by governments during the current pandemic in his speech on June 17, 2020. What Future for the Global Trading System?, PETERSON INST. FOR INT'L ECON.: TRADE WINDS (June 17, 2020), https://www.piie.com/events/what-future-global-trading-system [https://perma.cc/YB5M-2M76].

⁶⁶ DDG Wolff: Q&A on the COVID-19 Pandemic and Trade, WTO (Oct. 2, 2020), https://www.wto.org/english/news_e/news20_e/ddgaw_05oct20_e.htm [https://perma.cc/NZ86-Q5KX].

⁶⁷ See Bernard Hoekman & Petros C. Mavroidis, MFN Clubs and Scheduling Additional Commitments in the GATT: Learning from the GATS, 28 EUR. J. INT'L L. 387 (2017).

⁶⁸ GATS, supra note 45, art. III(1).

aforementioned measures.⁶⁹ This ex post notification exposes two shortcomings in times of emergency. First, emergency is an exception to the publication of measures requirement even though GATS does not provide a definition for what constitutes an emergency. Second, a reading of this Article concludes that the obligation to promptly respond to inquiries could occur only after other Members become aware of the existence of measures at issue, reflecting a reactive approach. Worse yet, existing WTO jurisprudence provides little guidance on applying Article III in times of emergency. Currently, four WTO disputes have cited Article III in general in the requests for consultation, 70 and another three cases cited paragraph one of Article III in particular in the requests for consultations.⁷¹ Of the four cases invoking Article III in general in their requests for consultation, a panel was established in only one case, ⁷² but no panel report or appellate body report was issued, nor was any reference to emergency made. Meanwhile, the three cases invoking Article III:1 were brought by Qatar, and they cited nearly identical language. These cases concern the alleged failure to promptly publish relevant measures and inform the Council for Trade in Services but make no mention of any type of emergency. Thus, under Article III, Members are exempted from publishing measures pertaining to services trade and are under no obligation to make prior notification to other Members to coordinate in times of health emergencies.

⁶⁹ Id. art. III(4).

⁷⁰ Request for Consultations by the European Communities, *United States—The Cuban Liberty and Democratic Solidarity Act*, WTO Doc. WT/DS38/1 (May 3, 1996); Request for Consultations by the United States, *Japan—Measures Affecting Distribution Services*, WTO Doc. WT/DS45/1 (June 13, 1996); Request for Consultations by the European Communities, *Canada—Measures Affecting Film Distribution Services*, WTO Doc. WT/DS117/1 (Jan. 20, 1998); Request for Consultations by the Russian Federation, *Ukraine—Measures Relating to Trade in Goods and Services*, WTO Doc. WT/DS525/1 (May 19, 2017).

⁷¹ Request for Consultations by Qatar, United Arab Emirates—Measures Relating to Trade in Goods and Services, and Trade-Related Aspects of Intellectual Property Rights, WTO Doc. WT/DS526/1 (July 31, 2017); Request for Consultations by Qatar, Bahrain—Measures Relating to Trade in Goods and Services, and Trade-Related Aspects of Intellectual Property Rights, WTO Doc. WT/DS527/1 (July 31, 2017); Request for Consultations by Qatar, Saudi Arabia—Measures Relating to Trade in Goods and Services, and Trade-Related Aspects of Intellectual Property Rights, WTO Doc. WT/DS528/1 (July 31, 2017). All three cases were brought by Qatar on the same day.

⁷² Constitution of the Panel Established at the Request of the European Communities, *United States—The Cuban Liberty and Democratic Solidarity Act*, WTO Doc. WT/DS38/3 (adopted Feb. 20, 1997).

Article X encourages Members to enter into "multilateral negotiations on the question of emergency safeguard measures based on the principle of non-discrimination."73 Despite the three-year timetable set forth in Article X, negotiation efforts have not yielded concrete results.⁷⁴ Possible explanations of the lack of rules on emergency safeguard measures include the lack of definition of what constitutes an emergency safeguard measure (ESM), under what circumstances a Member may adopt such an emergency safeguard measure, and for how long such a measure could be maintained. Some believe that ESMs are designed to protect relevant domestic industries against emergencies—without explicit definition—and call for a uniform safeguard mechanism applying to all sectors and all modes of supply, bearing substantial similarity to the Agreement on Safeguard under the General Agreement on Tariffs and Trade (GATT).⁷⁵ Some recognized the difficulties in visualizing most of the elements that may be deemed indispensable for an ESM decision to be made and noted the politics-serving purpose of an ESM. Thus, they similarly advocated for emulating the GATT, with necessary adaptions. ⁷⁶ There appears to be no existing WTO jurisprudence on Article X.⁷⁷ If ESMs are defined similarly to those under the GATT, then Article X may be inadequate to respond to health emergencies; the required elements of Article X, like a sudden increase in volume that caused serious injury to domestic industry, would be less likely to be the case in health emergencies, as experienced during this pandemic.⁷⁸

⁷³ GATS, *supra* note 45, art. X(1).

 $^{^{74}}$ World Trade Organization, Ministerial Declaration of 22 December 2005, Annex C \P 4, WTO Doc. WT/MIN(05)/DEC.

⁷⁵ Yong-Shik Lee, Emergency Safeguard Measures Under Article X in GATS-Applicability of the Concepts in the WTO Agreement on Safeguards, 33 J. WORLD TRADE 47, 49, 58–59 (1999).

⁷⁶ UNCTAD, Emergency Safeguard Measure in the GATS: Beyond Feasible and Desirable, U.N. Doc. UNCTAD/DITC/TNDC/2005/4 (Mar. 9, 2005).

⁷⁷ See generally Disputes by Agreement, WTO, https://www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.htm [https://perma.cc/SR8B-EB5G] (as cited in request for consultations). While the website lists United States—Measures Relating to Trade in Goods and Services WT/DS574 as the only case in which Article X of GATS was invoked in the request for consultations, a close examination of the Request for Consultations reveals that the complainant did not invoke this article. Requests for Consultations by Venezuela, United States—Measures Relating to Trade in Goods and Services, WTO Doc. WT/DS574/1 (Jan. 8, 2019).

⁷⁸ See *supra* Part I for a discussion on the impacts of COVID-19 on the global services trade.

Article XIV of GATS sets forth the general exceptions provision that governments can rely on to justify measures that would otherwise be held inconsistent with other GATS provisions or Members' sector-specific commitments. ⁷⁹ Under Article XIV, governments may impose measures "necessary to protect human, animal or plant life or health" as long as "such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where like conditions prevail, or a disguised restriction on trade in services." ⁸⁰ The protection of human life and health against a life-threatening health risk has been characterized as "vital and important in the highest degree" of societal interests. ⁸¹

In order to defend claims brought under Article XIV, the claimant government must first make a *prima facie* case that a provision of GATS has been breached. Then the burden of proof shifts to the respondent government to prove the *prima facie* case that its measures satisfy both the specific subparagraph and the chapeau. 82 Once the respondent government makes such a showing, the burden of proof shifts to the complaining government to demonstrate that there is a reasonably available alternative; the respondent government would then seek to rebut. 83

While the purpose of Article XIV *bis* is to allow governments to take necessary actions for security concerns, it is unclear whether this article applies to public health emergencies. Article XIV *bis* allows a Member to take actions "it considers necessary for the protection of its essential security interests: . . . [when the actions are] taken in time of war or other emergency in international relations." To date, the WTO has yet to issue a report on Article XIV *bis*, 85 although reports have been issued

⁷⁹ Appellate Body Report, *United States—Measures Affecting the Cross-Border Supply of Gambling and Betting Services*, ¶ 291, WTO Doc. WT/DS285/AB/R (adopted Apr. 7, 2005) [hereinafter *US—Gambling* Appellate Body Report].

⁸⁰ GATS, supra note 45, art. XIV.

⁸¹ Appellate Body Report, European Communities—Measures Affecting Asbestos and Asbestos-Containing Products, ¶ 172, WTO Doc. WT/DS135/AB/R (adopted Mar. 12, 2001) [hereinafter EC—Asbestos Appellate Body Report].

⁸² US—Gambling Appellate Body Report, supra note 79, ¶¶ 309–310.

⁸³ *Id.* ¶ 311.

⁸⁴ GATS, supra note 45, art. XIV(b)(iii).

⁸⁵ A WTO panel has been established to adjudicate a dispute between the Republic of South Korea and Japan over Japan's export restrictions. DS 590 Japan—Measures Related to the Exportation of Products and Technology to Korea, WTO, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds590_e.htm (last visited Oct. 4, 2021). Panel established on July 29, 2020. Japan suggested that it may invoke Article XXI of GATT and possibly Article XIV bis of GATS, both provisions governing the invocation of essential security

on similar provisions in the contexts of GATT and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement).86 To successfully invoke Article XIV bis, the action must be taken during a war or other emergency in international relations, the latter of which may include "a situation of armed conflict, or of latent armed conflict, or of heightened tension or crisis, or of general instability engulfing or surrounding a state."87 Such action must serve to protect essential security interests—the "interests relating to the quintessential functions of the state, namely, the protection of its territory and its population from external threats, and the maintenance of law and public order internally."88 However, several challenges may arise if Article XIV bis is invoked to justify health-related measures. First, it is unclear whether a health emergency, even a declared public health emergency of international concern (PHEIC), is equivalent to an emergency in international relations. Members may argue that a health emergency has created a heightened crisis when the emergency has led to widespread and continuing travel bans, decimation of the tourist and travel industries in dozens of countries, and economic fallouts. Whether economic fallouts or economic instability may constitute a security exception remains unsettled in international adjudication.⁸⁹ Second, as of now, the protection of citizens from infection by communicable diseases in a health emergency (which may or may not originate in the

interests as a justification. See Panels Established to Review Indian Tech Tariffs, Colombian Duties on Fries, WTO (June 29, 2020), https://www.wto.org/english/news_e/news20_e/dsb_29jun20_e.htm [https://perma.cc/5Z24-4S5P].

⁸⁶ The WTO has a history of drawing references from covered Agreements. See US—Gambling Appellate Body Report, supra note 79. See also Panel Report, Saudi Arabia—Measures Concerning the Protection of Intellectual Property Rights, ¶¶ 7.245–.246, WTO Doc. WT/DS567/R (adopted July 28, 2020) (referencing analysis of GATT Article XXI).

⁸⁷ Panel Report, Russia—Measures Concerning Traffic in Transit, \P 7.76, WTO Doc. WT/DS512/R (adopted Apr. 26, 2019).

⁸⁸ Id. ¶ 7.130; Panel Report, Saudi Arabia—Measures Concerning the Protection of Intellectual Property Rights, ¶ 7.249, WTO Doc. WT/DS567/R (adopted July 28, 2020).

⁸⁹ See CMS Gas Transmission Co. v. Republic of Argentina, ICSID Case No. ARB/01/8, Award, ¶¶ 353–356 (May 12, 2005); CMS Gas Transmission Co. v. Argentine Republic, ICSID Case No. ARB/01/8, Decision of the ad hoc Committee on the Application for Annulment of the Argentine Republic, ¶¶ 130–132 (Sept. 25, 2007); LG&E Energy Corp. v. Argentine Republic, ICSID Case No. ARB/02/1, Decision on Liability, ¶¶ 229, 239, 256–258 (Oct. 3, 2006), 21 ICSID Rev.-F.I.L.J. 203 (2006); Enron Corp. Ponderosa Asset, L.P. v. Argentine Republic, ICSID Case No. ARB/01/3, Award, ¶¶ 293, 303–313, 320–321, 322–342 (May 22, 2007). Although those decisions are made by arbitral tribunals in the context of the investor-state arbitration mechanism under the United States-Argentina Bilateral Investment Treaty, which are different from the WTO jurisprudence, those decisions may nevertheless reflect the unsettled nature regarding this critical topic.

Member's territory) has yet to be qualified as a quintessential function of the state, although many would agree it qualifies.

B. WHO and International Health Regulations (2005)

The International Health Regulations are the rules that govern the control of the international spread of disease. These rules, which are legally binding upon all WHO Members, were amended in 2005 following outbreaks of the severe acute respiratory syndrome (SARS) and the avian influenza (H5N1).⁹⁰ The revision was "based on the premise that no country can fully protect its citizens in isolation or through traditional border controls" and also purported to "avoid unnecessary interference with international traffic and trade."

IHR 2005 expands the scope of diseases that constitute PHEICs and sets forth specific criteria that Member States must consider when making decisions.⁹³ Once a Member State determines that an aforementioned disease exists in its territory, the Member State is required by IHR 2005 to notify the WHO.94 After consulting with the reporting State, the WHO Director-General and the Emergency Committee determine whether a PHEIC exists.⁹⁵ Once a PHEIC shall declared, "the Director-General issue temporary recommendations" that "may include health measures to be implemented by the State . . . or by other States Parties . . . to prevent or reduce the international spread of disease and avoid unnecessary international traffic."96 with While temporary recommendations—as well as standing recommendations—are pieces of "non-binding advice," states are expected to implement health measures other than those recommended by the WHO only when the decision to deviate is based on scientific principles, evidence, and

⁹⁰ Frequently Asked Questions About the International Health Regulations (2005), WHO, https://www.who.int/ihr/about/FAQ2009.pdf [https://perma.cc/2Y9S-AFZF].

⁹¹ International Spread of Disease Threatens Public Health Security, WHO (2010), https://www.who.int/news/item/08-12-2010-international-spread-of-disease-threatens-public -health-security [https://perma.cc/CJ9A-LXG6].

⁹² International Health Regulations (2005) Third Edition, WHO (2008), https://apps.who.int/iris/bitstream/handle/10665/246107/9789241580496-eng.pdf?sequence=1 [https://perma.cc/A86K-SNUP] [hereinafter IHR 2005].

⁹³ Id. Foreword.

⁹⁴ Id. art. 6.

⁹⁵ Id. art. 12.

⁹⁶ Id. art. 15(1)-(2).

⁹⁷ *Id.* art. 1.

specific guidance from the WHO. 98 Under IHR 2005, scientific evidence must be able to reach the "level of proof based on the established and accepted methods of science,"99 and scientific principles refer to the "accepted fundamental laws and facts of nature known through the methods of science."100 Furthermore, states must base their decision to implement additional health measures that "significantly interfere with international traffic" on scientific information and a public health rationale and provide such information to the WHO. 101 Scholars have noted the similarities between IHR 2005 and the WTO SPS Agreement, presumably based on the emphasis of scientific evidence and decision-making. 102

Moreover, IHR 2005 provides for cooperation and coordination between the WHO and other international organizations, such as the WTO.¹⁰³ In particular, the WHO is obligated to "coordinate its activities within such organizations or bodies in order to ensure the application of adequate measures for the protection of public health" when the response is "primarily within the competence of other intergovernmental organizations."104 In such cases, the WHO's provision of advice for public health purposes "shall" not be limited. 105 More importantly, the WHO Director-General is required to "consider ... activities undertaken by other relevant intergovernmental organizations and international bodies" when recommendations. 106 IHR 2005 provisions "shall not affect the rights and obligations of any State Party deriving from other international agreements."107

C. The Interplay—or Lack Thereof—Between GATS and IHR 2005

Prior to the implementation of the current IHR 2005, "[t]raderestricting health measures addressing infectious diseases not subject

⁹⁸ Id. art. 43.

⁹⁹ Id. art. 1.

¹⁰⁰ *Id*.

¹⁰¹ Id. art. 43.

¹⁰² David P. Fidler, From International Sanitary Conventions to Global Health Security: The New International Health Regulations, 4 CHINESE J. INT'L L. 325, 346 (2005).

¹⁰³ IHR 2005, supra note 92, arts. 6.1, 14, 17(f), 57.1.

¹⁰⁴ Id. art. 14.2 (using the word "shall" to highlight the obligation).

¹⁰⁵ Id. art. 14.3.

¹⁰⁶ Id. art. 17(f).

¹⁰⁷ Id. art. 57.1.

to the IHR or non-communicable disease threats (e.g., toxic chemicals in products) fell outside the IHR and were handled, generally, as matters of international trade law."¹⁰⁸ Since IHR 2005 became effective in 2007, the WHO has declared six PHEICs: the H1N1 influenza virus pandemic (2009),¹⁰⁹ the resurgence of wild poliovirus (2014),¹¹⁰ the West Africa Ebola virus outbreak (2014),¹¹¹ the Zika virus outbreak (2016),¹¹² the Ebola outbreak (2019),¹¹³ and the COVID-19 pandemic (2020).¹¹⁴

Between January 1995 and July 2021, around thirty-one cases cited GATS in the requests for consultations under the Dispute Settlement Understanding proceeding. None of the requests were initiated in 2020 and only one in 2021. Of those thirty-one requests for consultations, fourteen requests were made after IHR 2005 became effective in

¹⁰⁸ Fidler, *supra* note 102, at 351.

¹⁰⁹ Statement by WHO Director-General, Dr Margaret Chan: Swine Influenza, WHO (Apr. 27, 2009), https://www.paho.org/en/news/27-4-2009-statement-who-director-general-dr-margaret-chan [https://perma.cc/5LCB-5HJH].

¹¹⁰ WHO Statement on the Second Meeting of the International Health Regulations Emergency Committee Concerning the International Spread of Wild Poliovirus, WHO REG'L OFF. FOR E. MEDITERRANEAN, http://www.emro.who.int/polio/polio-news/ihr-statement-2.html ("On 5 May 2014 the Director-General declared the international spread of wild poliovirus in 2014 a Public Health Emergency of International Concern (PHEIC) under the International Health Regulations (IHR 2005)...").

¹¹¹ Statement on the 4th Meeting of the IHR Emergency Committee Regarding the 2014 Ebola Outbreak in West Africa, WHO (Jan. 21, 2015), https://www.who.int/news/item/21-01-2015-statement-on-the-4th-meeting-of-the-ihr-emergency-committee-regarding-the-2014-ebola-outbreak-in-west-africa [https://perma.cc/54LG-MGXG].

¹¹² WHO Statement on the First Meeting of the International Health Regulations (2005) (IHR 2005) Emergency Committee on Zika Virus and Observed Increase in Neurological Disorders and Neonatal Malformations, WHO (Feb. 1, 2016), https://www.who.int/news/item/01-02-2016-who-statement-on-the-first-meeting-of-the-international-health-regulations-(2005)-(ihr-2005)-emergency-committee-on-zika-virus-and-observed-increase-in-neurological-disorders-and-neonatal-malformations [https://perma.cc/6YNY-S5EC].

¹¹³ Statement on the Meeting of the International Health Regulations (2005) Emergency Committee for Ebola Virus Disease in the Democratic Republic of the Congo, WHO (June 14, 2019), https://www.who.int/news/item/14-06-2019-statement-on-the-meeting-of-the-international-health-regulations-(2005)-emergency-committee-for-ebola-virus-disease-in-the-democratic-republic-of-the-congo [https://perma.cc/9E9S-MQ53].

¹¹⁴ Statement on the Second Meeting of the International Health Regulations (2005) Emergency Committee Regarding the Outbreak of Novel Coronavirus (2019-nCoV), WHO (Jan. 30, 2020), https://www.who.int/news/item/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov) [https://perma.cc/LL28-JP9A].

¹¹⁵ Disputes by Agreement, WTO, https://www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.htm [https://perma.cc/T99H-7XJL].

2007.¹¹⁶ Despite the aforementioned five declared PHEICs (excluding COVID-19), none of those fourteen cases dealt with measures responding to a health emergency, let alone any mentioning of IHR 2005. The other seventeen cases did not cite IHR 2005 or a health emergency in their respective written submissions.

Only three of the thirty requests for consultations—ten percent of all requests for consultations—invoked GATS Article XIV. 117 In only one case, the Member sought to justify its measures on the ground that they were "necessary to protect human, animal or plant life or health," 118 but it did so without explicitly invoking Article XIV(b). Furthermore, all three invocations failed to persuade the panel and/or Appellate Body that the measures at issue were justified under one or more of the general exceptions. 119

In the only case that concerns Article XIV(b), the United States sought to justify its ban on online gambling as a means to protect people from health risks associated with online gambling. Pather than invoking Article XIV(b) separately, the United States raised the health justification in association with the justification under Article XIV(a), stating that the challenged measure was necessary to "protect health and morals." The panel noted the United States' "concerns with respect to money laundering, fraud, health and underage gambling." But the panel focused on Article XIV(a) and found that the United States failed to prove the measure was "necessary" under Article XIV(a), while "acknowledg[ing] that such laws are designed so as to protect public morals or maintain public order." The Appellate Body reversed the panel's conclusion, holding instead that the United States

¹¹⁶ Id.

¹¹⁷ Panel Report, United States—Measures Affecting the Cross-Border Supply of Gambling and Betting Services, WTO Doc. WT/DS258/R (Nov. 10, 2004) [hereinafter US—Gambling Panel Report]; Panel Report, Argentina—Measures Relating to Trade in Goods and Services, WTO Doc. WT/DS453/R (Sept. 30, 2015) [hereinafter Argentina—Financial Services]; Panel Report, European Union and Its Member States—Certain Measures Relating to the Energy Sector, WTO Doc. WT/DS476/R (Aug. 10, 2018) [hereinafter EU—Energy Package]; European Union and Its Member States—Certain Measures Relating to the Energy Sector, WTO Doc. WT/DS476/8 (Nov. 21, 2018).

¹¹⁸ US—Gambling Appellate Body Report, supra note 79, ¶ 291 n. 350.

¹¹⁹ US—Gambling Panel Report, supra note 117; Argentina—Financial Services, supra note 117, ¶¶ 7.764, 8.2; EU—Energy Package, supra note 117, ¶ 8.1.

¹²⁰ *US—Gambling* Panel Report, *supra* note 117, ¶¶ 3.19, 6.510.

¹²¹ *Id.* ¶ 6.471.

¹²² Id. ¶ 6.521.

¹²³ Id. ¶ 6.535.

persuasively argued that the ban was necessary to protect public morals and to maintain public order. ¹²⁴ The invocation of Article XIV(a) was still unsuccessful as the Appellate Body held that the United States failed to make the case that the ban was "not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination" or as "a disguised restriction on trade in services." ¹²⁵ Antigua challenged the panel's consideration on health concerns, ¹²⁶ but the Appellate Body concluded that while the United States did not explicitly raise the public health argument, the panel did not err in considering it. ¹²⁷ Importantly, the Appellate Body did not express an opinion on the United States' attempted justification on the ground that the measures were "necessary to protect human, animal or plant life or health" without explicitly invoking Article XIV(b). ¹²⁸

The lack of disputes involving GATS Article XIV (b) shows a vacuum for disciplines at the intersection of service trade governance and health emergency response measures. ¹²⁹ GATS provisions apply to a broad array of measures that "affect[] trade in services," ¹³⁰ and prohibit any a priori exclusion. ¹³¹ Measures "affect" identified services when such measures influence suppliers' decision to supply that specific service in the specific mode concerned. ¹³² Thus, when viewed against the broad coverage of GATS, the lack of any disputes regarding measures taken in health emergencies to protect citizens' health calls for a close examination.

Legal and political considerations may explain the vacuum. First, Members may fear that challenging other Members' measures that aim to protect citizens' health might limit their own policy choices in adopting similar measures in the future. Thus, by seeking to preserve policy space for future actions and hoping other Members

¹²⁴ US—Gambling Appellate Body Report, supra note 79, ¶ 326.

¹²⁵ Id. ¶ 369.

¹²⁶ Id. ¶ 74.

¹²⁷ Id. ¶ 284.

¹²⁸ Id. ¶ 373.

¹²⁹ World Health Organization & World Trade Organization Secretariat, WTO Agreements & Public Health (2002). Tellingly, this vacuum has been reflected in a joint publication of the WTO and the WHO. Id. On page 58, in the illustrative chart, Box 5, GATS is not considered as one of the most relevant agreements in dealing with infectious disease control. Id.

¹³⁰ Appellate Body Report, Canada—Certain Measures Affecting the Automotive Industry, ¶ 20, WTO Doc. WT/DS139/AB/R, WT/DS142/AB/R (May 31, 2000).

 $^{^{131}}$ Appellate Body Report, European Communities—Regime for the Importation, Sale and Distribution of Bananas, \P 220, WTO Doc. WT/DS27/AB/R (Sept. 9, 1997).

¹³² See Argentina—Financial Services, supra note 117, \P 7.112.

reciprocate, Members choose not to initiate a WTO complaint. 133 Second, governments may also worry about the potential backlash and damage to relationships resulting from a WTO complaint. Third, such measures, due to the underlying emergency nature of the communicable disease, may be temporary or short-lived. Therefore, the short-term economic suffering may not justify the costs of bringing a challenge before the Dispute Settlement Body. Furthermore, even if the negative economic impact is significant enough to warrant such a challenge, by the time the report of the panel or the Appellate Body (or the panel pursuant to the Multiparty Interim Appeal Arbitration Arrangement¹³⁴) is adopted or becomes effective, the case may be moot as the temporary measures may become ineffective or be withdrawn by the imposing Member as health emergencies subside. 135 Last but not least, GATS may not be the best instrument to address measures implemented during prior PHEICs given some deficiencies discussed *infra*; it may also be the case that those introduced measures primarily affect goods trade and only minimally affect services trade. 136

With respect to the COVID-19 pandemic, scholars have analyzed measures imposed by governments aimed at containing the spread of COVID-19 under international trade law with greater emphasis on the trade in goods aspect or the architecture of international trade rules in general. For example, Joost Pauwelyn addressed the legality of measures restricting the exportation of personal protective equipment

¹³³ Members Discuss Trade Responses to H1N1 Flu, WTO (June 25, 2009), https://www.wto.org/english/news_e/news09_e/sps_25jun09_e.htm [https://perma.cc/H8CN-46VS]. For example, during the 2009 H1N1 influenza, the first PHEIC after IHR 2005 became effective, WTO Members resorted to the WTO forum, specifically the Sanitary and Phytosanitary Measures (SPS) Committee that deals with food safety and animal and plant health "in order to avoid formal legal disputes." Id.

¹³⁴ Interim Appeal Arrangement for WTO Disputes Becomes Effective, EUR. COMM'N: DIRECTORATE-GEN. FOR TRADE (Apr. 30, 2020), https://trade.ec.europa.eu/doclib/press/index.cfm?id=2143 [https://perma.cc/NN5U-X9GA].

¹³⁵ Research shows that, on average, it takes 365 to 1,117 days from the date when a panel is established to the date when the panel report is circulated to the public. Simon Lester, *The Timing of Panel Reports*, INT'L ECON. L. & POL'Y BLOG (July 9, 2018), https://ielp.worldtradelaw.net/2018/07/the-timing-of-panel-reports.html [https://perma.cc/ER25-U3A4]. An appeal takes an additional 117 to 170 days from the date before an Appellate Body report is circulated. *Id.* On average, it takes another eleven and a half months before any recommendations are implemented. *Id.*

¹³⁶ For example, the 2009 H1N1 influenza, while being mainly a human health issue, caused several WTO Members to impose import restrictions applying to pigs and pork products, thus implicating the SPS Agreement due to the popular description as "swine flu." *Members Discuss Trade Responses to H1N1 Flu, supra* note 133.

and food imposed by Members at the beginning of the pandemic, concluding that those measures are likely justified so long as their reasoning fits export restriction laws under either WTO or EU laws. ¹³⁷ Similarly, Alan O. Sykes examined the WTO regulations on export restrictions, arguing that justifications under WTO rules serve as escape clauses to induce compliance with commitments and promote the stability of international agreements, while recognizing the inherent limitations of international cooperation. ¹³⁸

On the other hand, Julian Arato, Kathleen Claussen, and J. Benton Heath emphasized the risks of overreliance on exceptions—the exceptionalism—in international trade and investment laws and called for reforms. Christopher T. Robertson, Sergio Puig, and others discussed political and legal means of effectively managing transmissible diseases using the moral-hazard concept. Covering a much broader scope that includes financial, monetary, and development dimensions, Steve Charnovitz advocated for the creation of a set of new rules on international pandemic law—defined as the emerging and potential law of how governments and international organizations should address pandemics like COVID-19. Charnovitz's proposal drew immediate scholarly discussion. This Article contributes to existing literature and debates by proposing GATS-specific rules that seek to guide governments in future health emergencies through a science-based approach.

D. Shortcomings of Existing Plurilateral Trade Agreements

Other international trade instruments, such as PTAs, similarly lack rules dealing specifically with health emergency measures. The recently signed Regional Comprehensive Economic Partnership (RCEP), despite

¹³⁷ JOOST PAUWELYN ET AL., COVID-19 AND TRADE POLICY: WHY TURNING INWARD WON'T WORK 103–09 (Richard Baldwin & Simon Evenett eds., 2020).

¹³⁸ See Alan O. Sykes, Short Supply Conditions and the Law of International Trade: Economic Lessons from the Pandemic, 114 Am. J. INT'L L. 647 (2020).

¹³⁹ See Julian Arato, Kathleen Claussen & J. Benton Heath, *The Perils of Pandemic Exceptionalism*, 114 Am. J. INT'L L. 627 (2020).

¹⁴⁰ See Christopher Robertson et al., Indemnifying Precaution: Economic Insights for Regulation of a Highly Infectious Disease, 7 J.L. & BIOSCIENCES 1 (2020).

¹⁴¹ Steve Charnovitz, *The Field of International Pandemic Law*, INT'L ECON. L. & POL'Y BLOG (May 10, 2020), https://ielp.worldtradelaw.net/2020/05/the-field-of-international-pandemic-law.html [https://perma.cc/FVJ3-CBCE].

¹⁴² Ernst Ulrich Petersmann, Guest Post: Will the 'Charnovitz Principles' Improve Global Health Governance?, INT'L ECON. L. & POL'Y BLOG (May 13, 2020), https://ielp.worldtradelaw.net/2020/05/guest-post-will-the-charnovitz-principles-improve-global-health-governance.html [https://perma.cc/LQP7-WXLC].

containing broadly defined terms like "services," "trade in services," and "measures by a Party affecting trade in services," fails to set forth rules governing health emergency measures in services trade regulation. However, RCEP does incorporate Article XIV of GATS, mutatis mutandis, 144 binding Parties to the same rules of GATS. Arguably, Members can rely on Article 17.13 to justify the adoption of health emergency measures as they are "taken in time of national emergency," assuming Members declare a health emergency as a national emergency. 145 This approach, however, faces similar challenges to those discussed earlier. Notably, RCEP allows parties to adopt emergency measures necessary to protect human life and health despite the impacts on goods trade. 146 An "emergency measure" is a measure that a Party adopts to address the urgent problem—arising or threatening to arise in the territory of the Party—of human life or health protection. 147 Once a Party adopts an emergency measure, the adopting Party shall review it "within a reasonable period of time or on request of the exporting Party" ¹⁴⁸ and "shall provide the result of the review to the exporting Party upon request." ¹⁴⁹ If a Party maintains the emergency measure after the review, the imposing Party must periodically review the measure based on the most recent, available information and shall explain the reasons for the continuation of emergency measures upon request. 150 The exporting Party affected by the emergency measure "may" request discussions with the adopting Party.¹⁵¹ However, due to the separate application of RCEP's SPS Chapter vis-à-vis the Trade in Services Chapter, it does not appear that the "emergency measures" permitted under the trade in goods SPS regime will also apply to services trade. Nevertheless, the "emergency

¹⁴³ The definitions are similar to those of GATS. Regional Comprehensive Economic Partnership, art. 8.1(g), 8.1(l), 8.1(r), 8.2, Nov. 15, 2020, https://rcepsec.org/legal-text/[https://perma.cc/YSA3-PDU2].

¹⁴⁴ Id. art. 17.12.

¹⁴⁵ Id. art. 17.13.

¹⁴⁶ *Id.* art. 5.11 (allowing Members to "adopt an emergency measure that is necessary for the protection of human, animal or plant life or health and that may have an effect on trade").

¹⁴⁷ *Id.* art. 5.1 (defining emergency measures as "sanitary or phytosanitary measure[s] that [are] applied . . . to address an urgent problem of human, animal or plant life or health protection that arise[] or threaten[] to arise in the Party applying the measure").

¹⁴⁸ Id. art. 5.11(3).

¹⁴⁹ *Id*.

¹⁵⁰ Id.

¹⁵¹ Id. art. 5.11(2).

measure" provision can serve as a helpful reference point if Parties decide to amend the Trade in Services Chapter to incorporate periodical review and transparency requirements.

The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)¹⁵² also does not contain rules governing services trade in times of health emergency in its chapter governing "Cross-Border Trade in Services."153 Like RCEP, CPTPP, in its generally applicable "Exceptions and General Provisions" chapter, stipulates that "paragraphs (a), (b) and (c) of Article XIV of GATS are incorporated into and made part of this Agreement, mutatis mutandis."154 Although CPTPP further clarifies that Article XIV of GATS applies to "environmental measures necessary to protect human, animal or plant life or health,"155 the plain language suggests that the focus is on environmental measures instead of health emergency measures. Unlike RCEP, where a state Party may justify health emergency measures under the security exception, the security exception provision in CPTPP does not appear to contemplate such an application. 156 Conversely, CPTPP contains SPS "emergency measure" goods provisions that "address an urgent problem of human, animal or plant life or health protection aris[ing] or threaten[ing] to arise in the Party applying the measure." ¹⁵⁷ Compared to RCEP, CPTPP imposes more stringent review requirements upon imposing Parties. Under CPTPP, an imposing Party "shall review the scientific basis of [a] measure within six months," a strict timeline compared to the "reasonable period of time" requirement under RCEP. 158 As observed in RCEP, the same question remains, (i.e., it is unclear and perhaps quite unlikely) that the emergency measure provision in the SPS chapter will be applicable to the trade in services chapter.

The United States-Mexico-Canada Agreement (USMCA)¹⁵⁹ adopts a similar approach to CPTPP and RCEP. Exceptions governing cross-

¹⁵² See Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), Mar. 8, 2018, https://www.dfat.gov.au/trade/agreements/in-force/cptpp/official-documents [hereinafter CPTPP].

¹⁵³ Trans-Pacific Partnership (TPP), ch. 10, Apr. 15, 1994.

¹⁵⁴ CPTPP, supra note 152, art. 29.1(3) (footnote omitted).

¹⁵⁵ *Id*.

¹⁵⁶ TPP, *supra* note 153, art. 29.2. Paragraph (b) allows a Party to adopt "measures that it considers necessary for the . . . protection of its own essential security interests."

¹⁵⁷ CPTPP, supra note 152, arts. 7.1, 7.14.

¹⁵⁸ Id. art. 7.14.

¹⁵⁹ Agreement Between the United States of America, the United Mexican States, and Canada (USMCA), ch. 15, Nov. 30, 2018, https://ustr.gov/trade-agreements/free-trade

border trade in services are provided in Chapter 32, which sets forth general exceptions that incorporate paragraphs (a), (b), and (c) of Article XIV of GATS mutatis mutandis and clarifies the application of exceptions to environmental measures necessary to protect human health. ¹⁶⁰ USMCA's essential security exception is almost verbatim to that of CPTPP, thus making it difficult for its member states to justify health emergency measures under current jurisprudence. ¹⁶¹ USMCA also permits its parties to impose emergency measures "to address an urgent problem of human, animal or plant life or health" in goods trade and requires the imposing Party to "promptly notify in writing" each affected Party of the emergency measures. ¹⁶² Like CPTPP, a mandatory review within six months and a periodical review afterward are provided. ¹⁶³

Nor are any exceptions specific to health-emergencies provided in the services trade chapter in the Comprehensive Economic and Trade Agreement (CETA)¹⁶⁴ between the EU and Canada. While the language CETA adopts in the general exception chapter does not directly incorporate Article XIV of GATS, it is highly similar to paragraphs (a), (b), and (c) of Article XIV, 165 emphasizing the application of exceptions to environmental measures necessary to protect human health. 166 The security exception in CETA largely resembles Article XIV bis of GATS, allowing its parties to justify measures "taken in time of ... other emergency in international relations." ¹⁶⁷ Because of the extreme similarity between the wording of CETA and WTO instruments, it is not unreasonable to conclude that the high bar for establishing an "emergency in international relations" may likely render a successful justification of health measures difficult. Currently, CETA allows its parties to adopt "emergency SPS measures" with a strict timeframe for notification (24 hours) and

⁻agreements/united-states-mexico-canada-agreement/agreement-between [https://perma.cc/D95G-LL96].

¹⁶⁰ Id. art. 32.1.

¹⁶¹ Id. art. 32.2.

¹⁶² Id. art. 9.14.

¹⁶³ *Id*.

¹⁶⁴ Comprehensive Economic and Trade Agreement (CETA), ch. 9, Oct. 18, 2013, https://ec.europa.eu/trade/policy/in-focus/ceta/ceta-chapter-by-chapter/ [https://perma.cc/T53E-XHTM].

¹⁶⁵ Id. art. 28.3.

¹⁶⁶ Id. art. 28.3 n.2.

¹⁶⁷ Id. art. 28.6.

technical consultations (10 days). However, CETA does so without defining what measures constitute "emergency SPS measures." If CETA adopts a similar definition to that defined in the WTO SPS Agreement (i.e., measures taken when "urgent problems of health protection arise or threaten to arise"), then its approach would be akin to RCEP, CPTPP, and USMCA.

While not a free trade agreement, the EU-China Comprehensive Agreement on Investment (CAI)¹⁷⁰ recognizes the parties' right to regulate to achieve legitimate policy objectives in areas such as public health, suggesting an effect of the COVID-19 pandemic. For instance, CAI permits both parties to adopt measures "necessary to protect human, animal or plant life or health" and "necessary to . . . maintain public order" as long as the measures are not applied arbitrarily, are not unjustifiably discriminatory, and are not disguised restrictions. 171 Interestingly, despite the germane connection between services trade and investment, CAI explicitly references and incorporates general exceptions under Article XX of GATT (regulating trade in goods) but not Article XIV of GATS.¹⁷² The security exception provision in CAI resembles Article XIV bis of GATS, permitting its parties to justify measures "taken in time of ... other emergency in international relations."173 Therefore, issues discussed under Article XIV bis may similarly hinder parties' ability to take prompt actions to address health emergencies. As the published text is for "information purposes only," it remains to be seen if it will be further modified. 174

Despite different treaty languages, one clear theme can be deduced from the above-discussed provisions in those PTAs and BITs:

¹⁶⁸ Id. art. 5.13.

¹⁶⁹ SPS Handbook Training Module: Chapter 2 Operating the SPS Notification Authority, WTO, https://www.wto.org/english/tratop_e/sps_e/sps_handbook_cbt_e/c2s2p2 e.htm [https://perma.cc/6TRQ-E6NJ].

¹⁷⁰ But scholars have expressed the view that CAI may lead to a comprehensive free trade agreement between the EU and China. Manjiao Chi, *The China-EU BIT as a Stepping Stone Towards a China-EU FTA: A Policy Analysis*, 2017 EUR. Y.B. OF INT'L ECON. L. 475, 475–90 (2017).

¹⁷¹ EU-China Comprehensive Agreement on Investment (CAI) § VI(2)(4), Jan. 22, 2021, https://trade.ec.europa.eu/doclib/press/index.cfm?id=2115 [https://perma.cc/T5N9-8RU5].

¹⁷² *Id.* That being said, the high similarity (and near identity) of the wording of the two provisions—GATS Article XIV and CAI Article 4, Section VI, subsection 2—suggests the possibility of applying GATS Article XIV jurisprudence to CAI interpretation and application.

¹⁷³ *Id.* art. 10.

¹⁷⁴ The lead-in note of CAI states that the current "text is published for information purposes only and may undergo further modifications."

governments recognize the significance of flexibility in the exercise of regulatory powers when emergencies arise. The introduction of such emergency measures to SPS chapters in the three recent FTAs furthers the emergency measure provision under the SPS Agreement. It is, therefore, not unreasonable to introduce provisions addressing health emergency measures, as will be further elaborated below, into GATS to accord sufficient flexibility to governments while preserving coordination between Member states and the centrality of the WTO.

IV HOW THE PROPOSED RULES WORK

The proposed framework aims to facilitate coordination and solidarity between WTO Members and simultaneously preserve states' autonomy in protecting the health of its citizenry, with a specific focus on science and services trade. By setting forth the criteria on both the procedural and substantive side, the proposed rules seek to serve as a starting point for further discussion on the appropriate discipline at the multilateral forum.¹⁷⁵

Science and relevant international scientific bodies have played a role in assisting adjudicatory bodies in reaching decisions in past WTO dispute settlements. WTO Members have already become acquainted with the requirement that they rely on science and international standards, and where a higher level of protection is pursued, scientific evidence shall be presented.¹⁷⁶ The SPS Agreement defines international standards by referring to relevant international organizations such as the Codex Alimentarius Commission (Codex), the Food and Agriculture Organization (FAO), the World Organisation for Animal Health (OIE), and the WHO.¹⁷⁷ And in cases involving the SPS Agreement, those bodies have been consulted; documents issued by these bodies or opinions delivered by experts designated by them have assisted panels in assessments.¹⁷⁸ Moreover, the WHO has been

¹⁷⁵ See generally Robert Howse, The WTO System: Law Pol. & Legitimacy 23 (2007).

¹⁷⁶ SPS Agreement, arts. 2.1, 2.3, https://www.wto.org/english/tratop_e/sps_e/spsagr_e.htm [https://perma.cc/DVB2-Q2MM].

¹⁷⁷ Id. Annex A.

¹⁷⁸ See Panel Report, Korea—Measures Affecting the Importation of Bovine Meat and Meat Products from Canada, WTO Doc. WT/DS391/R (adopted July 3, 2012); see also Appellate Body Report, India—Measures Concerning the Importation of Certain Agricultural Products, WTO Doc. WT/DS430/AB/R (adopted June 4, 2015).

involved in the working processes of the Council of Trade in Services.¹⁷⁹ Thus, in the service trade arena, it is not unreasonable to refer to recommendations from the WHO under IHR 2005.

The new provision also seeks to set the benchmark for preferential trade agreements (PTAs). As noted earlier, none of the major PTAs, such as RCEP, CPTPP, USMCA, or CETA, or BITs like CAI, contain a similar provision in their respective trade in services chapter. Thus, given the developments of new regional and cross-continental PTAs, the proposed rule change aims to serve as a template for their discussions on the trade in services chapter.

A. Procedural Aspects of the Proposed Rules

On the procedural side, Members are to notify the Council for Trade in Services, whose responsibilities include the facilitation of the operation of the GATS and the furtherance of its objectives, ¹⁸⁰ no later than the date when the measure becomes effective. Notifications should include a general description of service sectors or subsectors, modes of delivery, related specific commitments that may be affected by the proposed measure(s), a general estimation of the duration of the measure(s), and a brief summary of risks associated with the health emergency and the level of protection the Member desires to achieve through new measures. On the one hand, the purpose and objective of this procedure is to offer an opportunity to the Member who is introducing new measures contrary to GATS general obligations (inter alia MFN) or sector-specific commitments to thoroughly examine the propriety of the proposed measures. On the other hand, it accords an opportunity to other WTO Members to be acquainted with new measures and to prepare accordingly.¹⁸¹

¹⁷⁹ See generally Council for Trade in Services, Note by the Secretariat: Report of the Meeting Held on 14 April 2000, WTO Doc. S/C/M/42 (May 9, 2000); Report to the General Council on Activities During 1998, WTO Doc. S/C/6 (Dec. 7, 1998).

¹⁸⁰ Marrakesh Agreement, *supra* note 44, art. IV(5). The Council for Trade in Services' responsibilities include receiving notifications of measures affecting trade in services. *Id.* art. III; *see generally The Services Council, Its Committees and Other Subsidiary Bodies*, WTO, https://www.wto.org/english/tratop_e/serv_e/s_coun_e.htm [https://perma.cc/XB7D-YEY9].

¹⁸¹ It has been argued that "[p]rocedural obligations enable situations of risk to be regulated with a degree of flexibility, over time, on the basis of ongoing interaction between international actors." CAROLINE E. FOSTER, SCIENCE AND THE PRECAUTIONARY PRINCIPLE IN INTERNATIONAL COURTS AND TRIBUNALS 8 (Cambridge Univ. Press, 2011).

B. Substantive Aspects of the Proposed Rules

Substantively, under the proposed rules, a government would first identify risks, based on scientific evidence where available, and then identify the appropriate level of management for identified risks. Risks may include, but are not limited to, the toxicity of the disease, the transmissibility of the disease, and the harm and adverse effects the disease may cause to human beings. Risk identification refers to both the identification of such risk and the causal relationship between the exposure of identified disease and the severity of harm/adverse effects to human health. Scientific principles and scientific evidence may include established medical research and laboratory results as well as advice, standards, guidelines, and recommendations issued by competent domestic and international health authorities, such as the WHO. Scientific evidence need not be mainstream or settled, so long as it is based on sound scientific principle, logic, and reasoning. 182 Where the scientific evidence is insufficient, for example, with respect to the transmissibility or the causal relationship between the exposure and the severity of harm, as evidenced by the SARS-CoV-2 virus, a Member shall base measures—provisional in nature—on scientific principles and available scientific evidence. The Member should also seek to obtain additional scientific information as a situation develops and be ready to modify measures when justified. The appropriate level of risk management relates to the level of tolerance for such risks within the Member's territory; thus, risk management is highly specific and dependent on the social, cultural, economic, and societal conditions of the particular Member. Moreover, the appropriate level of risk management should be reasonably supported by the identified scientific evidence and should be proportionate, to the extent possible, in its response to the level of protection. Furthermore, the relationship between the appropriate level of risk management vis-à-vis the sectors and subsectors and the delivery modality affected should also be considered, though an exhaustive list of sectors and subsectors is not necessary.

¹⁸² See Vern R. Walker, Keeping the WTO from Becoming the World Trans-Science Organization: Scientific Uncertainty, Science Policy, and Factfinding in the Growth Hormones Dispute, 31 CORNELL INT'L L.J. 251, 258–59 (arguing for the adoption of a "scientifically plausible" standard in the context of SPS Agreement "whenever it is supported by empirical data (as opposed to mere speculation or personal intuition) and by a line of reasoning (often including a model and theory), which together provide a rational basis for drawing a conclusion, even though reasonable scientists might disagree on whether that conclusion is the only inference that can be drawn validly from the data.").

Once a state meets the procedural and substantive criteria described above, deference is given to the appropriate level of risk management the state selects, provided that such selection is not made with arbitrary or unjustifiable discriminatory intent or for the purpose of protectionism. Thus, following the rules establishes a safe harbor if and when the acting Member becomes a respondent before the Dispute Settlement Body (DSB), composed of representatives of all WTO Members. Additionally, states are encouraged, in the course of risk management, to give due consideration to other states in light of the modes of delivery and specific commitments in the schedule that may be negatively affected by the measures. The "good faith" principle in Article 31 of the Vienna Convention on the Law of Treaties would also apply.

Under the proposed rules, states may introduce measures that others may consider precautionary, given the high stakes of human health at issue, ¹⁸⁴ as long as those measures satisfy the procedural and substantive criteria articulated above. The proposed rules also relieve states from resorting to exceptions under GATS Article XIV and Article XIV *bis*, thus reducing the risk of exceptionalism, ¹⁸⁵ which can result from the expansive use of exceptions, as justifications for restrictive measures in other areas. ¹⁸⁶ Furthermore, the proposed rule may incentivize states to adopt better communication, rational decision-making, and transparency mechanisms in addressing concerns coming from both the domestic and foreign fronts. ¹⁸⁷ On the domestic front, better communication regarding the basis for the adoption of the scientifically justified measures would reassure individuals that governments will not take chances with their health and will enhance individual

¹⁸³ Marrakesh Agreement, supra note 44, art. IV.

¹⁸⁴ EC—Asbestos Appellate Body Report, supra note 81, ¶ 153 (suggesting that when the risk to health is high or "carcinogenic," governmental measures may be justified). But cf. Complaint by the United States: EC Measures Concerning Meat and Meat Products (Hormones), ¶¶ 113–118, WTO Doc. WT/DS26/R/USA (Aug. 18, 1997) (rejecting EC's argument that it deserves deferential treatment given that the risk caused by the "carcinogen" to health is high). See also FOSTER, supra note 181, at 73 (recommending international tribunals welcome the precautionary influence and amend the application of rules on burden of proof in order to accommodate the precautionary principle in exceptional cases).

¹⁸⁵ See generally Arato, Claussen & Heath, supra note 139. See generally FEDERICA PADDEU, JUSTIFICATION AND EXCUSE IN INTERNATIONAL LAW (2018) (analyzing the limited availability of justifications such as force majeure, necessity, and distress under international law).

¹⁸⁶ See Tania Voon, The Security Exception in WTO Law: Entering a New Era, 113 AM. J. INT'L L. UNBOUND 45 (2019).

¹⁸⁷ See Robert Howse, Democracy, Science, and Free Trade: Risk Regulation on Trial at the World Trade Organization, 98 MICH. L. REV. 2329, 2330 (2000).

welfare. 188 On the international front, rational decision-making based on scientific evidence could raise awareness and inform other governments. Last but not least, given the central role the Council for Trade in Services is to play, this proposed rule may enhance the WTO negotiation and communication function.

C. A Less-than-Perfect Analogy to the SPS Agreement

The proposed framework bears some similarity to that of the SPS Agreement—with the emphasis on science and the elimination of exceptions—while at the same time recognizing the differences between services trade and goods trade. Thus, WTO jurisprudence under the SPS Agreement may serve as helpful guidance in envisioning the implementation of the proposed rule change, though the analogy is imperfect.¹⁸⁹

The SPS Agreement—purported to "ensure that free trade continues regardless of technological differences or expectations as to what is 'healthy' or 'safe'" —deals with specific health concerns. 191 An

Sanitary or phytosanitary measure – Any measure applied:

- (a) to protect animal or plant life or health within the territory of the Member from risks arising from the entry, establishment or spread of pests, diseases, disease-carrying organisms or disease-causing organisms;
- (b) to protect human or animal life or health within the territory of the Member from risks arising from additives, contaminants, toxins or disease-causing organisms in foods, beverages or feedstuffs;
- (c) to protect human life or health within the territory of the Member from risks arising from diseases carried by animals, plants or products thereof, or from the entry, establishment or spread of pests;
- or (d) to prevent or limit other damage within the territory of the Member from the entry, establishment or spread of pests.

Sanitary or phytosanitary measures include all relevant laws, decrees, regulations, requirements and procedures including, inter alia, end product criteria; processes and production methods; testing, inspection, certification and approval procedures; quarantine treatments including relevant requirements associated with the transport of animals or plants, or with the materials necessary for their survival during

¹⁸⁸ W. KIP VISCUSI, FATAL TRADEOFFS: PUBLIC AND PRIVATE RESPONSIBILITIES FOR RISK 152 (1992).

¹⁸⁹ This imperfect analogy was also recognized by Joel P. Trachtman in the context of discussing Article VI of GATS (domestic regulation) more broadly, including finance regulation, professional regulation, etc. *See* Joel P. Trachtman, *Lessons for GATS Article VI from the SPS, TBT and GATT Treatment of Domestic Regulation*, SSRN (Jan. 29, 2002), https://papers.csm.com/sol3/papers.cfm?abstract_id=298760 [https://perma.cc/GP5L-HH66].

¹⁹⁰ Julie Cromer, Sanitary and Phytosanitary Measures: What They Could Mean for Health and Safety Regulations Under GATT, 36 HARV. INT'L L.J. 557, 568 (1995).

¹⁹¹ Annex A-1 of SPS Agreement defines SPS measure as the following:

SPS Agreement-compliant measure must be based on international standards through a certain objective relationship between the SPS measure at issue and a risk assessment, must conform to scientific principles, or the Member must be able to scientifically justify the measure through a risk assessment. Such a measure must not be more trade restrictive than necessary to achieve the desired level of protection, nor should it be discriminatory or a disguised restriction on international trade through an arbitrary or unjustifiable distinction in the levels of desired protection. Members can set more stringent regulations on a given subject as long as the regulation complies with the obligations set forth above. Once the Member's measure conforms to the requirements, the WTO would not apply a cost-benefit

transport; provisions on relevant statistical methods, sampling procedures and methods of risk assessment; and packaging and labelling requirements directly related to food safety.

A general moratorium on the approval of products has been considered as not an "SPS measure" within the meaning of Annex A-1. Panel Report, *European Communities—Measures Affecting the Approval and Marketing of Biotech Products*, ¶¶ 7.1326–.1465, WTO Doc. WT/DS291/R, WT/DS292/R & WT/DS293/R (adopted Sept. 29, 2006).

192 Appellate Body Report, EC Measures Concerning Meat and Meat Products (Hormones), ¶ 189, WTO Doc. WT/DS26/AB/R & WT/DS48/AB/R, (adopted Jan. 16, 1998). Annex A-4 of SPS Agreement defines risk assessment as:

The evaluation of the likelihood of entry, establishment or spread of a pest or disease within the territory of an importing Member according to the sanitary or phytosanitary measures which might be applied, and of the associated potential biological and economic consequences; or the evaluation of the potential for adverse effects on human or animal health arising from the presence of additives, contaminants, toxins or disease-causing organisms in food, beverages or feedstuffs.

193 SPS Agreement, *supra* note 176, arts. 2(2), 3(3), 5(1). A measure is found to be not based on international standards if it contradicts international standards. *See* Appellate Body Report, *European Communities—Trade Description of Sardines*, ¶ 248, WTO Doc. WT/DS231/AB/R (adopted Sept. 26, 2002); *see also* Panel Report, *India—Measures Concerning the Importation of Certain Agricultural Products*, ¶ 7.629, WTO Doc. WT/DS430/R (adopted Oct. 14, 2014).

194 SPS Agreement, supra note 176, art. 5(6).

195 *Id.* art. 5(5). However, in the early days of the SPS Agreement, Steve Charnovitz expressed concerns over the requirement for national regulatory consistency under Article 5.5 of the SPS Agreement and the subsequent Appellate Body decision in the *Australia—Salmon* case, that "[a]ccusing a government of trade discrimination or a disguised trade restriction is a serious charge that should not be hurled lightly." Steve Charnovitz, *Environment and Health Under WTO Dispute Settlement*, 13 TUL. ENV'T L.J. 271, 283–84 (2000).

196 Alan O. Sykes, Regulatory Protectionism and the Law of International Trade, 66 U. CHI. L. REV. 1, 23 (1999); see also JOANNE SCOTT, THE WTO AGREEMENT ON SANITARY AND PHYTOSANITARY MEASURES 35–41 (2007) (noting WTO Members consider their autonomy centrally important when setting their own levels of protection against risks under the SPS Agreement).

analysis assessing the legality of the measure when it is later challenged before the DSB.¹⁹⁷ Members must also accept the sanitary and phytosanitary measures of other Members as equivalent if the exporting Member objectively demonstrates that its measures achieve the importing Member's appropriate level of sanitary or phytosanitary protection.¹⁹⁸ Where scientific evidence is insufficient—qualitatively and quantitatively¹⁹⁹—a Member may provisionally adopt sanitary or phytosanitary measures on the basis of available pertinent information, provided they review the measure periodically and seek to obtain additional information necessary for objective assessment.²⁰⁰

Where emergency situations exist, Members are permitted to take immediate measures to address such "urgent problems of health protection [that] arise or threaten to arise,"²⁰¹ and they are required to "immediately notify other Members, through the WTO Secretariat."²⁰² As of February 2, 2021, there were 3,551 documents filed under the emergency SPS notification system in either the emergency notification format or addenda emergency format, including 265 emergency notifications in 2020 alone.²⁰³ Take the H1N1 pandemic from June 2009²⁰⁴ to August 2010,²⁰⁵ the first PHEIC under IHR 2005, as an example. Between 2009 and 2010, Members submitted 160 SPS emergency notifications to the WTO,²⁰⁶ 140 of which were filed between January 2009 and August 2010, extending beyond the period of the declared PHEIC. Within that period, nine notifications, all of

¹⁹⁷ Sykes, *supra* note 196, at 31–33.

¹⁹⁸ SPS Agreement, supra note 176, art. 4.

¹⁹⁹ Appellate Body Report, *Japan—Measures Affecting the Importation of Apples*, ¶ 179, WTO Doc. WT/DS245/AB/R (adopted Nov. 26, 2003).

²⁰⁰ SPS Agreement, supra note 176, art. 5(7).

²⁰¹ SPS Handbook Training Module, *supra* note 169.

²⁰² Understanding the WTO Agreement on Sanitary and Phytosanitary Measures, WTO (May 1998), https://www.wto.org/english/tratop_e/sps_e/spsund_e.htm [https://perma.cc/BL5L-AK8P].

²⁰³ Sanitary and Phytosanitary Information Management System, WTO, http://spsims.wto.org/en/Notifications/Search?DoSearch=True&NotificationFormats=7&NotificationFormats=201&DisplayChildren=true [https://perma.cc/8HLD-LE5M].

²⁰⁴ Dr. Margaret Chan, *World Now at the Start of 2009 Influenza Pandemic*, WHO (June 11, 2009), https://reliefweb.int/report/world/world-now-start-2009-influenza-pandemic-statement-press-who-director-general-dr [https://perma.cc/D6YD-HZYA].

²⁰⁵ H1N1 in Post-Pandemic Period, WHO (Aug. 10, 2010), https://www.who.int/news/item/10-08-2010-h1n1-in-post-pandemic-period [https://perma.cc/JG86-52AZ].

²⁰⁶ See Committee on Sanitary and Phytosanitary Measures, *Note by the Secretariat: Notifications Issued During the Month of January 2009*, WTO Doc. G/SPS/GEN/793 (Feb. 2, 2021).

which were made as emergency notifications, specifically cited "H1N1 influenza" in their "objective/issue." ²⁰⁷

As of February 2, 2021, fifty WTO disputes have cited the SPS Agreement in the requests for consultation, among which twenty-five cases cited Article 2.2 of the SPS Agreement, which authorizes governments to adopt measures "necessary to protect human . . . health . . . based on scientific principles." Ten cases cited Article 5.7, which allows Members to "provisionally adopt . . . measures on the basis of available pertinent information, including that from the relevant international organizations . . . as well as applied by other Members" when "relevant scientific evidence is insufficient." All ten cases brought under Article 5.7 were also challenged under Article 2.2. ²⁰⁹ Of the ten cases, three were appealed and have led to the adoption of Appellate Body reports. ²¹⁰ One case resulted in a panel report, ²¹¹ and three cases welcomed the establishment of a panel. ²¹² Another case is

207 These nine emergency notifications are:

G/SPS/N/UKR/2 - EMERGENCY, 1 May 2009, Ukraine;

G/SPS/N/ECU/82 - EMERGENCY, 15 May 2009, Ecuador;

G/SPS/N/JOR/20 - EMERGENCY 25 May 2009, Jordan;

G/SPS/N/ALB/116 - EMERGENCY 29 May 2009, Albania;

G/SPS/N/CHN/116 - EMERGENCY, 5 June 2009, China;

G/SPS/N/CHN/117 - EMERGENCY, 5 June 2009, China;

G/SPS/N/CHN/118 - EMERGENCY, 5 June 2009, China;

G/SPS/N/UKR/6 - EMERGENCY, 3 December 2009, Ukraine; and

G/SPS/N/JOR/22 - EMERGENCY, 4 May 2010, Jordan.

²⁰⁸ See Disputes by Agreement: Sanitary and Phytosanitary Measures, WTO, https://www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.htm [https://perma.cc/T689-VGPH].

209 Id.

²¹⁰ DS430: India—Measures Concerning the Importation of Certain Agricultural Products WTO Doc. (adopted June 19, 2015); DS475: Russian Federation—Measures on the Importation of Live Pigs, Pork and Other Pig Products from the European Union (Mar. 21, 2017); DS495: Korea—Import Bans, and Testing and Certification Requirements for Radionuclides (Apr. 26, 2019).

²¹¹ DS392: United States—Certain Measures Affecting Imports of Poultry from China (Oct. 25, 2010).

²¹² Costa Rica—Measures Concerning the Importation of Fresh Avocados from Mexico, WTO Doc. WT/DS524/3 (panel composed on May 16, 2019). China—Measures Concerning the Importation of Canola Seed from Canada, WTO Doc. WT/DS589 (panel established on July 26, 2021). Panama—Measures Concerning the Importation of Certain Products from Costa Rica, WTO Doc. WT/DS599 (panel established on Sept. 27, 2021), https://www.wto.org/english/news_e/news21_e/dsb_27sep21_e.htm [https://perma.cc/QEQ3-57ZQ].

in consultation,²¹³ and the remaining two cases settled.²¹⁴ Those cases help guide the relationship between the international standard and the risk assessment and the treatment of precautionary measures where scientific evidence is insufficient.

One analogy concerns the relationship between Members' general obligation to base measures on international standards and the specific obligation to perform risk assessments. The highly pathogenic avian influenza (HPAI),²¹⁵ though not designated as a pandemic by the WHO, can cause large-scale outbreaks, serious illness, and even death in humans. Concerned about H5N1 outbreaks, India banned imports of poultry from the United States, a country with no reported cases, ²¹⁶ and other countries. 217 The United States challenged the ban under the SPS Agreement and Article XI of GATT.²¹⁸ In the ruling over the SPS Agreement, the panel found that India failed to base the import ban on or conform to the OIE Terrestrial Code, nor did India conduct a scientific risk assessment of the import ban. 219 The panel also concluded that the measures were more trade-restrictive than necessary.²²⁰ Furthermore, India was found to have failed to recognize the diseasefree areas and areas of low prevalence of the disease under Article 6 of the SPS; thus, India wrongly prohibited imports of poultry products from those "safe" areas.²²¹ The WTO panel essentially sided with the United States. The panel, however, did not address the United States' argument based on the Article 5.7 "precautionary principle" as India

²¹³ See Indonesia—Measures Concerning the Importation of Bovine Meat, WTO Doc. WT/DS506 (began consultations Apr. 4, 2016).

²¹⁴ Australia—Quarantine Regime for Imports, WTO Doc. WT/DS287 (settled on Mar. 9, 2007); Korea—Measures Affecting the Importation of Bovine Meat and Meat Products from Canada, WTO Doc. WT/DS391 (settled on June 20, 2012).

²¹⁵ Influenza (Avian and Other Zoonotic), WHO, https://www.who.int/news-room/fact-sheets/detail/influenza-(avian-and-other-zoonotic) [https://perma.cc/K538-ZANU].

²¹⁶ See H5N1 Avian Influenza: Timeline of Major Events, WTO (Jan. 25, 2012), https://www.who.int/influenza/human_animal_interface/H5N1_avian_influenza_update.pdf [https://perma.cc/JN76-9QU4] (reporting no H5N1 cases in the United States).

²¹⁷ Appellate Body Report, *India—Measures Concerning the Importation of Certain Agricultural Products*, WTO Doc. WT/DS430/AB/R (adopted June 19, 2015).

²¹⁸ Request for Consultation, *India—Measures Concerning the Importation of Certain Agricultural Products*, Doc. WT/DS430/1 (Mar. 8, 2012), https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/G/L/981.pdf&Open=True [https://perma.cc/Z8HU-P2TU].

²¹⁹ Panel Report, *India—Measures Concerning the Importation of Certain Agricultural Products*, ¶ 8.1, WTO Doc. WT/DS430/R (adopted June 19, 2015).

²²⁰ Id.

had not raised it as a defense.²²² The Appellate Body affirmed that the "preferred means for complying with the basic obligations under Article 2 is through the "particular routes" or "specific obligations" set out in Article 5."223 The Appellate Body also affirmed that the "SPS measure found to be inconsistent with Articles 5.1 and 5.2 [risk assessment] can be presumed, more generally, to be inconsistent with Article 2.2."²²⁴ The Appellate Body subsequently agreed with the panel that India failed to base its domestic measures on a risk assessment and conform to OIE Terrestrial Code, thus violating Articles 5.1, 5.2, 3.1, and 3.2, respectively.²²⁵ The Appellate Body also upheld the panel's conclusion that India's failure to recognize disease-free areas was inconsistent with Article 6.²²⁶ However, the Appellate Body reversed the panel's holding on Article 2.2, concluding that the panel should have considered whether the challenged measures were supported by sufficient scientific evidence under Article 2.2.227 As this case illustrates, WTO Members may likely find the science-based approach and scientific evidence-based risk assessment proposed in this Article similar to those provided in the SPS Agreement.

Another analogy relates to the treatment of the precautionary principle.²²⁸ The Appellate Body in *US/Canada—Continued Suspension* recognized a Member's authority to implement emergency measures, holding that "in emergency situations . . . a Member will take a provisional SPS measure on the basis of limited information and the steps it takes to comply with its obligation to seek to obtain additional information." ²²⁹ Initially, the European Community (EC) implemented directives banning the importation of meat and meat products treated

²²² Id. ¶ 7.276 n.581.

²²³ Appellate Body Report, *India—Measures Concerning the Importation of Certain Agricultural Products*, \P 5.23, WTO Doc. WT/DS430/AB/R (adopted June 4, 2015) (citing Appellate Body Reports *Australia—Apples*, \P 339 and *EC—Hormones*, \P 212).

²²⁴ Id.

²²⁵ Id. ¶ 6.1.

²²⁶ Id.

²²⁷ Id. ¶ 5.40.

²²⁸ There were debates on whether Article 5.7 denotes the "precautionary principle" and whether the "precautionary principle" is an accepted norm of international law at the early stage of the operation of the SPS Agreement. Ryan David Thomas, *Where's the Beef? Mad Cows and the Blight of the SPS Agreement*, 32 VAND. J. TRANSNAT'L L. 487, 490 (1999) (stating that, as of 1999, the "Precautionary Principle is not yet an accepted norm of international law").

²²⁹ Appellate Body Report, US/Canada—Continued Suspension of Obligations in the EC Hormones Dispute, \P 680, WTO Doc. WT/DS320/AB/R (adopted Oct. 6, 2008) [hereinafter Continued Suspension].

with six specific growth hormones based on concerns about the impact of hormones on human health.²³⁰ The Appellate Body in the original proceeding found the directives violated Article 5.1 of the SPS Agreement because the EC failed to conduct risk assessment.²³¹ However, the Appellate Body in the original proceeding also recognized that an adequate risk assessment does not have to make a monolithic finding.²³² Subsequently, the EC commissioned scientific studies on the adverse effects of the hormones on human health and modified previous directives, which permanently banned one type of hormone-treated product and provisionally banned products treated with other hormones.²³³ The EC then challenged the United States' and Canada's suspension of benefits under the original EC—Hormones decision. The panel in US/Canada—Continued Suspension agreed with the EC that the standard for risk assessment under Article 5.1 is different from that of Article 5.7.²³⁴ But the panel found that the EC failed to meet the requirements under Article 5.7 because the "insufficiency is [not] to be assessed in relation to the Member's level of protection"235 and the EC failed to demonstrate a "critical mass" of new evidence.²³⁶ The Appellate Body adopted a more deferential attitude toward the state and thus rejected the panel's ruling, holding the "critical mass" standard is "too inflexible."237 According to the Appellate Body, a Member may rely on Article 5.7

Where there is, among other opinions, a qualified and respected scientific view that puts into question the relationship between the relevant scientific evidence and the conclusions in relation to risk, thereby not permitting the performance of a sufficiently objective assessment of risk on the basis of the existing scientific evidence.²³⁸

²³⁰ Complaint by the United States: European Communities—Measures Concerning Meat and Meat Products (Hormones), ¶¶ 2.1–2.5, 2.8–2.9, WTO Doc. WT/DS26/13; WT/DS48 /11 (adopted Feb. 13, 1998).

²³¹ Appellate Body Report, *EC—Hormones*, WTO Doc. WT/DS26/AB/R, WT/DS48 /AB/R, ¶ 253 (adopted Feb. 13, 1998), https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx ?filename=q:/WT/DS/26ABR-01.pdf&Open=True [https://perma.cc/M6U8-J4FU].

²³² *Id.* ¶ 194.

²³³ Continued Suspension, supra note 229, ¶¶ 83–84.

²³⁴ Panel Report, *United States—Continued Suspension of Obligations in the EC—Hormones Dispute*, ¶ 6.170, WTO Doc. WT/DS320/R (adopted Mar. 31, 2008).

²³⁵ Id. ¶ 6.136.

 $^{^{236}}$ Panel Report, US/Canada—Continued Suspension, \P 7.648, WTO Doc. WT/DS320/R (adopted Nov. 18. 2008).

²³⁷ Continued Suspension, supra note 229, ¶¶ 705, 733–734, 736(d)(ii).

²³⁸ *Id.* ¶ 677.

While a Member is obligated to seek new information, it "is not expected to guarantee specific results." ²³⁹

Commentators noted that the Appellate Body's ruling in *US/Canada*—*Continued Suspension* "appears to be an ostensible effort to broaden a regulating member's policy space as to risk factors and scientific evidence" as it "took into account certain nonscientific policy considerations, such as the acceptable level of protection."²⁴⁰ This approach—deference to state—has been subject to criticism²⁴¹ and also commendation.²⁴²

V CHALLENGES TO THE PROPOSED CHANGE

As is the case with scientific debates and sufficiency under the WTO jurisprudence over SPS, the proposed rule change may generate similar concerns and challenges in its application. First and foremost are concerns regarding science both because it continuously evolves²⁴³ and because there is some disagreement on the appropriate role it deserves in policy decision-making. Scholars have cautioned about several risks—especially regulatory risks of depriving governments of sufficient flexibility in decision-making processes—associated with calls for requiring scientific justifications for regulations in other areas of trade.²⁴⁴ The uncertainty of the role that science should play is also reflected in WTO jurisprudence.²⁴⁵ In the original hormone beef case, the Appellate Body stressed the central role of science in risk

²³⁹ Id. ¶ 679.

²⁴⁰ Sungjoon Cho, *Note on US—Continued Suspension of Obligations in the EC—Hormones Dispute*, 103 AM. J. INT'L L. 299, 302 (2009).

²⁴¹ See id.

²⁴² See generally Bryan Mercurio & Dianna Shao, A Precautionary Approach to Decision Making: The Evolving Jurisprudence on Article 5.7 of the SPS Agreement, 2 TRADE L. & DEV. 195 (2010) (stating that the Appellate Body's decision is a step forward).

²⁴³ See generally THOMAS S. KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS (2d ed. 1962) (describing the developments of science in normal times and the revolution of science that supersedes the prior science paradigm in the anomalies and arguing that science guided by one paradigm would be incommensurable with science developed under a different paradigm).

²⁴⁴ Simon Lester, *Food Regulation, Science, Protectionism, and Regulatory Autonomy /Sovereignty*, INT'L ECON. L. & POL'Y BLOG (June 22, 2020), https://ielp.worldtradelaw.net/2020/06/food-regulation-science-and-trade-policy.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+ielpblog+%28International+Economic+Law+and+Policy+Blog%29 [https://perma.cc/YRZ3-7NHF].

²⁴⁵ For a detailed analysis of science and the precautionary principle and their application in international adjudication, *see* FOSTER, *supra* note 181.

assessment,²⁴⁶ whereas the Appellate Body in *Australia—Apples* emphasized a broader array of factors in risk assessment.²⁴⁷ Moreover, diseases that cause health emergencies—especially those declared as PHEICs—are usually novel, fast-spreading, and continuously evolving. Effective treatments are not presently available for these diseases; they may take time to develop, thus leaving limited information, let alone operational international standards, for governments to act upon. This differs from that of SPS, where the asymmetry of information, or insufficiency of information, is remedied by the existence of international standards.²⁴⁸ Additionally, conflicting scientific conclusions will likely occur, and this is more likely to happen when the situation the measures intend to guard is caused by a novel infectious disease like SARS-CoV-2,²⁴⁹ adding more uncertainties to decision-making and coordination.

Another challenge that partly relates to the disagreements on science is the complicated political climate that is a precondition for a multilateral solution. There have been efforts in the past to include a necessity test and to require service trade measures be based on objective and transparent criteria. However, neither has materialized due to non-reconcilable disagreements. There may also exist circumstances under which prior notification may become impracticable, such as the urgency of the emergency, the administrative burden, the lack of human resources, and the costs involved. Further complications and difficulties with balancing different interests while achieving consensus in the proposed rule change may be inferred from

²⁴⁶ See Continued Suspension, supra note 229, ¶ 527.

 $^{^{247}}$ Appellate Body Report, Australia—Measures Affecting the Importation of Apples from New Zealand, \P 208, WTO Doc. WT/DS367/AB/R (adopted Nov. 29, 2010).

²⁴⁸ Sykes, *supra* note 196, at 18–19.

²⁴⁹ Compare Martin Kulldorff et al., Great Barrington Declaration (Oct. 4 2020), https://gbdeclaration.org/ (calling for an approach dubbed "Focused Protection" emphasizing herd immunity), with John Snow Memorandum, https://www.johnsnowmemo.com/ (rebutting the Great Barrington Declaration and calling for government interventions and arguing against uncontrolled transmission as a means to achieve herd immunity) (the John Snow Memorandum was first published in The Lancet on Oct. 15, 2020, https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)32153-X/fulltext) [https://perma.cc/RX3V-43NR].

²⁵⁰ WTO Members Review Further Proposals to Ease Global Trade in Services, WTO (Mar. 14–17, 2017), https://www.wto.org/english/news_e/news17_e/serv_14mar17_e.htm [https://perma.cc/PK2X-ZZNU].

²⁵¹ See U.N. Conference on Trade and Development, Negotiating Liberalization of Trade in Services for Development, 26–29, U.N. Doc. UNCTAD/DITC/TNCD/2019/2. See also GANTZ, supra note 47.

the past experience in amending Article 31 of TRIPs to combat another public health issue, the HIV/AIDS disease.²⁵² But compromise is not unachievable: in 2001, the WTO Ministerial Conference adopted the Doha Declaration on the TRIPS Agreement and Public Health to introduce the mechanism of "compulsory license" with the aim to provide affordable drugs in support of public health.²⁵³ Although currently similar disagreements over an intellectual property waiver exist,²⁵⁴ the hurdle to adopt the proposed rule is not insurmountable, as it would not require governments to give up authority to protect their businesses.²⁵⁵

Furthermore, the role the WTO should play may also be subject to disagreements. This Article assigns the central coordination role to the Council for Trade in Services, expecting it to continue to disseminate information and facilitate regulatory learning.²⁵⁶ However, a scholar has warned against the notion that the "WTO should become, or must become, the 'World Trans-science Organization,' a global meta-

²⁵² See Sandra Bartelt, Compulsory Licences Pursuant to TRIPS Article 31 in the Light of the Doha Declaration on the TRIPS Agreement and Public Health, 6 J. WORLD INTELL. PROP. 283 (2003).

²⁵³ See World Trade Organization, Declaration on the TRIPS Agreement and Public Health of 14 November 2001, WTO Doc. WT/MIN(01)/DEC/2.

²⁵⁴ See Hannah Monicken, U.S., Others Defend IP Rights as Waiver Backers Push for Text-Based Talks, WORLD TRADE ONLINE (Feb. 4, 2021, 4:25 PM), https://insidetrade.com/daily-news/us-others-defend-ip-rights-waiver-backers-push-text-based-talks [https://perma.cc/WMB7-LQTZ]; Members to Continue Discussion on Proposal for Temporary IP Waiver in Response to COVID-19, WTO (Dec. 10, 2020), https://www.wto.org/english/news_e/news20_e/trip_10dec20_e.htm [https://perma.cc/Q5M5-YLZT]; Council for Trade-Related Aspects of Intellectual Prop. Rights, Waiver from Certain Provisions of the TRIPS Agreement for the Prevention, Containment and Treatment of COVID-19: Communication from India and South Africa, ¶¶ 12–13, WTO Doc. IP/C/W/669 (Oct. 2, 2020).

²⁵⁵ It should be recognized that a quick solution may not be achieved, as evidenced by the Doha Declaration, which took a long time before the Ministerial Conference adopted it and even longer before it is fully implemented. See also James Bacchus, An Unnecessary Proposal: A WTO Waiver of Intellectual Property Rights for COVID-19 Vaccines, CATO INST. (Dec. 16, 2020), https://www.cato.org/free-trade-bulletin/unnecessary-proposal-wto-waiver-intellectual-property-rights-covid-19-vaccines [https://perma.cc/6D8Q-BW9V]. The former WTO Appellate Body judge observed that "[c]ompulsory licensing of medicines is not popular with private drug manufacturers because it is a derogation from the customary workings of market-based capitalism." Id.

²⁵⁶ See Andrew Lang & Joanne Scott, The Hidden World of WTO Governance, 20 EUR. J. INT'L L. 575, 575 (2009) (analyzing the works of the Service Council and the Committee on Sanitary and Phytosanitary Measures (SPS Committee) and arguing that both the Service Council and the SPS Committee have played an important role "in generating and disseminating information, and as facilitators of technical assistance and regulatory learning" and in contributing to "the emergence of interpretive communities which serve to elaborate upon the open-ended norms laid down in the relevant agreements").

regulator."²⁵⁷ Recognizing the boundary of the WTO, perhaps ideally, the WTO and the WHO would work proactively, jointly, and cooperatively in handling future pandemics or other health emergencies. Moreover, the role governments should play in regulating the economy is not without debate.²⁵⁸ While some governments may accept and prefer a *laissez-regler* approach,²⁵⁹ others may aspire to be more engaged.²⁶⁰ Meanwhile, the deference the proposed rules accord to states may also generate concerns over the potential of abuse.

Lastly, the current state of affairs at the WTO may also cast doubts on the ability of the WTO to bring about the changes in the proposed rules or in effectuating proactive, effective, and meaningful cooperation with the WHO. As of February 6, 2021, the Appellate Body crisis,²⁶¹ the lack of consensus in reaching a plurilateral agreement on fishery subsidies,²⁶² and the absence of the directorgeneral still persist.²⁶³ Thus, it is not unreasonable to suggest the

²⁵⁷ Vern R. Walker, Keeping the WTO from Becoming the World Trans-Science Organization: Scientific Uncertainty, Science Policy, and Fact Finding in the Growth Hormones Dispute, 31 CORNELL INT'L L.J. 251, 254–55 (1988).

²⁵⁸ Though under a different discipline (antitrust and competition regulation), Eleanor M. Fox summarized three major forces underlying regulations, *inter alia*, the progressive force cautioning against the big business and corporate power, the libertarian force preferring minimum governmental involvement, and the conservatives believing government's ascendant role. Eleanor M. Fox, *Antitrust and Power: The State, the Market, and the Virus*, COMPETITION POL'Y INT'L (Apr. 13, 2020), https://www.competitionpolicy international.com/antitrust-and-power-the-state-the-market-and-the-virus/ [https://perma.cc/PQM5-5U5F].

²⁵⁹ Joel Trachtman, Trade and ... Problems, Cost-Benefit Analysis and Subsidiarity, 9 Eur. J. INT'L L. 32, 37 (1998).

²⁶⁰ See generally Steve Charnovitz, Environment and Health Under WTO Dispute Settlement, 32 INT'L LAW. 901 (1998).

²⁶¹ Dispute Settlement: Appellate Body, WTO, https://www.wto.org/english/tratop_e/dispu_e/appellate_body_e.htm (last visited Oct. 8, 2021) ("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.").

²⁶² See WTO Members Committed to Keeping Up Momentum in Fisheries Subsidies Negotiations, WTO (Dec. 14, 2020), https://www.wto.org/english/news_e/news20_e/fish 14dec20_e.htm [https://perma.cc/F4U9-PSRS].

²⁶³ Bryce Baschuk, *Dysfunction Deepens as Members Fail to Pick an Interim Chief*, BLOOMBERG (July 31, 2020), https://www.bloomberglaw.com/product/blaw/document/QEADJMT0G1L1?criteria_id=460a6af2e3ba5788f1189b8a2b514bf7&searchGuid=e136644c-7efe-49c4-a602-44ca1426eaa1[https://perma.cc/QA5V-VA6Z]. On February 15, 2021, the WTO chose Dr. Ngozi Okonjo-Iweala as Director-General, who took office on March 1, 2021. *History Is Made: Ngozi Okonjo-Iweala Chosen as Director-General*, WTO (Feb. 15, 2021), https://www.wto.org/english/news_e/news21_e/dgno_15feb21_e.htm [https://perma.cc/UT7T-D4LJ].

extensive and fragile authority of the WTO Appellate Body²⁶⁴ may be of limited utility in adjudicating disputes involving the less satisfactory implementation of the proposed rule, even if the WTO Appellate Body is reformed and restaffed.

Despite all these challenges, optimism on the proposed new rules may still be warranted. For one, despite the Appellate Body paralysis, most Members still believe in the WTO and its dispute settlement mechanism, 265 as exemplified by the increase in the number of consultations each year.²⁶⁶ Optimism can also be discerned from Members' efforts to revitalize the WTO as they seek to reform the organization.²⁶⁷ Members have shown their ability to reach consensus on the director-general²⁶⁸ and to advance negotiations on other areas of trade discipline, 269 enabling the WTO to fulfill its designated responsibilities. Thus, it is not unreasonable to expect new leadership to energize WTO Members and bring about changes and reforms, either on the negotiation/rulemaking front or the dispute resolution front. Therefore, given the high stakes the proposed rules purport to address, some degree of deference and regulatory autonomy should be preserved to states, who arguably are in the best position to determine the appropriate level of protection, subject to the WTO's supervision.

²⁶⁴ See generally Gregory Shaffer, Manfred Elsig & Sergio Puig, The Extensive (But Fragile) Authority of the WTO Appellate Body, 79 L. & CONTEMP. PROBS. 237 (2016).

²⁶⁵ Cf. Karen J. Alter, Laurence R. Heifer & Mikael Rask Madsen, How Context Shapes the Authority of International Courts, 79 L. & CONTEMP. PROBS., 1, 9–12 (2016) (stating that authority of international courts comes from the recognition and acceptance of an obligation to comply with a court's ruling and some form of practice to implement the ruling).

²⁶⁶ As of January 19, 2021, 600 cases have been brought to the WTO DSB for consultation, including five cases initiated in 2020 and three in the first nineteen days of 2021. *Dispute Settlement: The Disputes*, WTO, https://www.wto.org/english/tratop_e/dispu_e/dispustats_e.htm [https://perma.cc/48KZ-R2AK].

²⁶⁷ See Albert Hirschman, Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States (1970) (theorizing three approaches that people adopt when firms decline: exit, voice, and reform).

²⁶⁸ See Office of the United States Trade Representative Statement on the Director General of the World Trade Organization, OFF. OF THE U.S. TRADE REPRESENTATIVE (Feb. 5, 2021), https://ustr.gov/about-us/policy-offices/press-office/press-releases/2021/february/office-united-states-trade-representative-statement-director-general-world-trade-organization [https://perma.cc/D8BX-SDZC].

²⁶⁹ See WTO Members Edge Closer to Fisheries Subsidies Agreement, WTO (July 15, 2021), https://www.wto.org/english/news_e/news21_e/fish_15jul21_e.htm [https://perma.cc/ER47-HZM9].

CONCLUSION

This coronavirus pandemic has exposed many of the shortcomings of the current international trade rules. Without clear rules and guidance, the uncertainty on the legality of laws, regulations, and measures adopted in times of health emergencies may hinder policy choices (rightly or wrongly as perceived by affected governments). While current policy and scholarly analysis of governmental measures provide helpful assistance to the assessment ex post, this Article contributes to the discussion by (1) focusing on GATS and (2) by providing an ex ante mechanism that seeks to relieve governments from uncertainties. The proposed rules, therefore, seek to address these challenges and facilitate coordination while preserving states' regulatory autonomy in implementing measures to protect the health of their citizenry.

Procedurally, this Article proposes to impose an ex ante notification requirement, limited to similar health emergency situations. States are required to make notifications to the Council for Trade in Services. The notice includes a general description of service sectors or subsectors, modes of delivery, and related specific commitments that may be affected by the proposed measure(s). It also contains a general estimation of the duration of the measure(s); a brief summary of risks associated with the health emergency; and the level of protection the Member desires to achieve through new measures. It seeks to provide certainty and incentivize interested Members to engage in coordinated actions before taking unilateral measures.

Substantively, it accords deference to the state on its identification of the appropriate level of protection once it identifies risks and bases the measures on scientific evidence. The proposed rules emphasize the importance of scientific principles and scientific evidence and also recognize science's continuous evolution and the novelty of new viruses that cause health emergencies. Under the proposed rules, measures responding to a health emergency may be based on or supported by established medical research and laboratory results as well as advice, standards, guidelines, and recommendations issued by competent domestic and international health authorities. Scientific evidence does not need to be mainstream so long as it is based on sound scientific principles, logic, and reasoning. The proposed rules also set parameters on the prohibition of arbitrary or unjustifiable discriminatory intent or for the purpose of protectionism. The rules encourage states to give due consideration to other states, considering

the modes of delivery and specific commitments in the schedule that may be negatively affected by the measures and adopt the "good faith" principle in Article 31 of the Vienna Convention when making decisions. The proposed rules thus alleviate states' burden of proof in justifying their health emergency measures and minimize the risk of frequent invocation of exceptions.

The universal impact of this and future pandemics requires coordinated action based on scientific evidence and applied in a WTO-compliant way.²⁷⁰ Filling the vacuum of the current GATS rules and debates, this Article, through the proposed rules, aims to balance the twin goals of (1) recognizing governmental autonomy and preserving policy space for governments and (2) promoting solidarity and building confidence in international institutions and multilateralism.

²⁷⁰ Jingyuan Zhou, Facilitating WTO-compliant Responses to International Public Health Emergencies, INT'L ECON. L. & POL'Y BLOG (March 3, 2020), https://www.bloomberglaw.com/product/blaw/document/QEADJMT0G1L1?criteria_id=460a6af2e3ba5788f1189b8a2b514bf7&searchGuid=e136644c-7efe-49c4-a602-44ca1426eaa1.