3

Data-Driven Platform as Service

Classification, Market Access, and Digital Sovereignty

3.1 Introduction

At the platform level, our daily lives are increasingly transformed into structured data flows. Looking back to the negotiating history of the WTO, however, today's platform economy was an unknown market phenomenon when the WTO was established in the early 1990s. At the time of the Uruguay Round negotiations, Mode 1 (cross-border) trade was considered insignificant or even "irrelevant" to most of the services sectors.[1] Such an understanding was reflected in the distribution of the commitments by mode of supply under the GATS. Some 30 percent of all members' market access commitments on Mode 1 services trade are unqualified, that is, without limitations, as compared to only 15 percent of the commitments on Mode 3 (commercial presence).[2] Furthermore, the level of obligations for Mode 1 services trade does not differ in an obvious way between developed and developing countries.[3] Evidently, the GATS negotiators could not have been aware of the future existence and influences of digital platforms. Those pro-liberalization market access commitments on Mode 1 were based on the brick-and-mortar business models in the pre-Google days.

Technological innovations have brought about exponential growth in data generation, analysis, and use. This raises the question of whether the GATS market access commitments, which were made decades ago, remain tenable in this datafied world.[4] From geopolitical perspectives,

[1] GATS, Article I. "Mode 1" refers to services supplied cross-border.

[2] WTO Secretariat, *Guide to the GATS: An Overview of Issues for Further Liberalization of Trade in Services* (Kluwer Law International 2001), at 598, 602.

[3] Mirelle Cossy, "Cross-Border Supply of Services – Pattern of Specific Commitments" (April 28–29, 2005), WTO Symposium on Cross-Border Supply of Services.

[4] Dan Ciuriak, "The Challenge of Updating Institutions for Digital Trade" (2021) Opinion, Centre for International Governance Innovation <www.cigionline.org/articles/the-chal

as discussed in Chapter 2, issues surrounding national security now represent the most challenging battlefield facing international economic legal order. Digital transformation calls into question whether existing market access commitments, which are the result of "bargains" struck in a "previous technological era," can be reasonably sustained,[5] especially when considering the national security risks addressed above.[6] One notable example is when the Trump administration in 2020 decided to bar people in the US from downloading TikTok and WeChat, two social media platforms owned by Chinese companies.[7] China maintained that the services provided by the two platforms are covered by the US' GATS Schedule of Commitments on advertising services, computer-related services, telecommunications, audio-video services, and entertainment services.[8] The dispute over TikTok and WeChat demonstrates the key problems this chapter attempts to address: How are digital platforms covered by the GATS market access obligations? Are trade commitments "resilient" enough to outlive "technological generations?"

Even for services sectors that are less security-sensitive, classification nevertheless matters, as it decides to what extent GATS applies. To illustrate, there are two different groups of obligation under the GATS – "general obligations," such as most-favored-nation treatment and transparency, which are applied across all sectors, and "specific commitments," such as market access and national treatment, which are only applied to those sectors a member inscribes in its Schedule of Commitments. The flexible nature of the latter, as stressed by GATS drafters, was designed to allow each member to adjust the market entry

lenge-of-updating-institutions-for-digital-trade/>. For more discussions, See Shin-yi Peng, "The Uneasy Interplay between Digital Inequality and International Economic Law" (2022) 33(1) European Journal of International Law 205, at 213–215.

[5] Ciuriak, *Ibid*.

[6] See Section 2.2.1 of this book.

[7] The US White House, "Executive Order on Addressing the Threat Posed by WeChat" (August 6, 2020) <https://trumpwhitehouse.archives.gov/presidential-actions/executive-order-addressing-threat-posed-wechat/>.

[8] Inside US Trade, "China Accuses U.S. of Violating WTO Rules in TikTok, WeChat Moves" (October 2, 2020). The Trump administration imposed restrictions on Chinese-owned social media platforms TikTok and WeChat. China claimed that the US actions violate its commitments under the GATS. China maintained that the two platforms provide services covered under GATS obligations, for example, advertising services, computer-related services, telecommunications, audio-video services, and entertainment services. As discussed in Chapter 2, the Biden administration has issued an Executive Order redirecting scrutiny of the Chinese apps.

conditions pursuant to its sector-specific policy concerns and objectives.[9] By scheduling the specific commitments, which have been individually and uniquely exercised by each member "on their own pace,"[10] a member is legally obliged to open a services market pursuant to its GATS Schedule.[11] In other words, market access applies under the GATS on a sector-by-sector basis. Sectoral classification, therefore, is the basis for identifying the scope of market access commitments under the GATS architecture.

Specific commitments have been scheduled based upon classification guidance W/120, prepared by the GATT Secretariat during the Uruguay Round negotiations. W/120 primarily relied upon the United Nations' Provisional Central Product Classification (CPC), dating back to 1991.[12] It goes without saying that services sectors have undergone significant changes since then. Today's commercial realities mean that W/120 classifications have become inadequate, and their correspondence with the CPC is out of date, leading to unreliable segmentations. More and more digital-related services identified in the W/120 and the CPC, such as facsimile services (7521**, 7529**), no longer make modern business sense. At the same time, more and more "new" services are not explicitly covered by the W/120 and the CPC with legal certainty.[13] At the heart of the issue is the scheduling logic of the GATS architecture. The GATS was introduced as a positive-list agreement, in which there is no market access for services trade unless it has been positively inscribed in a member's GATS Schedule.[14] Such a positive-list architecture creates problems for any digitalized service that currently exists in the markets but was not explicitly "described" in the CPC.[15] In this regard, much ink

[9] WTO Secretariat, supra note 2, at 591–592.

[10] Scott Sinclair and Jim Grieshaber-Otto, *Facing the Facts: A Guide to the GATS Debate* (Canadian Center for Policy Alternatives 2002), at 26.

[11] These specific Commitments guarantee minimum levels of treatment. However, note that they do not prevent WTO members' services markets from being more liberal in practice.

[12] United Nations, "Provisional Central Product Classification (CPC)" (1991) <https://unstats.un.org/unsd/classifications/Econ/Download/In%20Text/CPCprov_english.pdf>.

[13] Rolf H. Weber and Mira Burri, *Classification of Services in the Digital Economy* (Springer 2012), at 17–20.

[14] *Ibid.*, at 45. The GATS adopted a hybrid approach to scheduling commitments, with a positive list of sectors in which a member is willing to make binding market access commitments, together with a negative list of nonconforming measures regarding market access and national treatment that are retained in scheduled sectors.

[15] WTO, "Note by the Secretariat" MTN.GNS/W/120 (July 10, 1991). For the purposes of the Uruguay Round negotiations, the WTO Secretariat developed the GATS Services Sectoral Classification List ("the W/120") to enhance the consistency of the commitments

has been spilled surrounding whether search engines like Google are covered by GATS commitments, since China blocked Google.com and redirected traffic to local search engines. Are Google services already accommodated by the existing CPC? Commentators have argued both for and against with respect to the question of whether the W/120 and CPC subsectors "online information retrieval," "value-added telecommunications service," "data processing services," "online hosting and publication services," "advertising services," and "database services" include search engines such as Google.[16] In any event, Google cannot perfectly satisfy any definitions or conditions described in the existing CPC system, and as a result, classifying Google in either subsector seems illogical from a legal perspective. Likewise, how might chat applications such as WhatsApp best be defined? How might virtual meeting services such as Zoom be classified? Similar questions can be raised regarding the classification of endless lists of data-driven activities.

3.2 The "Renewal" of Trade Commitments

3.2.1 Services Digitalization: Technological Neutrality

Market access to data-related services has been the primary litigated area under the GATS. The first WTO ruling concerning e-commerce was on US restrictions over Internet gambling services. Antigua and Barbuda initiated a WTO dispute settlement case against the US,[17] claiming that US Internet gambling restrictions at both the federal and state levels violated its market access commitments to "Entertainment Services" under the GATS. This dispute concerned various US domestic measures

undertaken by members. Although it is optional, most members follow the W/120 classification system, whose 160 subsectors are defined by more detailed descriptions in the CPC. Thus, CPC categories help clarify the scope of the commitments actually undertaken under the GATS, and most members list the corresponding CPC numbers when scheduling their GATS commitments.

[16] See, for example, Henry Gao, "Google's China Problem: A Case Study on Trade, Technology and Human Rights under the GATS" (2011) 6 Asian Journal of WTO & International Health Law & Policy 349, at 364; Tim Wu, "The World Trade Law of Censorship and Internet Filtering" 7(1) Chicago Journal of International Law (2006) 263, at 265.

[17] Appellate Body Report, *United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services (U.S. – Gambling)*, WT/DS285/AB/R, April 20, 2005, paras. 6.19–6.40.

relating to gambling and betting services.[18] The complaining party pointed out that the US measures in dispute constitute a "total prohibition on the cross-border supply of gambling and betting services."[19] It further claimed that the prohibition violated Article XVI:1 of the GATS because, despite having scheduled a "full market access" commitment for the cross-border supply (*i.e.*, Mode 1) of gambling and betting services, the US "maintains and enforces measures prohibiting the cross-border supply" of those services.[20]

In its submission, the US government was of the view that "new technologies, including high-speed telecommunications and the Internet" have brought about explosive growth in online gambling, and such a dramatic increase has raised serious regulatory and law enforcement concerns in the country.[21] The US stressed that throughout its history, the country has consistently imposed tight regulations on the remote supply of gambling.[22] According to the US submission, gambling has been regulated in the US back to the earliest years of the Colonial era,[23] and the country has expanded the relevant regulatory regime for the remote supply of gambling so that it addresses modern threats and, in particular, criminal activities on the Internet.[24] To illustrate the regulatory characteristics of Internet gambling, the US elaborated at length regarding how, compared with nonremote gambling services (*i.e.*, traditional casinos), Internet gambling (*i.e.*, virtual casinos) poses greater threats of organized crime, money laundering, fraud, and youth gambling.[25] The US therefore claimed that a proper interpretation of its GATS

[18] In subsector 10.D of the U.S. GATS Schedule of Specific Commitments, the US inscribed the following entry: "Other Recreational Services (except sporting)." Then, next to that column, in the column titled "Limitations on Market Access," the US listed the four modes of supply, and for Mode 1, the US inscribed the word "None." Based on this entry, Antigua argued that the US has made a full market access commitment to Mode 1 of gambling and betting services.

[19] In this case, the Antiguan gambling and betting services at issue were supplied through the online mode, which, as argued by Antigua, is defined in Article I:2(a) of the GATS and involves a service "delivered within the territory of the member, from the territory of another member."

[20] Panel Report, *U.S. – Gambling*, WT/DS285/R, April 20, 2005, paras. 5.21–5.24.

[21] First Written Submission of the United States, *U.S. – Gambling*, WT/DS285, November 7, 2003, para. 2.

[22] *Ibid.*, para. 8.

[23] *Ibid.*

[24] *Ibid.*, paras. 8–9.

[25] Second Written Submission of the United States, *U.S. – Gambling*, WT/DS285, January 9, 2004, paras. 46–56.

Schedule would show that it had never opened its market to online gambling.

WTO jurisprudence makes clear that "a member's intent is not relevant" in determining whether the member has a commitment with respect to digital-enabled delivery.[26] Instead, under WTO law, the only relevant issue is whether the responding member in this particular dispute has explicitly excluded electronic means of service delivery from the market access commitments in its GATS Schedule.[27] The panel in *U.S. – Gambling*, by citing the "Progress Report of the Work Programme on Electronic Commerce,"[28] indicated that "[it] was the general view that the GATS is technologically neutral in the sense that it does not contain any provisions that distinguish between the different technological means through which a service may be supplied."[29] Noting the principle of "technological neutrality," which, according to the panel, "seems to be largely shared among WTO members," the panel stressed that "where market access and national treatment commitments exist, they encompass the delivery of the service through electronic means."[30] In short, by pointing out that "the GATS does not limit the various technologically possible means of delivery under Mode 1,"[31] the panel considered transactions via electronic media one of the "inherent means of delivery" of Mode 1 trade. Thus, the panel concluded that a market access commitment for Mode 1 implies the right of foreign companies to supply services through all means of delivery, including the Internet.[32]

[26] Panel Report, *China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products (China – Publications and Audiovisual Products)*, WT/DS363/R, January 19, 2010, para. 4.223.

[27] It should be clarified that market access commitments to a particular sector do not prevent states from regulating that sector for legitimate public objectives. See Section 3.5 for more on the relationship between market access and domestic regulation.

[28] Council for Trade in Services, Submission by the United States, "Work Programme on Electronic Commerce" WT/GC/16 (February 12, 1999), para. 4.

[29] Panel Report, *U.S. – Gambling*, adopted April 20, 2005, para. 6.285, footnote 836. The same paragraph also states "[M]ode 1 implies the right for other Members' suppliers to supply a service through all means of delivery, whether by mail, telephone, Internet, etc."

[30] *Ibid.*

[31] *Ibid.*, para. 6.281.

[32] *Ibid.*, paras. 6.285–6.287. Note that the US' appeal focused on the Panel's interpretation of Article XVI:2 (a)(c) of the GATS. The Appellate Body therefore did not review the Panel's finding regarding the means of delivery under Mode 1.

3.2.2 *Services Platformization: Evolutionary Interpretation*

The case of *China – Publications and Audiovisual Products* is another compelling example of how digital technologies have disrupted the traditional understanding of market access commitments.[33] In its GATS Schedule, China opened its market to "sound recording distribution services"[34] and listed no national treatment limitations under Mode 3 (commercial presence) for Chinese-foreign contractual joint ventures. Given these commitments, Chinese-foreign contractual joint ventures, including the majority of foreign-owned joint ventures, should enjoy national treatment in terms of sound recording distribution. The Chinese domestic legal framework,[35] however, limits the ability of foreign-invested enterprises to engage in the distribution of sound recordings by prohibiting these enterprises from "electronically distributing" their music services via online platforms such as iTunes. The US therefore claimed that China's measures were inconsistent with the GATS obligations.[36]

China in turn asserted that online music platforms are not covered by China's GATS market access commitments.[37] China argued that the music industry landscape has been undergoing major structural changes since its WTO accession negotiations. At the time of the negotiation of China's GATS commitments, the legal framework governing the recorded music market exclusively addressed the distribution of sound recordings in their traditional, hard copy format.[38] China submitted several pieces of evidence to support its position that online music services did not constitute an established business operating within the Chinese legal framework during its GATS negotiations, and that China

[33] Appellate Body Report, *China – Publications and Audiovisual Products*, WT/DS363/AB/R, January 19, 2010. This dispute concerns China's national treatment limitations under "Mode 3."

[34] Panel Report, *China – Publications and Audiovisual Products*, paras. 7.1300–7.1311. China committed to allowing foreign services suppliers to establish contractual joint ventures with Chinese partners to engage in sound recording distribution.

[35] First Written Submission of the United States of America, *China – Publications and Audiovisual Products,* WT/DS363, May 13, 2008, para. 357.

[36] More specifically, this refers to China's national treatment commitments under "Mode 3." *Ibid.*, paras. 140–155, 357.

[37] First Written Submission of the People's Republic of China, *China – Publications and Audiovisual Products*, WT/DS363, June 20, 2008, paras. 389–403. The Chinese government argued that electronic distribution of sound recordings was a new phenomenon that emerged fully after China acceded to the WTO.

[38] *Ibid.*, paras. 446–448.

was not aware music was being electronically distributed when it joined the WTO.[39] According to China, the first online music service platforms in China were launched in the early 2000s. In other words, such digital platforms are a new phenomenon that did not exist at the time of China's WTO accession.[40] China therefore claimed that online music platforms, which were not offered for liberalization at the time of its WTO accession, "cannot be committed post hoc through the dispute settlement process."[41]

On this issue, the principle of technological neutrality was central to the US' arguments against China.[42] The US relied on the principle to point out that the differences between physical and digital distribution are not relevant to the interpretation of the scope of a GATS commitment unless specified in a member's schedule.[43] In the view of the US, the electronic distribution of services merely constitutes "a new means of delivery for an existing service," and the GATS is sufficiently dynamic to cover new technological innovations "affecting the delivery of services."[44] The US rebutted that China's position, if accepted, would result in "an unworkable outcome,"[45] simply because in that case, GATS commitments "must be renegotiated each time a new technology results in a new means of supplying a service."[46] The US stressed that by this logic, WTO members could invoke such reasoning to "evade [market access] services commitments" whenever a new form of service delivery technology was developed.[47]

The most important implication of this dispute is the Appellate Body's ambiguous stance on the (in)significance of "technical possibility" and the (ir)relevance of "commercial reality" – namely, the state of technology and the market that existed at the time of the treaty negotiations. The Appellate Body emphasized that, at least in this dispute, the technical and

[39] Panel Report, *China – Publications and Audiovisual Products,* paras. 7.1161–7.1167.
[40] First Written Submission of the People's Republic of China, *China – Publications and Audiovisual Products*, paras. 443–448.
[41] *Ibid.*, para. 509.
[42] Oral Statement of the United States of America at the First Substantive Meeting of the Panel, *China – Publications and Audiovisual Products,* WT/DS363, July 22, 2008, para. 56.
[43] *Ibid.*, para. 51.
[44] *Ibid.*, paras. 72–73.
[45] *Ibid.*, para. 56.
[46] *Ibid.*
[47] *Ibid.*, para. 73.

commercial factual situations are not the central considerations.[48] In this regard, the Appellate Body stated that GATS Schedules constitute a part of the multilateral trade agreements, with "continuing obligations" entered into by WTO members "for an indefinite period of time."[49] The Appellate Body drew attention to the treaty interpretation approach taken in *U.S. – Shrimp*,[50] where the term "exhaustible natural resources" in Article XX(g) of the GATT was read "in the light of contemporary concerns of the community of nations about the protection and conservation of the environment."[51] To summarize, under the concept of evolutionary interpretation, the Appellate Body in *U.S. – Shrimp* reasoned that the GATT was crafted more than fifty years ago, and the generic term "natural resources" in Article XX(g) is not "static" in terms of its content or reference, but is, rather, "evolutionary."[52] Likewise, the Applegate Body in *China – Publications and Audiovisual Products* concluded that the Chinese commitments in the dispute are "generic terms" whose content may "change over time,"[53] namely, from physical to digital.[54]

3.3 Classifying Data-Driven Platforms

3.3.1 *Rapidly Changing Markets: Technologically Future Proof?*

Answering the question raised earlier – whether international trade commitments are sufficiently resilient to outlive technological generations, in particular, from physical to digital – the position of the GATS Council on Services is that the GATS applies even as technology changes a service's delivery method.[55] Therefore, "much of e-commerce

[48] Appellate Body Report, *China – Publications and Audiovisual Products*, paras. 407–410.
[49] *Ibid.*, para. 396.
[50] *Ibid.*, para. 397; Footnote 705.
[51] Appellate Body Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products* (*U.S. – Shrimp*), WT/DS58/AB/R, November 6, 1998, paras. 129–130.
[52] *Ibid.*, para. 130.
[53] Appellate Body Report, *China – Publications and Audiovisual Products*, para. 396.
[54] This discussion draws upon materials in Shin-yi Peng, "Digital Trade" in Daniel Bethlehem et al. (eds), *The Oxford Handbook of International Trade Law* (Oxford University Press 2022), chapter 29; Shin-yi Peng, "Renegotiate the WTO Commitments? Technological Change and Treaty Interpretation" (2012) 45(2) Cornell International Law Journal 403–430.
[55] See Susan Ariel Aaronson and Patrick Leblond "Another Digital Divide: The Rise of Data Realms and its Implications for the WTO" (2018) 21(2) Journal of International Economic Law 245, at 252.

falls within the GATS' scope," and "GATS obligations cover measures affecting the electronic delivery of services."[56] As discussed above, WTO case law has further confirmed that GATS disciplines and obligations extend to services supplied electronically. The reach of existing GATS commitments applies to digital means of service delivery that have emerged since the GATS was concluded in 1994. WTO members need not renegotiate their market access commitments "in the face of ever-changing technology."[57]

If we follow the logic of the Appellate Body in *China – Publications and Audiovisual Products,* when a term in a WTO member's market access schedule is sufficiently "generic," the commitment would be a "timeless" WTO obligation; on the other hand, when the term is sufficiently specific, the commitment would be a "time-bound" obligation that applies to a specific "technological status quo." Under such an interpretive approach, virtually all GATS-specific commitments are made in a "sufficiently generic" way and are therefore open-ended and able to accommodate any possible future means of delivery. For example, Taiwan opened its "Cellular Mobile Phone Services" in its GATS Schedule when it joined the WTO in 2002. What the Taiwanese trade negotiators had in mind at the time of the trade negotiations was the state-of-the-art – namely, 2G – technology. The negotiators were of course unaware of how the powerful 5G technology of today would enable the IoT and AI, as well as how these 5G-enabled applications would change the way we live and work. However, since Taiwan did not specify "2G" in its GATS Schedule, the market access concessions of "Cellular Mobile Phone Services" would automatically evolve into the "new" context as time passes – from 2G to 3G, 4G, 5G . . . and xG. At the core of the issue are the "temporal variations" in human language. Our language meanings are under "constant flux" according to social, cultural, and technological contexts.[58] Should we interpret a GATS market access commitment using the "ordinary meaning" at the time of its treaty conclusion (*i.e.*, historical language) or the "ordinary meaning" at the time of interpretation (*i.e.*, modern language)?[59]

[56] Council for Trade in Services, supra note 28.
[57] Oral statement of the United States of America at the First Substantive Meeting of the Panel, *China – Publications and Audiovisual Products,* para. 75.
[58] Ulf Linderfalk, *On the Interpretation of Treaties* (Springer 2007), at 73.
[59] For more detailed discussions in this regard, see Shin-yi Peng, supra note 54, at 403.

In *China – Publications and Audiovisual Products,* China repeatedly stressed in its written submissions that the only viable way to address the issue of technological and social evolution should be via trade (re)negotiations, rather than via the "fast track" of WTO dispute settlement procedures.[60] If a member wants online services to be liberalized, then it must pursue such liberalization by undertaking new negotiations with other members.[61] In China's view, the WTO tribunals should refrain from anticipating the results of future trade negotiations.[62] The Chinese government pointed out that unduly extending the scope of members' existing GATS commitments would be antithetical to the principle of "progressive liberalization," as reflected in both the GATS Preamble and Article XIX, which indicates that the GATS is aimed at establishing a multilateral framework for the expansion of services trade under conditions of transparency and progressive liberalization.[63] According to China, such a principle shapes the structure of the GATS, which allows members to undertake specific commitments through successive rounds of multilateral negotiations with a view toward incrementally liberalizing their services markets rather than doing so immediately and completely at the time of their WTO accession.[64] China therefore asserted that the same principle requires the panel to base its analysis of the relevant terms in a member's GATS Schedule on their meaning at the time of trade negotiations, so as to prevent the extension of the scope of market access commitments based on "temporal variations in language."[65]

In light of the Appellate Body's evolutionary approach to interpretation, key questions remain: Is the GATS "sufficiently dynamic," as framed by the US in *China – Publications and Audiovisual Products,* to cover every new technological innovation affecting trade in services?[66] Digital technologies and data markets are changing rapidly and

[60] First Written Submission of the People's Republic of China, *China – Publications and Audiovisual Products*, para. 448.
[61] *Ibid.*, para. 510.
[62] *Ibid.*, paras. 512–514.
[63] GATS, the Preamble: "Members . . . Recognizing the right of Members to regulate, and to introduce new regulations, on the supply of services within their territories in order to meet national policy objectives and, given asymmetries existing with respect to the degree of development of services regulations in different countries, the particular need of developing countries to exercise this right . . .."
[64] Appellate Body Report, *China – Publications and Audiovisual Products*, para. 394.
[65] *Ibid.,* para. 47.
[66] Oral Statement of the United States of America at the First Substantive Meeting of the Panel, *China – Publications and Audiovisual Products*, para. 75.

disruptively. Technically, how can we distinguish between "new service supply modalities" and "new services?" Does it make economic and legal sense that the former is already covered by the existing market access commitments, while market access for the latter is subject to future trade negotiations? Relying on concepts such as "technological neutrality" or "evolutionary interpretation" to expand the scope of market access commitments under the GATS, if applied to an extreme, may mean that international trade commitments are future-proof and are therefore "auto-renewed" across technological generations.

3.3.2 *Innovative Business Models: Case-by-Case Approach?*

Classification with definition matters in every legal instrument – it decides the scope of each legal obligation, and it defines the boundary of each regulation. To a large degree, technological uncertainty causes equal challenges to both international trade law and domestic regulation in this regard. After all, "treating like services alike" is a commonly shared regulatory principle. In the context of domestic regulation, classification issues arise along every step of digitalization and datafication. For example, should a "traditional service" and a "platform-based new service" be classified in the same manner for regulatory purposes? City authorities should enforce existing taxi regulations over Uber if it is classified as a transport service, like the traditional taxi. Similarly, Airbnb hosts should be required to obtain licenses if they are classified as real estate agents. For sectoral regulators, the decision on whether the two types of services – one in physical form and the other online – fall within the same regulatory category is dependent upon the characteristics of the services at issue. The central question always surrounds whether the digital platform is "similar to" or "different from" its off-line analogues.[67]

The approaches taken by the European Court of Justice (ECJ) serve as an interesting reference here.[68] On the question of whether Uber should be classified as a "transport services supplier" and should therefore be

[67] This discussion draws upon materials in Shin-yi Peng, "Levelling the Playing Field between Sharing Platforms and Industry Incumbents: Good Regulatory Practices?" in Anupam Chander and Haochen Sun (eds), *Data Sovereignty* (Oxford University Press 2023), chapter 7.

[68] The key legal issue was whether the sharing platforms in question should be classified as "information society services," which could therefore enjoy the benefits of free movement.

required to seek prior regulatory approval, the ECJ decided that the services offered by Uber should not be regarded as an "Information Society Service" under the EU's E-Commerce Directive. Rather, Uber should be legally equated with traditional transport services (*i.e.*, taxi services) that must be regulated.[69] However, the ECJ ruled that Airbnb must be classified as an "Information Society Service" as defined in the E-Commerce Directive. In other words, the ECJ held that Airbnb and Uber should be treated differently.[70] According to the ECJ rulings, the commercial offering provided by Uber is in itself "more than an intermediary service."[71] Overall, Uber's activities should be classified as "intermediation services forming an integral part of an overall service," and "the main component of which is a transport service."[72] In this regard, Uber must comply with the domestic regulations of each EU member state pertaining to "transport services."[73] However, the ECJ stressed that a similarly decisive influence of Airbnb, in terms of its power over the transactions of the accommodation services, could not be identified.[74] The ECJ thus classified the intermediation service offered by Airbnb as an "information society service" that is entitled to the benefits of free movement.[75] In short, different legal classifications trigger the implementation of different sets of rules.

In the above ECJ rulings, the different treatment of the two data-driven platforms is primarily attributable to two factors: first, the ability of users to successfully operate without the platform, and second, the ability of the platforms to control transactions. According to the ECJ's assessment, Airbnb's business model is not comparable to that of Uber, in the sense that "Airbnb's intermediation service is in no way indispensable to the provision of accommodation services."[76] In addition, Uber had exercised "decisive influence" over conditions that are "economically significant aspects of the service," while Airbnb had not.[77] In brief, the technical features and business models of a digital platform are complex

[69] Case C-434/15, Association Professional Elite Taxi v. Uber Systems Spain, SL, 2017 E.C.R. 981.
[70] *Ibid.*
[71] *Ibid.*
[72] *Ibid.*
[73] *Ibid.*
[74] Case C-390/18, Airbnb Ireland, 2019 E.C.R. 1112.
[75] *Ibid.*
[76] *Ibid.*
[77] *Ibid.*

and involve a great number of variables.[78] The ECJ approaches to classifying the commercial nature of a platform are dynamic and pragmatic. Various conclusions can be drawn as to whether a specific platform qualifies as an "information service." The nature of a platform is therefore legally unsettled. In the wake of the ECJ judgments, it would seem that the answer to the question of how to determine the exact nature of the services provided by platforms is dependent upon a case-by-case assessment of the characteristics of a particular platform. This, however, begs the question of relevant criteria, as well as their weighting.

The ECJ's practice of platform classification demonstrates that the WTO is not alone in this "digital dilemma." On the one hand, legal certainty and predictability are valuable attributes in any legal system, and consistency in the application of rules is an important source of legitimacy for any dispute resolution mechanism. It remains difficult to predict how a digital platform will be classified by the ECJ, thereby rendering such platforms subject to either a "light touch" or a "heavy hand" in terms of regulation. This case-by-case uncertainty may invite endless disputes. On the other hand, in light of the unpredictable nature and incredible pace of technology, judicial discretion is becoming a "necessary evil." Judicial activism inheres in the incompleteness of rules. If the definition is sufficiently precise, there is less room for judicial judgments. However, in situations where a classification system does not provide clear-cut definitions, there are opportunities for the tribunals to operate in a reactive manner and engage in dynamic interpretation. Indeed, the classification systems under both the GATS Schedules and the EU E-Commerce Directive are outdated.[79] The WTO and the ECJ will need to continue to classify digital platforms in a judicially active way if the relevant definitions in the legal instruments are disconnected from rapidly changing technologies.

In this context, the EU's Digital Services Act (DSA),[80] which aims to upgrade the more than twenty-year-old EU E-Commerce Directive, applies to a broad category of online players, including "mere conduit" services,

[78] For example, under the EU's Digital Services Act (DSA), core platform services include: online intermediation services (*i.e.*, marketplaces, app stores), online search engines, social networking, cloud services, and advertising services. Regulation (EU) 2022/2065 of the European Parliament and of the Council of October 19, 2022 on a Single Market For Digital Services and amending Directive 2000/31/EC (Digital Services Act).

[79] Note that the DSA is intended to modernize the EU's E-Commerce Directive, which dates back to 2000.

[80] The DSA was first proposed in December 2020 along with another landmark piece of legislation from the EU – the Digital Markets Act (DMA) – to shape the legal order of the digital economy. See Chapters 4 and 5 for further discussion.

"caching" services, hosting services, online platforms, very large online platforms (VLOPs), and very large online search engines.[81] Among other terms, "online platform" is defined in Article 3 (i) of the DSA as follows:

> . . . a hosting service that, at the request of a recipient of the service, stores and disseminates information to the public, unless that activity is a minor and purely ancillary feature of another service or a minor functionality of the principal service and, for objective and technical reasons, cannot be used without that other service, and the integration of the feature or functionality into the other service is not a means to circumvent the applicability of this Regulation. . .[82]

It takes time to determine if such a broad definition can solve the practical issue of legal uncertainty present in the EU E-Commerce Directive. At first glance, the taxonomies offered by the DSA, to a certain extent, overlap and create uncertainty in determining if a regulation is applicable to a particular case. Admittedly, there is no "one-size-fits-all definition" of a digital platform.[83] It is necessary to create multiple taxonomies, as the DSA does, to classify the different kinds of data-driven activities depending on their primary functions, the actors involved, the ways in which they exploit data, the sources of revenue, and the level of control they exercise over users' activities.[84] Logically, the same digital platform may also be classified into multiple categories simply because of the multiple functions it features.[85] In any event, the DSA intends to cover very broad and diversified sets of services offered on the Internet. The definitions therein are functionally constructed, allowing regulators to map the business practices to policy issues. In conclusion, will the approach taken by the DSA end the legal uncertainty? Probably not. However, the approach offers a high degree of generality, which is key in reducing the risk of regulatory disconnection.

3.4 Future Market Access for Data-Driven Platforms

3.4.1 The WTO: Reforms and Renegotiations Needed

Turning back to the international trading regime, what lessons and reflections can we draw from the EU's regulatory experience? This book

[81] DSA, Article 3 (Definitions).
[82] *Ibid.*
[83] European Parliament, "Liability of Online Platforms" (2021) <www.europarl.europa.eu/RegData/etudes/STUD/2021/656318/EPRS_STU(2021)656318_EN.pdf>, at 17.
[84] *Ibid.*, at 17–22.
[85] *Ibid.*, at 16–17.

contends that trade negotiators in this age of datafication must be aware of the impossibility of drafting trade rules that speak directly to every situation and must also recognize the need for constant adaptation to technological advancements. By the same token, some sort of functional approach to market access commitments must be incorporated into trade negotiations. When opening a market to an innovative sector, international trade agreements should employ flexible language so as to allow reasonable room for technological changes, and to prevent market access commitments from becoming quickly overtaken by subsequent events. One example is the functionally simplistic approach to the telecom services sector classification proposed by the EU. Inscribing a simple entry, "any service consisting of the transmission and reception of signals by any electromagnetic means," as suggested by the EU, would seem to end classification uncertainty in the telecom sector.[86] At the end of the day, it is not possible to have a precise and clear-cut definition for market access commitments in the data-driven sectors.

Looking toward the future, substantial reforms and renegotiation are needed in the WTO, assuming it is politically feasible someday. Although both *U.S. – Gambling* and *China – Publications and Audiovisual Products* raised the question of how a schedule of commitments is to be interpreted to include a new service not in existence at the time of negotiations,[87] WTO case law is not entirely clear regarding in what situation and to what extent the "state of technology" that existed at the time of the market access negotiations is relevant in determining the scope of the commitments. On the one hand, digital technology is organic and technologically innovative, and we must read the existing trade commitments in a dynamic and evolutionary way. On the other hand, judicial interpretation may not be the most appropriate method of clarifying whether the W/120 and the CPC cover certain digital trade-related services. What is covered and what is not covered by members' GATS Schedules is an

[86] Communication from the European Commission, "Classification in the Telecom Sector under the WTO-GATS Framework" TN/S/W/27, S/CSC/W/44 (February 10, 2005); As suggested by Brownsword and Somsen, "the more the law strives to be precise and comprehensive, the sooner it is likely to become disconnected from rapidly changing technologies that are its regulatory targets." Roger Brownsword and Han Somsen, "Law, Innovation and Technology: Before We Fast Forward – A Forum for Debate" (2009) 1 Law, Innovation and Technology 1, at 3.

[87] See Sondre T. Helmersen, "The Evolutionary Treaty Interpretation by the WTO Appellate Body" in Georges Abi-Saab et al. (eds), *Evolutionary Interpretation and International Law* (Hart Publishing 2019), at 210–212.

issue that should be (re)negotiated by WTO members, not by litigation.[88]

In conclusion, there is an urgent need for the W/120 scheme to be replaced or revised.[89] Negotiating proposals, including technical discussions regarding how to classify platforms for cloud computing services,[90] have been submitted to address necessary adjustments, and to ensure that services classification and scheduling can accommodate modern commercial and technological developments. The GATS classification/scheduling system must be reformed in light of innovative advances and trends toward a datafied world.[91] From iTunes and Google to TikTok and WeChat, the legal certainty of market access for digital trade cannot be ensured until classifications can be unambiguously defined. Moreover, renegotiations are needed to curb the notion that the GATS Schedules are "future proof" – covering all platform-based, data-driven e-commerce.[92] At the time of this writing, it remains to be seen to what extent the WTO JSI on E-commerce will be able to clarify issues surrounding the market access of digital platforms.

3.4.2 *The FTAs: Data Flows as both the Means and the End*

Under the FTAs concluded in more recent years, the E-Commerce/Digital Trade Chapters can be seen as a flipped governing approach that creates "*de facto* market access" for cross-border services trade. Essentially, the concept underlying the E-Commerce/Digital Trade Chapters was that rather than the "services," the "data flows used to

[88] Shin-yi Peng, "Regulating New Services through Litigation? Electronic Commerce as a Case Study on the Evaluation of Judicial Activism in the WTO" (2014) 48(6) Journal of World Trade 1189, at 1222; Wu, supra note 16, at 283; Gao, supra note 16, at 361–367.

[89] See for example, Communication from Australia and Canada, "Understanding on the Scope of Coverage of CPC 84 – Computer and Related Services" TN/S/W/60, S/CSC/W/51 (January 26, 2007). See also Non-Paper for the Discussions on Electronic Commerce, "Work Programme on Electronic Commerce" JOB/GC/100 (July 25, 2016).

[90] See, for example, Communication from the United States, "Work Program on Electronic Commerce: Ensuring that Trade Rules Support Innovative Advances in Computer Applications and Platforms" S/C/W/339 (September 20, 2011); Communication from the European Commission, "An Enabling Environment to Facilitate Online Transactions" TN/S/W/64 (May 23, 2017).

[91] Lee Tuthill and Martin Roy, "GATS Classification Issues for Information and Communication Technology Services" in Mia Burri and Thomas Cottier (eds), *Trade Governance in the Digital Age* (Cambridge University Press 2012), at 157.

[92] Gao, supra note 16, at 364 (discussing the most appropriate classification for Google's search services); Peng, supra note 54 (discussing whether the GATS is sufficiently dynamic to cover every new technological innovation given its positive-list architecture).

supply the services" require legal protections under an international trade agreement.[93] Under the CPTPP's E-Commerce Chapter and the USMCA's Digital Trade Chapter, as examples, parties have agreed to allow the "cross-border transfer of information . . . by electronic means" when the activity is for the conduct of the business of a covered person under the respective FTA.[94] Therefore, by securing the free flow of data, the E-Commerce/Digital Trade Chapters themselves open the market for data-driven sectors.

At the crux of the matter is the relationship between Cross-Border Trade in Services (*e.g.*, Chapter 10 of the CPTPP, Chapter 15 of the USMCA), on the one hand, and E-Commerce/Digital Trade (*e.g.*, Chapter 14 of the CPTPP, Chapter 19 of the USMCA), on the other hand. To what extent does the latter expand market access for the former? Would the latter be construed as overriding the nonconforming market access measures reserved by parties under the former? Or is it the other way around? How might the regulatory disciplines surrounding data transfer provided in the latter affect the market access commitments of the former? Indeed, when read together, there is an overlap in the scope of application of the Cross-Border Trade in Services Chapter and the E-Commerce/Digital Trade Chapter. For example, a domestic measure restricting health-related data transfer directly involves the obligations on the free flow of data in the E-Commerce/Digital Trade Chapter, and at the same time amounts to a trade barrier to market access for cross-border health services. Therefore, the rules from both chapters simultaneously apply when a domestic measure restricts cross-border data flows. To summarize, when data flow is considered a "means" for the supply of a service, it falls within the scope of the Cross-Border Trade in Services Chapter; when data flow itself is an "end," it is regulated under the E-Commerce/Digital Trade Chapter.[95]

Taking the CPTPP as an example, Cross-Border Trade in Services under the CPTPP, as defined in Article 10.1, contains three modes: cross-border supply (the same as Mode 1 under the GATS), consumption abroad (the same as Mode 2 under the GATS), and the presence of

[93] Thomas Streinz, "International Economic Law's Regulation of Data as a Resource for the Artificial Intelligence Economy" in Shin-yi Peng et al. (eds), *Artificial Intelligence and International Economic Law: Disruption, Regulation, and Reconfiguration* (Cambridge University Press 2021), at 175, 185–186.

[94] CPTPP, Article 14.11(1); USMCA Article 19.11(1).

[95] Streinz, supra note 93, at 185–187.

natural persons (the same as Mode 4 under the GATS). Chapter 10 mirrors similar core obligations in the GATS, including market access. The language of Article 10.5 (Market Access) is to a large extent borrowed from GATS Article XVI, which provides that no party may adopt quantitative limitations on the supply of services. In general, the CPTPP parties take a broad approach to cross-border trade in services, with services covered unless specifically listed in a party's schedule of nonconforming measures. Such a negative-list approach to services market access has in recent years been adopted by a large number of FTAs.[96] According to Article 10.7, the market access obligations under Article 10.5 shall not apply to any measure a party maintains with respect to sectors or activities, as excluded by that party in its Schedule to Annex II.[97] In other words, parties commit to opening the services market except in sectors where the "non-conforming measures" are listed in parties' schedules. Such a modality allows CPTPP parties to reserve the right to maintain or adopt restrictions for a particular sector, namely, to apply any measures that are inconsistent with certain obligations.[98] In short, a party-specific list of reservations enables a party to have full discretion to maintain existing nonconforming domestic regulations or to adopt new regulations without any legal consequences under the CPTPP.

It is important to note that to the extent Chapters 10 (Cross-Border Trade in Services) and 14 (Electronic Commerce) overlap, the former trumps the latter. To illustrate, there are two provisions dealing with the Chapters 10/14 overlap. First, Article 14.2(4) of the CPTPP states that measures affecting the cross-border supply of a service that is delivered electronically are subject to the obligations, nonconforming measures, and exceptions applicable to Chapter 10.[99] Second, Articles 14.2(5) and 14.2(6) of the CPTPP further clarify that any market access-related obligations in Chapter 14 – in particular, Article 14.11 (Cross-Border Transfer of Information by Electronic Means) and Article 14.13 (Location of Computing Facilities) – are subject to the relevant

[96] Unlike the GATS, a negative-list approach is essentially a "top-down" scheduling modality, under which all services sectors are to be opened for market entry unless otherwise specified by parties in their reservation lists appended to the FTA. See Aaditya Mattoo and Pierre Sauvé, "Regionalism in Services Trade" in Aaditya Mattoo et al. (eds), *A Handbook of International Trade in Services* (Oxford University Press 2008), at 256.

[97] CPTPP, Article 10.7.

[98] *Ibid.*

[99] CPTPP, Article 14.2(4).

provisions, exceptions, and nonconforming measures of Chapter 10.[100] For example, in its Annex II of the CPTPP, Australia listed nonconforming measures concerning the market access of distribution services. More specifically, it reserves the right "to adopt or maintain any measure with respect to wholesale and retail trade services of tobacco products, alcoholic beverages or firearms."[101] Assuming that Australia maintains a ban on online tobacco advertising, the marketing restrictions on digital platforms would fall within the Chapters 10/14 overlap. In that case, Article 14.11 (Cross-Border Transfer of Information by Electronic Means) would not apply because Australia did not forgo the right to introduce any market access-impairing tobacco measures in the future.

Much ink has been spilled by commentators regarding how the E-Commerce/Digital Trade Chapter can facilitate the free flow of data and thereby open the digital market. A strict focus on the E-Commerce/Digital Trade Chapter, however, might be too narrow to grasp the full picture.[102] As illustrated above, the Chapter on Cross-Border Trade in Services covers the data flows required to supply the specified services. At the same time, the Chapter on E-Commerce/Digital Trade, although it primarily concerns the regulatory disciplines on data flows, contains market access-related provisions that aim to protect data movement against cross-border data transfer restrictions.[103] When the obligations of the two chapters are in conflict, the obligations in the Cross-Border Trade in Services Chapter prevail.

Turning back to data-driven platforms, the overlapping provisions in the two chapters of the FTAs complicate their global market access. The commitments on "cross-border data flows" would not apply when parties do not allow "cross-border trade in services." In this regard, listing nonconforming measures under the Cross-Border Trade in Services Chapter would represent the most critical step in reserving the right to regulate the digital economy.[104] In the case of the CPTPP, several parties

[100] CPTPP, Article 14.2(5); Article 14.2(6).
[101] CPTPP, Annex II – Australia – 13.
[102] Deborah Elms, "The Comprehensive and Progressive Trans-Pacific Partnership Policy Innovations and Impacts" (2018) Global Economic Dynamics Focus Paper, at 14 (pointing out that "digital economy provisions can be found throughout the [CPTPP] agreement").
[103] Andrew Mitchell, "Brief of Evidence of Andrew David Mitchell in the Matter of the Trans-Pacific Partnership Agreement Inquiry before the Waitangi Tribunal" (2020), para. 96.
[104] See Section 4.4.2 of this book for more discussions.

have carefully safeguarded the boundaries of the services markets. New Zealand, for example, has circumscribed the scope of its CPTPP market access commitments on cross-border trade in services to exclusively match its GATS commitments.[105] Japan, as another striking example, has listed nonconforming market access measures for "all unrecognized or technically unfeasible services" as follows:

> **Cross-Border Trade in Services:**
> Japan reserves the right to adopt or maintain any measure relating to services *other than those recognized or other than those that should have been recognized* by the Government of Japan owing to the circumstances at the date of entry into force of this Agreement. (emphasis added) . . . Japan reserves the right to adopt or maintain any measure relating to the supply of services in any mode of supply in which *those services were not technically feasible at the date of entry into force of this Agreement* (emphasis added).[106]

Obviously, the Japanese inscription was inspired by the *China – Publications and Audiovisual Products* dispute. Considering that the negative-list approach adopted by the CPTPP would allow "new services" to be automatically included in the trade agreement and therefore entitle such services to be traded across borders in the CPTPP markets, Article 10.7 serves as a safety valve, allowing Japan to block not only "all unrecognized or technically unfeasible services," but also the means to deliver such services. Put simply, the inscription ensures that Japan does not risk committing to future services and associated delivery means that do not yet exist.

3.5 The Relationship between Market Access and Domestic Regulation

3.5.1 The Right to Regulate: Digital Sovereignty

Of course, market access obligations under international trade agreements do not prevent countries from adopting or implementing domestic regulations in pursuit of legitimate national policies. The GATS explicitly recognizes the right of members to pursue policy objectives through regulation, even in sectors where they have undertaken full commitments

[105] CPTPP, Annex II – New Zealand – 14.
[106] CPTPP, Annex II – Japan – 5.

to market access.[107] Once a state opens the international trade market of a specific sector, there might be a new need for domestic regulatory interference in the market to accomplish economic objectives such as market competition, or noneconomic social goals such as consumer protection.[108] In a nutshell, domestic regulation is essential to achieve legitimate policy objectives intertwined with trade in services, because the markets do not always work perfectly and cannot always bring about socially desired results by themselves.[109]

A sovereign's right to regulate in the age of datafication has been conceptualized into the notion of "digital sovereignty."[110] In Europe, as the most striking illustration, internal political supports have been overwhelming in shaping policy approaches to enhance Europe's "strategic autonomy" in the digital age.[111] The concept of "digital sovereignty" is thus becoming more and more common in the policy and academic literature, although there are divergent interpretations of it.[112] Various meanings have been attached to the concept. It is often used to denote "the ability of nation states to control the digital infrastructure on their territory and the data of their citizens."[113] The terminology, however, is increasingly used in a much broader context and almost always refers to the digital dimensions of a nation's autonomy,[114] including the ability of states to take action, both proactively and offensively, in the construction of digital infrastructure systems themselves, as well as the production, storage, processing, and analysis of the data of their citizens.[115] We can say that the unprecedented economic and social influence of big tech has

[107] Moreover, a violation of market access obligations might also be justified under exceptions contained in the WTO, such as Articles XIV (General Exceptions) and XIV *bis* (Security Exceptions) of the GATS, as well as in the FTAs, such as Articles 14.11(3) (Legitimate Public Policy Exceptions) and 29.1(3) (General Exceptions) of the CPTPP.

[108] Panagiotis Delimatsis, *International Trade in Services and Domestic Regulations: Necessity, Transparency and Regulatory Diversity* (Oxford University Press 2007), at 87–91.

[109] *Ibid.*, at 87.

[110] European Parliament, "Digital Sovereignty for Europe" (2020) <www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2020)651992 > .

[111] *Ibid.*

[112] The term is often used interchangeably with "data sovereignty."

[113] Lokke Moerel and Paul Timmers, "Reflections on Digital Sovereignty" (2021) EU Cyber Direct <https://eucyberdirect.eu/research/reflections-on-digital-sovereignty>.

[114] European Parliament, "Europe's Digital Decade and Autonomy" (2021) <www.europarl.europa.eu/RegData/etudes/STUD/2021/695465/IPOL_STU(2021)695465_EN.pdf>, at 59.

[115] *Ibid.*

served as the catalyst for the concept of "digital sovereignty," which is rooted in the need to safeguard regulatory authority in a data-driven world.

To summarize, there are growing concerns that individuals are losing control over their data, and that regulators are losing power to shape the legal framework of the digital sphere. Against this context, digital sovereignty has become a common concept to describe a broader range of digital policies and justify related regulation designed to defend a state's interests and values. Nonetheless, as the following chapters will continue to explore, domestic regulations are subject to disciplines under international economic law to safeguard the benefit of market access commitments, ensure that existing market entry is not nullified by unnecessary regulatory requirements, and reduce the likelihood of biased implementation of regulations.[116] In the context of digital trade, governments are free to regulate platforms but must do so in a way that does not constitute unnecessary barriers to trade. After all, the ability of services suppliers to engage in international trade is particularly affected by domestic regulation, including measures related to licensing and qualification requirements and procedures, as well as technical standards. Regulatory protectionism may impose disadvantages on platform services in a manner that is not necessary for the fulfilment of a genuine public policy objective. Domestic regulation adopted without adequate prior notification may prevent foreign services suppliers from competing on a level playing field. Excessive standards may also significantly distort international trade. Therefore, international trade rules should be in place to decide when and under what conditions legitimate policy objectives prevail over digital trade interests. As argued by Delimatsis, market access of the services trade "is only useful when it goes hand in hand with the promotion of sound domestic regulation."[117]

Domestic regulations that are not trade restrictions per se can still have unnecessary trade-restrictive effects. Article VI:4/5 of the GATS itself, however, is too weak to promote best regulatory approaches in an international context.[118] For this reason, Article VI:4 of the GATS

[116] See Section 5.4.2.

[117] Panagiotis Delimatsis, "Concluding the WTO Services Negotiations on Domestic Regulation: Hopes and Fears" (2020) 9(4) World Trade Review 643, 672.

[118] Markus Krajewski, *National Regulation and Trade Liberalization in Services* (Kluwer Law International 2003), at 140; Pierre Sauvé, *Trade Rules Behind Borders: Essays on Services, Investment and the New Trade Agenda* (Cameron May 2003), at113–115.

mandates the development of disciplines to ensure that domestic measures pertaining to licensing and qualification requirements and procedures and technical standards do not constitute unnecessary barriers to the services trade. The conclusion of the WTO JSI on Domestic Regulation, which sets out common rules requiring good regulatory practices, was a significant step in the multilateral trading regime to ensure that "existing liberalization commitments are not nullified by opaque and complex authorization procedures."[119] At the same time, more and more FTAs contain GATS-plus regulatory obligations, especially the trends to include a Regulatory Coherence/ Good Regulatory Practice Chapter in the FTA. This book will take a deep dive into this issue in Chapter 5.

3.5.2 *The Quantity/Quality Dichotomy*

Before we further address issues surrounding platform regulations in Chapters 4 and 5, a central, preliminary question lies in the relationship between market access and domestic regulation. Arguably, the structure of the GATS is based on a separation between domestic measures identified as "limitations on market access" (which fall under Article XVI)[120] and measures adopted to ensure the quality of the service (which fall under Article VI:4/5). Such a structural separation and distinction is based on the rationale that the regulatory intervention cannot be considered as "trade restrictiveness." Pursuant to the Scheduling Guidelines (S/L/92),[121] the market access column in a member's schedule must be confined to specifying the "terms, limitations and conditions of market access" listed in Article XVI:2(a)-(f), which essentially refer to limitations on (a) the "number" of services suppliers; (b) the "value" of transactions or assets; (c) the "number" of service operations or quantity of output; (d) the "number" of natural persons; (e) the legal form of establishment, such as "joint venture" requirements; and (f) foreign

[119] WTO, "Services Domestic Regulation: Rationale and Content, Potential Economic Benefits, and Increasing Prevalence in Trade Agreements" (2022) <www.wto.org/english/tratop_e/serv_e/sdr_factsheet_e_oct21.pdf>, at 2.

[120] Article XVI:1 of the GATS obliges WTO members to accord services and services suppliers of other members "no less favourable treatment than that provided for under the terms, limitations and conditions agreed and specified in its Schedule." Article XVI:2 defines measures that a member should not adopt or maintain, unless otherwise specified in its Schedule.

[121] WTO, "Guidelines for the Scheduling of Specific Commitments Under the General Agreement on Trade in Services" Council for Trade in Services, S/L/92 (March 28, 2001).

"capital participation." S/L/92 further clarifies that "approval procedures or licensing and qualification requirements" should not be scheduled under Article XVI "as long as they do not contain any of the limitations specified in Article XVI."[122] Regarding the distinction between Article XVI (market access) and Article VI:4/5 (domestic regulation), paragraph 11 of the S/L/92 states that the former refers to "maximum limitations," while the latter applies to "minimum requirements." A measure that does not conform to the latter "cannot be scheduled."[123]

In fact, during the Doha Round of negotiations, several members advocated for the "numerical target" as a complementary approach to the services market access negotiations that are "quantitative" in nature.[124] It is therefore reasonable to state that the negotiating modalities and the scheduling technology of GATS market access commitments are numerically oriented and quantity-driven. However, the dichotomy of quality vis-à-vis quantity may not always operate well in the real world. The quantity/quality distinction became blurred in WTO jurisprudence, and the problem of identifying the line between market access and domestic regulation is most acute in the broad interpretation of the concept of "zero quota." In *Mexico – Telecom,*[125] Mexico submitted that the "permit requirement" establishes a "zero quota" for Mode 3 market access.[126] According to Mexico, the permit requirement is qualified by the paragraph indicating the following: "[t]he establishment and operation of commercial agencies is invariably subject to the relevant regulations."[127] Mexico was of the view that nothing in its entry committed it to issuing the corresponding regulations, which is "equivalent to a zero quota."[128] Mexico's arguments point to the confusing boundary

[122] *Ibid.*, para. 11.
[123] *Ibid.*
[124] Communication from the European Commission, "Elements for Complementary Approaches in Services" TN/S/W/55 (October 27, 2005).
[125] Panel Report, *Mexico – Telecom*, para. 4.105.
[126] Mexico's Answer to Question No. 2(a) of the Panel, *Mexico – Telecom* (December 19, 2002).
[127] Panel Report, *Mexico – Telecom*, para. 7.349.
[128] However, the Panel stated that "[i]f the meaning of Mexico's entry is that Mexico has full discretion [regarding] whether or not to issue regulations [governing the granting of licenses], then it follows that Mexico has indeed not undertaken any commitment on the number of suppliers." Panel Report, *Mexico – Telecom,* para. 7.356. The Panel further stated that "subparagraph (d) [of Article XX:1] requires that a schedule shall specify . . . where appropriate the time-frame for implementation of such commitments . . . We therefore consider that subparagraph (d) of Article XX:1 requires the specification of a time-frame for implementation, should a Member wish to implement a

between Articles XVI (market access) and VI (domestic regulation) of the GATS. Unfortunately, the concept of "zero quota" since then has become rooted in WTO jurisprudence. The leading case in this issue is *U.S. – Gambling*. The US argued that regulations on online gambling services are not "quantitative limits" within the meaning of Article XVI:2, and that a commitment under XVI only prohibits "quantitative measures" included in XVI:2.[129] As claimed by the US, "there is no reason why a Member's imposition of nationality-neutral limitations" could violate GATS Article XVI "so long as the particular measures in question do not take the form of numerical quotas or any other form prohibited by Article XVI:2."[130] The Appellate Body in this particular issue ruled that the US measures in the dispute should be considered a limitation within the ambit of Article XVI:2(c) for the reason that it "totally prevents the services operations and output" through one or more or "all means of delivery that are included in Mode 1."[131] Such a ban, according to the panel and the Appellate Body, amounts to a "zero quota," and this constitutes a quantitative limitation within the meaning of Article XVI:2(a) and (c).[132]

As Pauwelyn pointed out,[133] the implication of this confusing ruling is the risk of equalizing the "zero quota effect" of a licensing or qualification requirement (that is a nonquantitative restriction) with a numerical quota (that is a real quantitative limitation). To be sure, the concept that market access and domestic regulation are "mutually exclusive" is overly simplified and at odds with administrative operations in the real world. The key, as commentators have suggested, is to make a distinction between the US regulations in *U.S. – Gambling*, that is, a blanket prohibition that bans gambling services suppliers to zero with respect to all cross-border trade, and other situations under which domestic regulation is of a "less drastic quantitative effect."[134] To conclude, recognizing the

commitment after its entry into force." In the view of the Panel, if a Member does not specify a time-frame, "implementation must be deemed to be concurrent with the entry into force of the commitment." Panel Report, *Mexico – Telecom*, para. 4.137.

[129] Appellate Body Report, *U.S. – Gambling*, para. 83.

[130] *Ibid.*

[131] *Ibid.*, paras. 257–265.

[132] *Ibid.*

[133] Joost Pauwelyn, "Rien ne va plus? Distinguishing Domestic Regulation from Market Access in GATT and GATS" (2005) 4 World Trade Review 131, at 133.

[134] *Ibid.*, *Cf.*, Panagiotis Delimatsis, *International Trade in Services and Domestic Regulations: Necessity, Transparency, and Regulatory Diversity* (Oxford University Press 2007), at 140.

"zero quota" interpretation will be potentially problematic for every domestic regulation that has the "effect" of restricting market access. Therefore, "zero quota" arguments should be used in very limited cases in which the quantitative impact of a licensing/qualification requirement is extreme.

3.5.3 "Market Access Commitments" Matter

Focusing on the rulings from the *U.S. – Gambling* case, to what extent can a WTO member regulate digital platforms assuming, *arguendo*, that such a service is covered by the member's GATS Schedule of Commitments? If the standard of review set by *U.S. – Gambling* remains the precedent-setting case on the quantity/quality dichotomy,[135] how far can domestic regulation go without causing the "zero quota effect" and therefore falling within the scope of Article XVI of the GATS? The following two scenarios related to Teleland and Digiland – both of which are WTO members – demonstrate the relationship between market access and domestic regulation when it comes to platform regulations.

> Scenario one: Teleland decided to prohibit transactions with Digiland-originated mobile apps, referring to them as significant threats to national security and privacy protection. Among the most popular of the banned apps was Let'sTalk, the messaging service owned by Digiland's Superdigital Holding. The government overseeing Teleland cited national security concerns as the justification for the bans, flagging the data-collecting activities of Let'sTalk and the potential for the Digiland government to obtain Teleland citizens' personal information. Let'sTalk was removed from the app stores and was no longer available for download in Teleland. In addition, the Ministry of Information Technology of Teleland issued a blocking order directing telecommunications companies, including the 5G operators and other ISPs, to block access to Let'sTalk.
>
> Scenario two: Amid COVID-19, the considerable increase in demand for digital services, including e-education and e-health, led to an equivalent increase in data volumes in Teleland. At the same time, the social distancing policy dramatically boosted the demand for streaming entertainment content, which strained the telecommunications infrastructure in Teleland. Netfly, which is owned by Digiland's Techmedia Holding, is

[135] Note that many recent FTAs require their dispute settlement panels to "take into account relevant interpretations in reports of WTO panels and the WTO Appellate Body." See, for example, Article 26.22 (Rules of interpretation) of the EU–NZ FTA.

> the dominant subscription streaming TV service in Teleland. In order to alleviate network congestion, the telecom regulator of Teleland issued an order requiring ISPs to prioritize traffic associated with e-education and e-health over traffic from streaming TV services. The order effectively reduced Netfly's network traffic in Teleland by 40 percent, which affected its quality of service and led to a substantial drop in subscribers.

Suppose that Teleland's GATS Schedule of Specific Commitments includes full market access commitments in the relevant sectors on Modes 1 and 3. In these hypothetical cases, the critical question is whether the two measures in dispute – the blocking in scenario one and the throttling in scenario two – constitute market access limitations to cross-border supply pursuant to Article XVI:2 of the GATS. Following the approach of the Appellate Body, Digiland could argue that the ban on Let'sTalk, which amounts to a "zero quota," constitutes a "limitation on the number of services suppliers in the form of numerical quotas" within the meaning of Article XVI:2(a). The issue in scenario two, on the other hand, is less straightforward. Although Teleland's network management has reduced Netfly's network traffic by 40 percent, it does not result in the "zero quota," as the streaming TV service may still operate in Teleland.

To conclude, market access commitment matters. Once full market access commitments are made, the quantitative impact of a member's domestic regulation, if it cannot be justified under general or security exceptions, should not be too extreme. Domestic regulation might be considered a market access limitation simply because it has a substantial "quantitative effect." The broad reading of Article XVI of the GATS in WTO jurisprudence has to some extent intruded upon the regulatory autonomy of WTO members.

3.6 Conclusion

Digitalization, datafication, and platformization were unforeseen phenomena when WTO members made the GATS market access commitments. However, as evidenced by the *U.S. – Gambling* and *China – Audiovisual Services* disputes, these decades-old commitments have certainly played more than a marginal role in the story of the evolution of global datafication. Regardless of whether or not it is a "historical accident," members have undertaken the obligations through the GATS market access commitments, effectively leaving the door open for big tech companies. In view of those market access commitments,

international trade liberalization must be accompanied by the introduction of new domestic regulation to address the potential risks and harms. As explained by Cohen,[136] "the emergence of platform-based business models has reshaped ... the consumption of goods and services." Chapters 4 and 5 will continue to address how platformization may have caused problems – including information manipulation, data capitalism, and algorithm discrimination – that a state cannot easily police.

[136] Julie E. Cohen, "Law for the Platform Economy" (2017) 51 U.C. Davis Law Review 133, at 137.