

Private Standards and the WTO: Reclusive No More

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Abstract: Private standards are increasing in number, and they affect trade, but their status in the WTO remains problematic. Standards-takers are typically countries with little bargaining power, who cannot affect their terms of trade, and, thus, even if they possess domestic antitrust laws, will find it hard to persuade standard-setters to take account of their interests. Our concern is to bring more of these standards within the normative framework of the trade regime – that is, we worry that these private forms of social order can conflict with the fundamental norms of transparency and non-discrimination. The WTO membership has consumed itself in endless discussions regarding mundane, legalistic issues, and has not moved at all towards addressing the real concerns of developing countries. We discuss one aspect of the problem: How reclusive should the WTO allow product standards to be? We argue that the WTO should adopt a ‘Reference Paper’ that would encourage its members to apply WTO rules for adopting those standards that already come under the aegis of the WTO to private standards. In the absence of centralized enforcement, utopia in the WTO legal paradigm, transparency disciplines imposed on standard-setters is the best the WTO could offer to those who are negatively affected by private standards.

1. Regulation, standardization, and private standards

All forms of standardization raise governance issues, from how they are developed to their effects on actors. The institutional form of a standards body with market power is not salient for standard-takers, whether they are small firms or developing

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countries.¹ But some standards bodies are more reclusive than others, which can be consequential, especially for anyone engaged in international trade. We argue that shedding more light on the process through which such ‘private standards’ are developed and implemented would be beneficial. The World Trade Organization (WTO) in its guise as orchestrator or meta-regulator is well placed to promote such transparency. We suggest how the WTO could adapt its state-centric rules to the need for appropriate disciplines in this area.

Private standards bodies are engaged in the governance of the trade regime, and recognizing that role does not imply a demand that they submit to the control of state bodies. Formal and informal institutions, from firms through standard-setting bodies to charitable organizations, share governance roles with government bodies (Freeman, 1999; Macdonald, 2002). This mode of thinking is alien to the WTO, which remains a contract among governments, at least in the thinking of officials. The bright line distinction between what is public, hence subject to WTO rules, and what is private, thus none of its business, still preoccupies the imagination of delegates in Geneva, not least in considering which parts of the universe of (private) standardizing bodies should be subject to WTO principles. We argue in this paper that the governance role of such bodies in the trading system, as in domestic regulation in many countries (we are thinking of debates about ‘incorporation by reference’), is too great to allow them to remain reclusive.

Regulation is a process of social ordering in which only the regulatory form, but not the quantum, changes (Macdonald, 1985). Governments faced with the regulatory challenges of a complex world make a choice along a continuum to:

1. regulate on their own;
2. delegate to an intergovernmental organization such as the OECD, WHO, UNECE, or the IMF;²
3. make use of some sort of recognized non-governmental standardizing body such as the (ISO);³ or
4. leave space for standardization by private bodies.

One can come up with a schema explaining the choice in terms of the degree of interdependence involved in a sector, the need for formal adjudication of conflicts, the demands of local preferences, the extent of vertical integration along supply chains, or the presence or absence of consensual understanding of the problem to be solved. Whether interests are diffuse or concentrated can affect the institutional

¹ A standard-taker is a firm or country that must use a given standard, with little or no opportunity to influence the evolution of the standard, or to decide which standard should be used, and faces switching costs when a new standard in its domain suddenly emerges. While the requirements a large firm imposes on its suppliers can have the same effect on small firms, our concern in this paper is only with standards adopted by standards bodies.

² Organisation for Economic Co-operation and Development; World Health Organization; United Nations Economic Commission for Europe; International Monetary Fund.

³ International Organization for Standardization.

form we pick. One could also explain the choice in terms of variation in the role of governments and markets in a sector, or by the possibility for competition among standards, or preferences for coordination, or the possibility of collaboration. Whatever the choice, power will be present in each location, making many standards effectively mandatory for market access or participation in a supply chain.

The first choice, to regulate on one's own while managing the inevitable spillovers, leads to the 'regulatory cooperation' problem as currently understood by trade negotiators. The second choice, to delegate to international organizations, is uncontroversial. The third choice includes bodies recognized in WTO agreements explicitly (Codex, OIE, IPCC) or implicitly (ISO, IEC, OIML).⁴ Many of these non-governmental standards bodies are effectively multilateral, in the sense that they have accepted the WTO principles for standards bodies described in Section 3 below; a reasonable basis, some claim, for drawing the line between 'international standards' and private standards (ISO, 2010). This group also includes bodies that enjoy a government franchise to coordinate standards in their respective countries, such as SCC, ETSI, CENELEC, CEN, and ANSI (WTO, 2014b).⁵

The fourth choice, the domain of this paper, involves the hundreds of voluntary and private standards. These standards have regulatory effect, and they affect trade. Our concern is to bring more of these standards within the normative framework of the trade regime – that is, we worry that these private forms of social order can conflict with the fundamental norms of transparency and non-discrimination. We do not argue for more formally 'binding' WTO rules judicable in the dispute settlement system. The degree of formality and justiciability of the rules is part of the choice states make. But even a recluse must abide by certain social norms.

The problem of private standards was posed most dramatically in February 2007, when the delegation of Saint Vincent and the Grenadines (hereafter, St Vincent) in a now-famous complaint said in the WTO that:

the proliferation of standards developed by private interest groups without any reference to the SPS Agreement or consultation with national authorities is a matter of concern and presents numerous challenges to small vulnerable economies. (WTO, 2007a)

The proximate reason for the complaint was the EUREPGAP (now GLOBAL GAP) requirements on pesticides used on bananas destined for sale in the European Union (EU) market, a private standard causing several problems for St Vincent exporters who faced yet another non-tariff barrier (WTO, 2005: paras. 16–20). The ultimate purpose of the complaint, however, was to raise the more

⁴ Codex Alimentarius Commission; Organisation Internationale des Epizooties, International Plant Protection Convention, International Electrotechnical Commission, International Organization of Legal Metrology.

⁵ Standards Council of Canada, European Telecommunications Standards Institute, European Committee for Electrotechnical Standardization, European Committee for Standardization, American National Standards Institute, Inc.

general concern that these standards are in conflict with the letter and spirit of the WTO agreements. They can be confusing, compliance with them is costly, and, as a result, developing countries especially find it hard to adjust. St Vincent argued for application of the WTO law to private standards.

St Vincent obviously cared about EUREPGAP, otherwise why complain in the first place? It did not go to great lengths to detail the costs associated with their issuance. And even if it did, it would be arguing its own case, which might, or might not be the standard case among developing countries, the archetypal standard-takers. We first establish why the worry can only be addressed through multilateral action, why the St Vincents of this world cannot find comfort when addressing this issue through their own domestic laws. We will show how the basic principles and norms of the trading system can structure the response. We kick off our discussion, in Section 2, with a brief explanation of why private standards are a novel issue, at least as regulation of world trade is concerned, followed by an explanation of why such standards might meet the benchmark of attributing private action to the state. We will show how the WTO response to St Vincent continues to stumble on the problem of defining private standards, and also entertain a discussion asking what would happen if WTO principles applied to private standards anyway. Having concluded that the situation is fuzzy at the very least, and most likely many private standards evade the WTO disciplines anyway, we will discuss our proposal, our preferred way forward, in Section 3. It is there that we will detail how a Reference Paper, inspired by the negotiation on telecoms, could help address the concerns we have raised in Sections 1 and 2. Section 4 concludes.

We do not try to summarize the large and growing literature on the proliferation of private standards, whether they converge or remain competitive, their effects on welfare, or even their implications for the trading system (Abbott and Snidal, 2009; Thorstensen *et al.*, 2015; Hobbs, 2010; Jansen, 2010; Beghin *et al.*, 2015; Latouche and Chevassus-Lozza, 2015; Alvarez and Hagen, 2011; Maertens and Swinnen, 2015; Djelic and den Hond, 2014; Schepel, 2005; Arcuri, 2013). Instead, we address one particular problem: for what action in its market is a WTO member accountable? *How reclusive should the WTO allow product standards to be?* Our conclusion rests on a claim that states implicitly tolerate even the most private of standards bodies. It seems reasonable, therefore, that states can be held accountable in the WTO for the terms under which they exercise such toleration.

2. The limits of unilateral action by developing countries (standards takers)

Private standards are costly to standards takers. Why did St Vincent not react unilaterally? Why did it have to solicit the WTO? Unilateral response is likely to be inefficient, and probably illegal as well. We explain.

St Vincent could have used antitrust law, to the extent that it had concerns that private standards would raise its domestic producers' costs or harm rivalry in its

domestic market. Such an action presupposes that St Vincent has its own antitrust statute, and a rather sophisticated antitrust authority, and that when enforcing (or threatening to enforce) its own antitrust laws, standard-setters in large markets would get the firm message that unless they were to comply with the laws of this island nation, their sales would suffer. Recall that what we care about here is what standard-takers can do. They typically lack bargaining power to provide a credible threat of painful retaliation, even if they are endowed with skilled antitrust authorities, an unrealistic assumption. St Vincent could also have subjected the standard to a host of consumer protection statutes found in advanced economies, but its consumers would not have been affected by the measure. As an aside, it is interesting that the EUREPGAP standard did not occupy the minds of the officials of the EU antitrust authority.⁶

Even if an antitrust or consumer protection challenge proved successful, the concerns of the traders of St Vincent would remain largely un-addressed. They will still not be allowed to participate in the standard-setting process by foreigners, and will continue to face the same costs when trying to access foreign markets that welcome the challenged standard. The maximum prize in case of victory will be that the market of St Vincent will be open only to the producers of St Vincent, a Pyrrhic victory. Since the measure in question was not a St Vincent regulation or standard, the authorities had no policy tools available to assist their producers, except blocking access to the St Vincent market, which would be no help at all.

The antitrust scenario is problematic from a legal perspective as well. The effects doctrine allows for extraterritorial application of antitrust laws if it is necessary to achieve the objectives of antitrust. Antitrust is the instrument to ensure rivalry in the market, and antitrust authorities use consumer welfare as proxy to this effect. Mavroidis and Neven (1999), in this vein, review practice and literature and conclude that to the extent that restrictive business practices affect the competitive process in the market applying its antitrust laws, then there is nothing wrong with enforcing domestic antitrust laws in order to sanction behavior even by foreigners that occurs elsewhere but affects the market of the enforcer. Antitrust authorities will have a mountain to climb if they were to argue that enforcement of their competition laws is necessary in the scenario we describe. There is only one negative welfare implication, namely the loss of income for producers originating in St Vincent. This is hardly akin to reducing rivalry in the market of the enforcer.

Unilateral response is thus no option. St Vincent was right to seek a multilateral solution by raising the matter in the SPS Committee. How did the WTO respond to the request?

⁶ The reasons for inaction by competition authorities could vary from political economy-type explanations to difficulties in defining the market. Standardized and non-standardized goods often compete in the same market, and there are dozens of overlapping standards.

2.1 *Why do private standards matter to developing countries?*

Consistency of standards with the WTO comes under the aegis of the Agreement on Technical Barriers to Trade (TBT), except those left to the Agreement on Sanitary and Phyto-sanitary Measures (SPS). In principle, to the extent that a standard deals with food safety, animal health, or plant health, it should fall under the SPS, and to the extent it concerns more ‘aggregate’ issues, like labels, it should fall under the TBT. Both agreements elaborate principles and practices for the development of national regulations, and they both promote the use of international standards as a means to advance regulatory harmonization. The WTO privileges certain international standardizing bodies as sources of recognized international standards, but the St Vincent complaint concerned a different group – bodies whose standards affect trade without being endorsed by any state. Although cast as ‘voluntary’ in nature (because they are developed and imposed by private entities), private standards may become de facto a necessary condition for market access. The magnitude of the trade effect will depend on the market power of the individual companies requiring adherence to the standard as well as on the number that do so (WTO, 2012d).

In Baldwin’s (1970) insuperable metaphor, it was quite hard to see the ‘snags’ that existed behind the border back in 1947 when the GATT was negotiated, since the picture was obscured by high tariffs in the US (Smoot-Hawley), and elsewhere. Some private standards pre-date the GATT, but, not surprisingly, the GATT framers paid no attention to this issue. The GATT dedicated only one provision to all domestic policies (Article III). Moreover, the understanding was that only government practices would come under the aegis of the GATT. Some private practices would be addressed through Chapter V of the ITO (International Trade Organization), which never came into force. The success of the GATT in reducing tariffs made trading nations aware of the ‘bite’ of non-tariff barriers (NTBs). But the original focus only on government measures was maintained when the SPS and TBT Agreements were negotiated. Over the last 30 years, however, private standards have proliferated, in part because global markets increase the problem of supply chain management and consumer confidence. In practice, probably because of the trust that consumers have shown in standards, standardization has incited competition among standardizers. Alas, the outcome has been proliferation of standards, and new confusion regarding which standard does what. We live in a world full of standards, and yet not in a standardized world (Timmermans and Epstein, 2010). Dozens of product markets are regulated by more than one standard, sometimes within the same geographic area.

One intuitively is led to believe that the universe of private standards is non-governmental environmental and social standards, but a large number of private standards are driven by firms. They can be categorized as individual company-specific schemes that apply to the whole supply chain (e.g. Tesco ‘Nature’s Choice’), consortia standards in electronics, collective national schemes (e.g. ‘British Retail

Consortium Global Standard Food'), and collective international schemes (e.g. 'Global Food Safety Initiative' or the Forest Standards Council) (WTO, 2007b). Standards can also be classified according to the various actors (states, firms and NGOs) that participate in their elaboration (Abbott and Snidal, 2009), or by the economic functions they perform, including product differentiation, supply chain management, and liability reduction or reputational protection (Hobbs, 2010: 142).

Private standards may also reflect the power structure of an industry, leading at a minimum to switching costs for smaller players in peripheral countries, which is especially the case in the information and communications technology (ICT) sector (Liu, 2014). The nature of this industry means that a greater degree of standardization is necessary to ensure compatibility among products, but the three major standard-setting organizations play relatively minor roles. Commonly used standards in modern ICT products are often developed and maintained by various industry groups and firms whose primary interests are to increase their market competitiveness, and sometimes privilege their intellectual property if embedded in a standard. Consortia are 'ad hoc groups with a clear short-term purpose, often in a fast-moving area of technology with massive impact'. Since participants are like-minded, reaching consensus should not take so long (Zúñiga Schroder, 2009: 1246–1247). Such standards might then be construed as being quicker to emerge, more flexible, more easily monitored by those affected to ensure they are fit for purpose (Pauwelyn, 2014). But standards set by private sector consortia are at risk of being captured by dominant players, with the risk of anti-competitive outcomes such as locking in proprietary technology or barring entry to markets (Wijkström and McDaniels, 2013: 1035).

Why is this a trade issue? Export opportunities for many producers are a function of their participation in global value chains (GVCs). By not complying with private standards, producers of St Vincent will be passing by the opportunity to join GVCs.⁷ And not just St Vincent. Despite its huge share of the global trade in ICT products, Chinese firms often have little say in the development and adoption of new standards in the ICT industry (Kennedy, 2006). China's participation in GVCs has been largely limited to manufacturing, whereas the crafting of new standards is often done at the research and development stage, which tends to happen in the more affluent developed nations. As a result, Chinese ICT firms are at a competitive disadvantage, since they must absorb the costs associated with standardization and compliance, while having very little say in the creation of those standards.

2.2 *Are private standards a matter of concern for WTO law?*

2.2.1 *TBT and SPS measures*

There is no doubt that technical regulations are government acts. Conversely, the 'governmental' nature of standards is debatable. We explain.

⁷ Hoekman (2014) provides a masterful explanation of the gains for developing countries from participating in GVCs.

The central objective of the TBT Agreement, as stated in its Preamble, is:

to ensure that *technical regulations* and *standards*, including packaging, marking and labelling requirements, and procedures for assessment of conformity with technical regulations and standards do not create unnecessary obstacles to international trade.

A technical regulation is a:

document which lays down product characteristics or their related processes and production methods, including the applicable administrative provisions, with which *compliance is mandatory*. (Annex 1 to the TBT Agreement, emphasis added)

A standard is a:

document *approved by a recognized body*, that provides, for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which *compliance is not mandatory*.⁷ (Annex 1 to the TBT Agreement, emphasis added)

2.2.2 *The legal disciplines imposed*

The Code of Good Practice (CGP) for the Preparation, Adoption and Application of Standards, is Annex 3 of the TBT Agreement. WTO members have discussed various additional aspects of good practice since the beginning of the WTO, enriching the original framework through subsequent discussion in the committee. The key principles are: non-discrimination (when applying standards); necessity (standards must be the least restrictive option, that is, the measure that has the least possible negative impacts on trade flows); international standards must constitute the basis of national standards when possible; duplication, that is, WTO members should avoid duplication, which adds unnecessarily to transaction costs; performance- rather than design-based, that is, standards should be performance rather design based so that consumers worldwide can profit from gains in varieties, and international trade is not unduly hampered; standardization, that is, work plans concerning future standardization should be published, and adequate notice should be given to interested parties to allow time for them to send their comments. In addition, the TBT Committee agreed in 2000 to Six Principles that should also be observed when international standards, guides and recommendations are elaborated. International standardizing bodies, such as the ISO, should ensure: transparency, openness, impartiality and consensus, effectiveness and relevance, coherence, and that the concerns of developing countries are addressed (WTO, 2000).

2.2.3 *Where do private standards fit?*

The term 'private standard' is not used at all (let alone defined) in the agreement. Mandatory compliance, the quintessential element of technical regulation, denotes a government act. Only governments have the right to impose similar

behaviour within their sovereignty. Before rushing to conclusions regarding ‘standards’ though, note that states do have some responsibility regarding the manner in which standards are prepared both by their own officials and by recognized bodies who have some sort of franchise for developing standards. Article 4.1 TBT is the relevant provision, and requires that WTO members:

shall take such reasonable measures as may be available to them to ensure that local government and *non-governmental standardizing bodies* within their territories, as well as regional standardizing bodies of which they or one or more bodies within their territories are members, accept and comply with this Code of Good Practice. In addition, Members shall not take measures which have the effect of, directly or indirectly, *requiring or encouraging such standardizing bodies* to act in a manner inconsistent with the Code of Good Practice. The obligations of Members with respect to compliance of standardizing bodies with the provisions of the Code of Good Practice shall apply irrespective of whether or not a standardizing body has *accepted the Code of Good Practice* (emphasis added).⁸

The term ‘non-governmental standardizing bodies’ is not defined in the Agreement, but the term ‘non-governmental body’, a wider term that plausibly encompasses it, is defined in §8 of Annex 1 to the TBT Agreement as follows:

Body other than a central government body or a local government body, including a non-governmental body which has legal power to enforce a technical regulation.

One would imagine that the key element in this definition is the term ‘legal power’. Unless a government has conferred (transferred) legal power to a non-governmental body, it incurs no obligation with respect to its actions. This would mean that, say, a standard operated by Microsoft on its own initiative, which emerged as a business-standard because of the dominance that Microsoft enjoys in the software market, could be developed in total disrespect of the relevant TBT rules. Is this not similar to what St Vincent was complaining about when facing the EUREPGAP standard?

Let us recall a few features of the ISO, the best-known international standardization body, before we move to see the statutory language in the TBT and SPS Agreements. The ISO has 162 members, the National Standards Bodies (NSBs). NSBs are vested with diverging degrees of government authority. This much would lead us to conclude that a ‘governmental’ element permeates the functioning of the ISO. And yet, some NSBs are not standard setters. The ANSI is the US NSB and coordinates the process in the US market, but standards are set by the standards developing organizations (SDOs). The workings of the ISO are therefore largely the workings of private agents.

The SPS Agreement is based on the TBT agreement, with some significant differences. Any sanitary or phytosanitary ‘measure’ should be based on an international standard. The Annex has an expansive list of measures, including regulations and

⁸ Analogous principles with respect to conformity assessment are found in Article 9.2 TBT.

certification procedures. Unlike the TBT, which does not mention any bodies, the SPS Preamble, Article 3, and Annex A mention as among relevant sources of international standards Codex, OIE, and IPCC. The Annex to the Agreement adds that

for matters not covered by the above organizations, appropriate standards, guidelines and recommendations promulgated by other relevant international organizations open for membership to all Members, as identified by the Committee.

Article 13 SPS on implementation (which echoes Article 4.1 TBT) falls short of clarifying the relevance of the SPS Agreement to private standards:

Members shall formulate and implement positive measures and mechanisms in support of the observance of the provisions of this Agreement by *other than central government bodies*. Members shall take such reasonable measures as may be available to them to ensure that *non-governmental entities* within their territories, as well as regional bodies in which relevant entities within their territories are members, comply with the relevant provisions of this Agreement ... Members shall ensure that they *rely on the services of non-governmental entities for implementing sanitary or phytosanitary measures only if these entities comply with the provisions of this Agreement*. (emphasis added)

Here too ‘non-governmental entities’ is not defined. The ‘legal power’ requirement we observed in the TBT context is missing here, but the last sentence is similar. Note that it speaks of bodies on which a state relies to implement SPS measures, such as ‘testing, inspection, certification, and approval procedures’. These bodies must act in accordance with the Agreement. Once again, the link to government functions is quite intense.

Where does this all lead us? From the WTO perspective, an action will come under the WTO disciplines only if it can be attributed to one of its members, which would happen if international standards become a government act.

2.2.4 *The legal benchmark for attributing behavior to a WTO Member*

The WTO is a government-to-government contract, but some private behavior is regulated in the agreements – the antidumping agreement, for example, applies to the measures governments apply to foreign firms. The most salient example in this context is anti-competitive pricing of essential telecommunications facilities in telecoms. The relevant legal obligations are assumed by WTO Members, who must enforce them on private entities through the so-called ‘Reference Paper’ that is incorporated in Members’ Schedules to the General Agreement on Trade in Services (GATS) in accordance with the 1997 Agreement on Trade in Basic Telecommunications Services. It bears repetition that the WTO discipline is imposed on its membership, not on private agents, even though the anti-competitive activity is private. The Reference Paper approach is nevertheless a solution that we think could be transplanted to private standards, and we will come back to this point in Section 6.

The GATT framers limited the ambit of the GATT to state practices. This much is clear since the GATT was only one of the many chapters of the ITO (International Trade Organization) dealing with state-only barriers to trade (Irwin *et al.*, 2008). Some cases are crystal clear. Taxation for example, is typically performed by the state. Some cases are less clear. What if a private bank at the request of the state provides domestic producers with loans at non-market rates? What should the extent of government involvement be for similar behaviour to be considered a state act?

The test starts with an expansive definition of ‘regulation’. The OECD (1997) sees regulation as ‘the diverse set of instruments by which governments set requirements on enterprises and citizens. Such regulations include laws, formal and informal orders and subordinate rules issued by all levels of government, and rules issued by non-governmental or self-regulatory bodies to whom governments have delegated regulatory powers.’ We can go further. Much regulation could be said to be about the structure of incentives (including subsidies), punishment, and institutions (e.g. contract) that can be used to generate desired outcomes (Macdonald, 1985: 104). Government can delegate by omission, in the sense of leaving space that non-state actors can fill as they choose. This act of omission is also a policy decision. What matters for economic actors is not who promulgates or enforces a measure, but whether it restricts or enhances access to a given market. Standards takers (like St Vincent) do not care much about the legal nature of standards they have to comply with. They care about their trade impact.

One of the dominant approaches in trade theory suggests that the point of trade agreements is to manage the way states attempt to manipulate the terms of trade, including through behind-the-border policy changes as well as border measures (Antràs and Staiger, 2012). In this sense, one role for the SPS and TBT agreements is ‘market access preservation’, in that reductions in border barriers can be compromised by behind-the-border measures. Should the WTO be concerned with any measures that compromise market access, even if the measures in question are supposedly ‘private’?

In *Japan–Semiconductors*,⁹ a GATT panel held that activities not performed by a state but which can be attributed to it should come under the ambit of the GATT. The key to attribution is the response to the question ‘would the challenged behaviour have occurred absent incentives by the government to behave in this way?’ Governments thus do not need to compel behaviour. It suffices that they ‘incentivize’ private agents to behave in a particular way in order to be themselves accountable before the WTO. Based on a later WTO case, *Japan–Film*,¹⁰ one could argue that implicit government endorsement of a private standards body could allow

⁹ GATT Panel Report, *Japan – Trade in Semi-Conductors*, adopted on 4 May 1988 (L/6309 - 35S/116).

¹⁰ WTO Panel Report, *Japan – Measures Affecting Consumer Photographic Film and Paper*, WT/DS44/R, circulated 31 March 1998.

evasion of that government's WTO obligations, unless that action was attributed to the government (Wouters and Geraets, 2012: 485).

It is unwarranted to think of the WTO benchmark as some sort of infallible test that will automatically and in a predictable manner respond to the question 'is this government behaviour?' Some judgment is inevitable. Assume for example that a WTO Member did not enforce its antitrust laws when facing a standard that raises rivals' costs. Is that enough to find that it 'incentivized' the private sector to adopt a standard? So far, no case of omission has been attributed to a government, although, in principle at least, nothing should stop a judge from doing just that. It is true, of course, that active endorsement brings us closer to 'incentivizing' behaviour than passive behaviour does. In the latter case, a careful judge would have to measure the significance of omission against other factors that might explain a particular act. In the case of active endorsement, no similar analysis is required.

And it is also true that the distinction between state and private behaviour is not always crystal clear. Sabel (2014), for example, suggests that the distinction makes no sense any time an antitrust authority acquiesces to a private standard by, for example, implicitly or explicitly exonerating it from prosecution. The argument is plausible, although so far no practice has been attributed to a government because it was exonerated from antitrust prosecution. Still, there are standards that, because of the missing market power or the unwillingness of the antitrust authority to intervene in the first place, will never receive some endorsement. In short, some private standards, following Sabel's argument, could be attributed to individual WTO members. And if they are so attributed, then the case for WTO involvement is stronger.

2.5 WTO efforts to address private standards: the devil is in the definition

The St Vincent complaint prompted years of debate in the SPS committee, revealing the extent of conceptual uncertainty about the status of private standards in WTO law. The SPS Committee embarked on a comprehensive study and action programme aiming to provide a solution to the request by the island nation. Instead of trying to come up with a pragmatic, even second-best solution, the WTO membership has spent a few years now trying to define 'private standard'. As we will see, this definitional debate is linked to debates on the meaning of 'international standard'. When a government measure is based on an international standard, it is effectively immunized from challenge in the dispute settlement system.¹¹ If the measure comes from some other source, then other Members are entitled to

¹¹ Do governments use international standards in their regulations? Apparently, though systematic data are hard to find (Fliess *et al.*, 2010). A survey of SPS and TBT specific trade concerns on labeling requirements found multiple occasions when a Member was asked whether a new requirement was based on an international standard – the answer often was no (Baddeley *et al.*, 2012).

question such things as whether it was based on a scientific risk assessment. The definitional debate, therefore, is about the boundaries of WTO law.

2.5.1 *The definitional problem in the SPS Committee*

In response to the concerns raised by St Vincent, the SPS Committee created an ad hoc working group on private standards (for a summary of its work, see WTO, 2014a: section 14). The Working Party developed a set of possible actions regarding SPS-related private standards (WTO, 2008), and the committee eventually adopted five of the 12 actions put forward (WTO, 2011c). Actions that are agreed upon include: establishing a working definition of a private standard; providing regular information updates to international standard-setting bodies (i.e. Codex), sister organizations, and other WTO councils and committees (i.e. TBT Committee) about standards; and working with private entities to help effectively communicate trade concerns at the WTO level as well as the importance of good business practice. The committee has had regular discussions of Actions 2–5, with some clarity emerging. Members expressed significantly different opinions on the other Actions, on which there is still no agreement to proceed – these actions are discussed in section 2.5.2 below.

Everything hinges on Action 1, to establish a working definition of ‘private standard’. The 2012 proposed definition of the term was:

SPS-related private standards are requirements related to food safety, animal or plant life or health developed [and] [and/or] applied by [entities other than governments] [non-governmental entities]. (WTO, 2012c)

The bracketed terms reflect the disagreements among WTO members. Developed countries have held that private standards do not fall within the mandate of the SPS agreement, and hence should rather have no definition at all, or have an ‘innocuous’ definition that would not be perceived as acceptance that they come under the aegis of the WTO. Some members opposed the use of the term ‘non-governmental entities’, which echoes the language of Article 13 of the SPS Agreement: to accept that term in the definition of ‘private standard’ would imply that private standards are already covered by the WTO. Using such terms as ‘organizations other than governments’ would allow discussion to proceed. WTO members on the other side of the debate prefer the terms ‘developed and/or applied’ as they believe that a majority of the problems related to private standards arise from the ‘development’ process (e.g. lack of transparency and stakeholder participation) and from the ‘application’ process (e.g. equivalence and mutual recognition).

When the Committee failed to make progress in regular meetings, they created an ‘electronic working group’ (E-WG) to consult on a definition. After a number of rounds of consultation, the E-WG proposed in September 2014 that the committee consider a new definition:

An SPS-related private standard is: A written requirement or condition, or a set of written requirements or conditions, *related to* food safety, or animal or plant life or health that may be used in commercial transactions and that is applied by a non-governmental entity that is not exercising governmental authority. (WTO, 2014a) (emphasis added)

The words ‘related to’ in the proposed definition cause difficulty for some Members, who see food safety as the government’s job. If a standard goes beyond the safety level set by the government, they think that it is about competition, or quality, but not safety. The private sector does not think that way. Supermarkets frequently compete on claims about how safe their food is, often without any scientific basis for their supposedly higher standard.

Nonetheless most Members are prepared to accept the co-Stewards’ proposed text for a working definition, with the exception of the European Union and the United States, who remain concerned with the use of the terms ‘non-governmental entity’ and ‘requirement’ in the working definition (WTO, 2015c). (The EU was slow to define its position. EU producers themselves complain about the costs for small producers, how private standards can be contradictory, and not harmonized. But many of the private standards in question are located in the EU.) The committee made no progress at two informal meetings in 2015, which reflected ‘more than a mere drafting problem’ in the words of the committee chair (WTO, 2015b). He added that since Members had agreed to develop a definition of private standards, the item would remain on the agenda until they succeed.

2.5.2 *The definitional problem writ large*

The inability to define ‘international standards’ also arises in other WTO bodies. The TBT Committee has tried to avoid the problem. Many Members expressed concern about the emergence of private standards during the fifth review of the TBT agreement in 2009, while others had argued that the term lacked clarity and that its relevance to the implementation of the TBT Agreement had not been established (WTO, 2009). Given this continuing divergence, they could go no farther in the 2012 review than an agreement ‘to exchange information and experiences on reasonable measures taken by Members to ensure that local government and non-governmental standardizing bodies involved in the development of standards within their territories, accept and comply with the Code of Good Practice’. They also agreed to discuss ‘how relevant bodies involved in the development of standards – whether at the national, regional or international level – provide opportunity for public comment’ (WTO, 2012b). They were no closer to consensus three years later in the seventh triennial review (WTO, 2015a).

The SPS Agreement names the three relevant standardizing bodies, but the TBT Agreement does not. That puts a lot of pressure on the TBT committee regarding the question of which bodies are deemed to be a source of ‘relevant international standards’. The EU approach in the Doha Round would see them being named in the TBT Agreement, but the US was opposed since it thinks the focus should

be on the standard not the body that created it (WTO, 2010a). Instead the US proposed defining an international standard as one developed in accordance with the Six Principles (WTO, 2011b; for a more complete discussion, see WTO, 2012d: 198ff). The WTO thus privileges use of measures based on input developed elsewhere without even defining ‘elsewhere’. The definition of ‘international standard’ in the WTO matters to the EU and the US because it matters in the TTIP negotiations, where it affects the respective roles of ANSI, on the one hand, and such bodies as CEN and CENELEC, on the other.

The ability of the Committee to clarify the rules and advance their shared understanding may be hampered by what the Appellate Body did in *US–Tuna II (Mexico)* (WTO, 2012a: para 366ff). It seems that the Appellate Body used the 2000 decision on the Six Principles to decide that the international standard invoked by Mexico was not in fact a standard, which has had a chilling effect on discussion of any further such committee decisions. In this case, the Appellate Body was not so much claiming that the TBT applies to private standards as saying that if a state relies on a standard, then the characteristics of the body are salient to an assessment of whether it is a ‘recognized international standard’ (Wijkström and McDaniel, 2013: 1028), which leaves open the question of whether the larger universe of private standards are now subject to the CGP and the Six Principles.

Voluntary sustainability standards have been under consideration in the Committee on Trade and the Environment (CTE) since the days of its predecessor committee in the GATT, most recently in a Workshop on Environment-related Private Standards, Certification and Labelling Requirements held in 2009. The CTE also received a formal mandate to address ‘labelling for environmental purposes’ in paragraph 32 (iii) of the 2001 Doha Development Agenda, although little has happened. In the CTE, developing country Members reiterate their concerns on market access difficulties due to the rapid proliferation of private standards, but the US maintains the same position as in the TBT – that discussion in the CTE should be limited to government environmental measures. While such a discussion might include reference to privately developed standards that had been or would be incorporated by government into technical regulations, it should not include private standards that could not be attributed to a government (WTO, 2010b). It is true that a label can easily start as (1) a means of product differentiation, then (2) a supply chain requirement, which can become (3) a *de facto* market standard, which governments may eventually incorporate by reference into (4) a technical regulation. It is also true that while the WTO only has a formal mandate to consider the fourth stage, action at earlier stages can have just as much impact on producers who lack market power, and decisions taken at earlier stages in a kind of path dependence may determine the outcome at stage 4, when it will be too late for changes.

Similar debates have taken place in the GATS Working Party on Domestic Regulation (WPDR), set up to carry forward the work mandated in GATS Article VI:4. That Article says that technical standards applying to the provider

of a service should not constitute unnecessary barriers to trade in service. Members have not agreed on whether voluntary standards fall within the scope of the disciplines to be developed, and, if so, how Members can effectively discipline action by private actors outside the overall scope of the GATS (WTO, 2011a).

Agreement on a definition for private standards remains elusive. Our brief review of law and practice in the TBT and SPS shows that both committees perceive the issue, and neither can get past the ‘public–private’ divide, which is partly a north–south debate and partly a transatlantic chasm. The division can be characterized as between the merits of bodies whose membership is open to WTO members (but whose decision-making process can be ponderous), and an alternative based on the level of acceptance of the standard in the market (but whose procedures can be opaque). Something ought to be done, but negotiation on the modalities of WTO action is stymied by the absence of agreement on the quintessential element in this discussion, the definition of the term ‘private standard’.

2.6 *What if the WTO regime applied to private standards?*

Let us assume for a moment that the WTO legal arsenal was applicable to private standards. Would St Vincent have complained in the first place? Maybe.

The key is asymmetry of information, and the ensuing impossibility to influence the shaping of private standards. If the CGP and the Six Principles applied to private standards, traders would be consulted before the entry into force of the proposed standard. St Vincent would not be caught by surprise since EUREPGAP would have profited from comments by its own exporters as well. But even if the final outcome had not reflected the comments made by the tiny Caribbean island nation, its producers would have had enough time to adjust to the new regulatory parameters applicable in their export markets. It would also possess information about the objectives of the measures, its trade impact, and the process for compliance with it. Allowing private standards to be ‘reclusive’, in other words, means effectively ‘insulating’ them from the influence that foreign traders might exercise on their shaping.¹²

The ISO and the IEC already reference the CGP and the Six Principles explicitly in their work (WTO, 2015a). In the US, ANSI, a private sector organization, accredits US standards developing organizations (SDOs). ANSI accepted the CGP on behalf of its over 200 accredited SDOs. But the practice is not always perfect. The ISO process is private, in that no transparency is provided for non-participants. Market forces drive the process. If a company asks for a standard, ISO sends an invitation to capable companies and previous participants in a similar standard setting exercise. Governments do not vote, but they can speak through

¹² Of course, openness of the national economy to international investment, eventual presence of value chains, etc. could be mitigating factors here, in the sense that ‘foreigners’ will be participating in the market where ‘private standards’ will be elaborated.

their large firms – which inherently discriminate against small firms and countries with no large firms. In short, ISO nominally accepts the CGP and the Six Principles, but the practice is not monitored by the WTO. Similarly, ANSI-accredited SDOs should follow the CGP, but they too are not monitored.

Voluntary sustainability standards are developed by a great many bodies, and some at least try to follow the ISEAL Code of Good Practice for Setting Social and Environmental Standards, which defines effective standard-setting processes, based on CGP (ISEAL, 2014). ISEAL runs a compliance process to ensure that its members apply the code properly.¹³ But however hard voluntary sustainability standards bodies try to develop governance models that engage all stakeholders, it will never be possible for reasons of limited resources and efficient operations to ensure a fully open and participatory process for all potential stakeholders (Potts *et al.*, 2014: 59). In short, many organizations on the continuum of standards bodies do follow WTO principles to some extent, but the results are uneven and surveillance is weak. St Vincent was right to complain, and WTO should do more.

3. Squaring the circle: a Reference Paper for private standards?

If we focus on the entities proximately responsible for private standards, they cannot be covered by the WTO because its rules are applicable only to its member states. Viewed from the perspective of traders affected by private standards, however, they are as much a part of the trading system as any other measure affecting participation in international commerce. As we discussed above, measures with regulatory effect exist on a continuum, from complete state authority at one end to limited state responsibility at the other. But any measure represents a choice made by states; hence, the state's responsibility is present all along the continuum.

The WTO should structure the normative framework within which standards bodies operate – what Abbott and Snidal (2009) call orchestration. The WTO would then be what Marx and Wouters (2013) call, with respect to ISEAL, a meta-regulator, in the sense of creating minimum standards to which voluntary sustainability standards should adhere.

It is highly unlikely that the WTO membership will agree to a new WTO Agreement on private standards. The experience in the SPS Committee where dozens of delegates have spent years in discussions on the definition of 'private standard' is quite telling. Moreover, with the uncertainty surrounding the Doha Round, it is hard to imagine the membership as a whole moving together on any new issue. The WTO should put an end to the current laborious and highly unproductive discussions aimed at legal constraint, and instead engage in a plurilateral

¹³ See <http://www.isealliance.org/online-community/projects/member-compliance> last accessed 18 May 2016.

negotiation aimed at increasing the transparency of private standards, while encouraging its members hosting standards setters to discipline their subjects.¹⁴

Members willing to participate should draft a standards ‘Reference Paper’ on the model of the Telecoms Reference Paper. One virtue of a Reference Paper is that it can be inscribed in the Schedules of participating Members. It enters into force when a pre-defined critical mass is reached, with no need for consensus among all Members, or formal ratification at home.¹⁵ Moreover, it can be ‘molded’. The Telecoms Reference Paper provided the basis for all national inscriptions in schedules, but some adjustments did occur. The key is to ensure that the ‘thrust’ of the agreed spine is not undone.

What should be in the Reference Paper? It would be a set of commitments on how each Member would treat private standards bodies in its jurisdiction, and how they would keep other Members informed. Recall that the SPS committee was unable to agree on six of the proposed actions on private standards (WTO, 2011c) (7) providing a forum for specific trade concerns relating to private standards (8) developing guidelines on how Article 13 of the SPS agreement should be interpreted with respect to these standards (9) developing a transparency mechanism for private standards that includes increased opportunity to provide input on their development (10) establishing a separate ‘Code of Good Practice’ for private standards (11) facilitating or developing ways in which Members can liaise with standards setting entities, and (12) clarifying if and how exactly the SPS Agreement applies to private standards.

Many of these actions are sensible, and could be part of the Reference Paper negotiations. The problem is that they would make a government regulatory body accountable in the WTO for a standard it cannot influence, if a specific trade concern were possible against the standard itself. The Reference Paper therefore should be a set of principles that would guide states to better regulate these things. Members would be accountable in WTO *not* for the private standard or even the actions of the private standardizing body, but for the state’s own efforts to make those bodies apply WTO principles. In other words, WTO Members will be required to show due diligence and enforce the agreed principles on their own private sector. Thus, omission to enforce as well will be punishable.

The Reference Paper would have to specify its own domain, which means cutting the definitional Gordian knot. The definitional problem arises because of concerns about what Members could be accountable for under WTO rules. Agreeing on a definition might be easier with an indicative list of standards (closer to the US

¹⁴ Similar constructs are the only realistic solution in advancing the trade agenda within the WTO, given how the membership is becoming more and more heterogeneous (Hoekman and Mavroidis, 2015).

¹⁵ Critical mass could be defined in terms of percentage of WTO Membership, international trade shares, or both. The Reference Paper was agreed of course in GATS, and one might legitimately question whether it can be done in the GATT context as well. Hoekman and Mavroidis (2016) show that nothing in the GATT closes the door to this option.

idea) or bodies (the EU idea), and the list could be incorporated in a Reference Paper whose main goal was discipline through transparency. Under such a system, debate in the committee could concern whether a particular standard or body belonged on the list and therefore ought to conform to the principles of the Reference Paper.

The next step would be providing more information about private standards. We have written elsewhere on the need to provide better information on the trade effects of regulation, which includes better notification of all regulations based on international standards (Wolfe, 2015). The information available on regulations while inadequate is far better than that for private standards. Others have noted that better information on new voluntary sustainability standards would help all users (Potts *et al.*, 2014: 325). In the seventh triennial review of the TBT agreement, Members agreed (WTO, 2015a, 4.10) with respect to transparency in standard-setting:

- i. consistent with paragraph J of the Code, to encourage Members' central government standardizing bodies, and non-governmental bodies that have accepted the Code, to publish their work programmes on websites and notify the specific website addresses where the work programmes are published to the ISO/IEC Information Centre;
- ii. consistent with paragraph L of the Code, to encourage Members' central government standardizing bodies, and non-governmental bodies that have accepted the Code, to share information about the publication of a notice announcing the period for commenting on a draft standard (e.g. title and volume of publication, website address); and,
- iii. to discuss ways of improving Members' access to the information mentioned in i and ii above.

These actions would be even more useful with respect to private standards. Leading Members of the WTO think voluntary standards are valuable – the parties to the Canada–EU Comprehensive Economic and Trade Agreement are committed in Article 22.3.2.a to ‘Encouraging the development and use of voluntary schemes relating to the sustainable production of goods and services, such as ecolabelling and fair trade schemes.’¹⁶ Part of such encouragement ought to be ensuring that their developers follow WTO principles.

4. Concluding remarks

Standards are a canary in the coal mine, a symptom of change in how the global economy works, one that challenges the conceptual basis of the WTO. If we

¹⁶ While the TPP environment chapter does not encourage such schemes, if such voluntary mechanisms are in view, Article 20.11 suggests that the Parties ought to encourage them to be developed taking into account scientific and technical information; and be based on relevant international standards, recommendations, or guidelines.

want to increase global prosperity, then we want to facilitate global value chains, and we want to allow decentralized pluralist governance to take place where it is most useful. But all decisions have consequences. We also want to maintain the WTO role in orchestrating the trading system, ensuring the primacy of the normative commitment to non-discrimination, including fairness to small states and firms. When we define something as one thing, or another, we bring it in or leave it out of certain kinds of governance arrangements. We cannot just use a definition to make states accountable for something over which they have no influence. All change in WTO rules implies a process of domestic reform. The states where most private standards originate are not the ones who are most concerned with their negative consequences. New rules must accommodate the regulatory framework of the dominant states, while improving the governance of the trading system. But even those states have reason to reflect on how standards are developed.

‘Incorporation by reference’, when a regulation mandates the use of a given standard (Keyes, 2004), is growing, especially in North America.¹⁷ Standards developers are happy when their standards are incorporated by reference in a US regulation, but resist allowing access to the text of the standard for free, since selling standards is how they fund their work. Nothing requires that a standard to be incorporated by reference in a regulation was developed in accordance with WTO principles. American legal scholars worry that when a federal agency simply incorporates a private standard, the rule becomes mandatory but the process of developing the standard remains private. Citizens can be challenged even to find the text of the standard, let alone observe or participate in its elaboration (Mendelson, 2014; Bremer, 2013). The US may not change how its regulatory agencies do incorporation by reference, but it might demand the application of the principles in our proposed Reference Paper to how the standards to be incorporated are themselves developed.

The challenge for trade policy, therefore, is that WTO disciplines on government regulation only did half the job of creating disciplines on behind the border measures, and sometimes not even that. Negotiators did not envisage that sometimes even addressing government-endorsed standards would be a complicated issue. Imbalances of power and technical skill affect the incidence and effect of standardization. It is not an innocent by-product of the evolution of the modern economy, but a reflection of choices about governance, whether by the state or some constellation of transnational actors (for a discussion from a critical perspective, see Peña, 2015). If the goal of the WTO is an open, liberal, multilateral trading system, one that can facilitate the further integration of developing countries in the world economy, then all the choices inherent in standardization need to be seen as choices. It matters who sets the standard, who does conformity assessment ex

¹⁷ In the most recent triennial review of the TBT Agreement, Members agreed to hold a thematic session in June 2016 on methods of referencing standards in regulation (WTO, 2015a: 4.10).

ante, and who verifies compliance ex post. Transparency is necessary at all stages. Actors who must live with the standard need some capacity to complain, or access to dispute settlement. Poor process impedes the development of good standards, including limited participation of consumer representatives, the disadvantageous position of developing countries, language difficulties, long average development times, and the politicization of the decision-making process (Zúñiga Schroder, 2009: 1242).

The governance issues raised by the proliferation of private standards go beyond the concerns of small traders to the heart of the rules that structure modern economies. A process that precludes participation by small firms in developing countries may also preclude the engagement of citizens in large countries. Reification of the old-fashioned distinction between public and private ordering fails to address the realities of twenty-first century governance.

References

- Abbott, K. W. and D. Snidal (2009), 'Strengthening International Regulation through Transnational New Governance: Overcoming the Orchestration Deficit', *Vanderbilt Journal of Transnational Law*, 42: 501–578.
- Alvarez, G. and O. von Hagen (2011), 'The Impacts of Private Standards on Producers in Developing Countries', International Trade Centre (ITC), Literature Review Series on the Impacts of Private Standards, Part II March 2011.
- Antràs, P. and R. W. Staiger (2012), 'Trade Agreements and the Nature of Price Determination', *American Economic Review*, 102(3): 470–6.
- Arcuri, A. (2013), 'The TBT Agreement and Private Standards', in T. Epps and M. J. Trebilcock (eds.), *Research Handbook on the WTO and Technical Barriers to Trade*, Cheltenham: Edward Elgar, pp. 485–524.
- Baddeley, S., P. Cheng, and R. Wolfe (2012), 'Trade Policy Implications of Carbon Labels on Food', *Estey Centre Journal of International Law and Trade Policy*, 13(1): 59–93.
- Baldwin, R. E. (1970), *Nontariff Distortions of International Trade*, Washington, DC: Brookings Institution.
- Beghin, J. C., Maertens, M., and Swinnen, J. F. (2015), 'Nontariff Measures and Standards in Trade and Global Value Chains', *Annual Review of Resource Economics*, 7(1): 425–450.
- Bremer, E. S. (2013), 'Incorporation by Reference in an Open-Government Age', *Harvard Journal of Law and Public Policy*, 36(1): 131–210.
- Djelic, M. L. and F. den Hond (2014), 'Introduction: Multiplicity and Plurality in the World of Standards', *Business and Politics*, 16(1): 67.
- Fliess, B., F. Gonzales, J. Kim, and R. D. Schonfeld (2010), 'The Use of International Standards in Technical Regulation', Organisation for Economic Co-operation and Development, OECD Trade Policy Working Paper No. 102 TAD/TC/WP(2009)12/FINAL, 19 July 2010.
- Freeman, J. (1999), 'Private Parties, Public Functions and the New Administrative Law', in D. Dyzenhaus (ed.), *Recrafting the Rule of Law: The Limits of Legal Order*, Oxford: Hart, pp. 331–369.
- Hobbs, J. E. (2010), 'Public and Private Standards for Food Safety and Quality: International Trade Implications', *Estey Centre Journal of International Law and Trade Policy*, 11(1): 136–152.
- Hoekman, B. (2014), *Supply Chains, Mega-Regionals and Multilateralism: A Road Map for the WTO*, London: CEPR Press.
- Hoekman, B. M. and P. C. Mavroidis (2015), 'Embracing Diversity: Plurilateral Agreements and the Trading System', *World Trade Review*, 14(1): 101–116.
- (2016), 'MFN Clubs and Scheduling Additional Commitments in the GATT: Learning from the GATS', European University Institute, EUI Working Paper RSCAS 2016/06, January 2016.

- Irwin, D. A., P. C. Mavroidis, and A. O. Sykes (2008), *The Genesis of the GATT*, New York: Cambridge University Press.
- ISEAL (2014), 'Setting Social and Environmental Standards: Iseal Code of Good Practice', ISEAL Alliance, Version 6.0, December 2014.
- ISO (2010), 'International Standards and "Private Standards"', International Organization for Standardization, 2010.
- Jansen, M. (2010), 'Developing Countries, Standards and the WTO', *The Journal of International Trade and Economic Development*, 19(1): 163–185.
- Kennedy, S. (2006), 'The Political Economy of Standards Coalitions: Explaining China's Involvement in High-Tech Standards Wars', *Asia Policy*, 2(1): 41–62.
- Keyes, J. M. (2004), 'Incorporation by Reference in Legislation', *Statute Law Review*, 25(3): 180.
- Latouche, K. and E. Chevassus-Lozza (2015), 'Retailer Supply Chain and Market Access: Evidence from French Agri-Food Firms Certified with Private Standards', *The World Economy*, 38(8): 1312–1334.
- Liu, H.-W. (2014), 'International Standards in Flux: A Balkanized ICT Standard-Setting Paradigm and Its Implications for the WTO', *Journal of International Economic Law*, 17(3): 551–600.
- Macdonald, R. A. (1985), 'Understanding Regulation by Regulations', in I. Bernier and A. Lajoie (eds.), *Regulations, Crown Corporations and Administrative Tribunals*, Toronto: University of Toronto Press, pp. 81–154.
- (2002), *Lessons of Everyday Law*, Montreal and Kingston: McGill-Queen's University Press for the School of Policy Studies and the Law Commission of Canada.
- Maertens, M. and J. Swinnen (2015), *Agricultural Trade and Development: A Value Chain Perspective*, WTO Working Paper ERSO-2015-04, April, 2015, Geneva: World Trade Organization.
- Marx, A. and J. Wouters (2013), 'Competition and Cooperation in the Market of Voluntary Sustainability Standards', United Nations Forum on Sustainability Standards UNFSS Discussion Papers No. 3, April 2013.
- Mavroidis, P. C. and D. Neven (1999), 'Some Reflections on Extraterritoriality in International Economic Law: A Law and Economic Analysis', *Melanges En Hommage De Michel Waelbroeck*, Brussels: Bruylant, pp. 1297–1325.
- Mendelson, N. A. (2014), 'Private Control over Access to the Law: The Perplexing Federal Regulatory Use of Private Standards', *Michigan Law Review*, 112(March): 737–807.
- Organisation for Economic Co-operation and Development (OECD) (1997), *Report on Regulatory Reform*, Paris: Organisation for Economic Co-operation and Development.
- Pauwelyn, J. (2014), 'Rule-Based Trade 2.0? The Rise of Informal Rules and International Standards and How They May Outcompete WTO Treaties', *Journal of International Economic Law*, 17(4): 739–751.
- Peña, A. M. (2015), 'Governing Differentiation: On Standardisation as Political Steering', *European Journal of International Relations*, 21(1): 52–75.
- Potts, J., M. Lynch, A. Wilkings, G. Huppé, M. Cunningham, and V. Voora (2014), *The State of Sustainability Initiatives Review 2014: Standards and the Green Economy*, Winnipeg: International Institute for Sustainable Development.
- Sabel, C. (2014), 'Regulatory Equivalence: What It Is and Why It Is Equivalent to a New Kind of Regulation', paper delivered to the conference on Private Standards and (Transatlantic), Trade Integration, European University Institute, Florence, 10–11 November 2014.
- Schepel, Harm (2005), *The Constitution of Private Governance: Product Standards in the Regulation of Integrating Markets*, Oxford: Hart.
- Thorstensen, V., R. Weissinger, and X. Sun (2015), 'Private Standards – Implications for Trade, Development, and Governance', WEF/ICTSD, E15 Task Force on Regulatory Systems Coherence August 2015.
- Timmermans, S. and S. Epstein (2010), 'A World of Standards but Not a Standard World: Toward a Sociology of Standards and Standardization', *Annual Review of Sociology*, 36: 69–89.
- Wijkström, E. and D. McDaniels (2013), 'Improving Regulatory Governance: International Standards and the WTO TBT Agreement', *Journal of World Trade*, 47(5): 1013–1046.

- Wolfe, R. (2015), 'How Can We Know (More) about the Trade Effects of Regulation?', WEF/ICTSD, E15 Task Force on Regulatory Systems Coherence August 2015.
- Wouters, J. and D. Geraets (2012), 'Private Food Standards and the World Trade Organization: Some Legal Considerations', *World Trade Review*, 11(3): 479–489.
- WTO (2000), 'Decision by the Committee on Principles for the Development of International Standards, Guides and Recommendations in Relation to Articles 2, 5 and Annex 3 of the Agreement; Found in Annex 4 of Second Triennial Review of the Operation and Implementation of the Agreement on Technical Barriers to Trade', World Trade Organization, Committee on Technical Barriers to Trade, G/TBT/9, 13 November 2000.
- (2005), 'Summary of the Meeting Held on 29–30 June 2005: Note by the Secretariat', World Trade Organization, Committee on Technical Barriers to Trade, G/SPS/R/37/Rev.1, 18 August 2005.
- (2007a), 'Private Industry Standards: Communication from Saint Vincent and the Grenadines', World Trade Organization, Committee on Technical Barriers to Trade, G/SPS/GEN/766, 28 February 2007.
- (2007b), 'Private Standards and the SPS Agreement', Committee on Sanitary and Phytosanitary Measures, World Trade Organization, G/SPS/GEN/746, 24 January 2007.
- (2008), 'Private Standards – Identifying Practical Actions for the SPS Committee – Summary of Responses: Note by the Secretariat', Committee on Sanitary and Phytosanitary Measures, World Trade Organization, G/SPS/W/230, 25 September 2008.
- (2009), 'Fifth Triennial Review of the Operation and Implementation of the Agreement on Technical Barriers to Trade under Article 15.4', World Trade Organization, Committee on Technical Barriers to Trade, G/TBT/26, 13 November 2009.
- (2010a), 'Market Access for Non-Agricultural Products: International Standards, Communication from the United States', World Trade Organization, Negotiating Group on Market Access, TN/MA/W/138, 28 June 2010.
- (2010b), 'Summary Report of the Information Session on Product Carbon Footprint and Labelling Schemes, 17 February 2010: Note by the Secretariat', World Trade Organization, Committee on Trade and Environment, WT/CTE/M/49/Add.1, 28 May 2010.
- (2011a), 'Disciplines on Domestic Regulation Pursuant to GATS Article VI:4: Chairman's Progress Report', World Trade Organization, Working Party on Domestic Regulation, S/WPDR/W/45, 14 April 2011.
- (2011b), 'International Standards in Support of Trade and Economic Development: Strengthening the Contribution of the Committee Decision; a Proposal from the United States', World Trade Organization, Negotiating Group on Market Access, TN/MA/W/141, 29 March 2011.
- (2011c), 'Actions Regarding SPS-Related Private Standards: Decision of the Committee', World Trade Organization, Committee on Sanitary and Phytosanitary Measures, G/SPS/55, 6 April 2011.
- (2012a), *United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products*, Report of the Appellate Body, World Trade Organization, WT/DS381/AB/R, 16 May 2012.
- (2012b), 'Sixth Triennial Review of the Operation and Implementation of the Agreement on Technical Barriers to Trade under Article 15.4', World Trade Organization, Committee on Technical Barriers to Trade, G/TBT/32, 29 November 2012.
- (2012c), 'Proposed Working Definition of SPS-Related Private Standards: Note by the Secretariat', World Trade Organization, Committee on Sanitary and Phytosanitary Measures, G/SPS/W/265/Rev.2, 28 September 2012.
- (2012d), *Trade and Public Policies: A Closer Look at Non-Tariff Measures in the 21st Century*, World Trade Report 2012, Geneva: World Trade Organization.
- (2014a), 'Review of the Operation and Implementation of the SPS Agreement: Draft Report of the Committee', World Trade Organization, Committee on Sanitary and Phytosanitary Measures, G/SPS/W/280/Rev.1, 18 September 2014.
- (2014b), 'List of Standardizing Bodies that Have Accepted the Code of Good Practice for the Preparation, Adoption and Application of Standards since 1 January 1995: Note by the

- Secretariat', World Trade Organization, Committee on Technical Barriers to Trade, G/TBT/CS/2/Rev.20, 26 February 2014.
- (2015a), 'Seventh Triennial Review of the Operation and Implementation of the Agreement on Technical Barriers to Trade under Article 15.4', World Trade Organization, Committee on Technical Barriers to Trade, G/TBT/37, 3 December 2015.
- (2015b), 'Summary of the Meeting of 15–16 July 2015: Note by the Secretariat', World Trade Organization, Committee on Sanitary and Phytosanitary Measures, G/SPS/R/79, 4 September 2015.
- (2015c), 'Report of the Co-Stewards of the Private Standards E-Working Group on Action 1 (G/SPS/55)', World Trade Organization, Committee on Sanitary and Phytosanitary Measures, G/SPS/W/283, 17 March 2015.
- Zúñiga Schroder, H. (2009), 'Definition of the Concept "International Standard" in the TBT Agreement', *Journal of World Trade*, 43(6): 1223–1254.