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Public and Private Standards for Food Safety and Quality: International Trade Implications

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This article examines the implications for the international trade environment of public and private standards for food safety and food quality. Public (mandatory) standards are a response to a perceived market failure and include mandatory risk assessment procedures, restrictions on harmful products, and labelling requirements. Disparate public standards create challenges for international trading partners and are dealt with through the WTO SPS and TBT Agreements. Private standards for food safety and quality are becoming a prominent feature of international food markets and include proprietary, consensus and third-party standards. The WTO has no jurisdiction over private standards. Key questions include whether private standards divert or reduce trade or whether they can be trade enhancing, and under what conditions. The implications for the WTO are discussed, and future trade policy research needs pertaining to the co-existence of public and private standards for food safety and quality are identified.

Keywords: food safety, GLOBALGAP, HACCP, mandatory standards, private standards

As food markets evolve with new technologies emerging, increased product differentiation and more affluent consumers, there is heightened focus on food safety and quality. Regulatory systems have responded with new product and production standards, approval processes, risk assessment processes and labelling requirements while, at the same time, a plethora of private food safety and quality standards have emerged alongside these regulatory developments. This article examines implications for the international trade environment of public and private standards for food safety and food quality. Key questions include whether private standards are trade diverting (even trade reducing) or can be trade enhancing and under what conditions, and the implications for the WTO of the growth in private standards.

The article begins by examining public standards, briefly outlining the underlying case for market failure, examining the challenges that disparate public standards create for international trading partners and considering how the WTO addresses trade measures that arise from differences in public standards for food safety and food quality. The article then turns to a consideration of private standards, examining the scope of private standards that have emerged, and addressing the potential trade effects (diverting or enhancing) of private standards. The article concludes with a discussion of the implications for the WTO and identifies future trade policy research needs pertaining to the co-existence of public and private standards for food safety and quality.

Public Standards

Mandatory public (regulatory) standards carry with them a legal obligation for compliance and are a response to a perceived market failure; as such they are often implemented in the presence of negative externalities, to ensure the provision of public goods, or to mitigate information asymmetry. Examples include mandatory food safety management practices, pesticide residue limits and waste water treatment regulations for the protection of the environment and human health, and prohibitions on specific confinement practices for livestock in the interests of animal welfare. Other examples include requirements for mandatory labelling of nutritional content in a consistent format, requirements for labelling the presence of allergens and production and labelling standards for use of the term “organic”.

In the case of food safety, the HACCP (Hazard Analysis and Critical Control Points) system has been adopted in a number of countries both on a voluntary and a mandatory basis. HACCP is a food safety management plan which involves the systematic analysis and control of biological, chemical and physical hazards within a

production process. In Canada and the United States, HACCP systems are mandatory for federally registered processing plants in a number of sectors including meat, fish and seafood. Regulations pertaining to animal welfare are also on the rise: the EU is phasing in a ban on the use of battery cages for layer hens, effective 2012, while bans on the use of confinement pens (gestation crates) for sows are in place in some jurisdictions (e.g., the EU and some U.S. states).¹ Mandatory food labelling requirements exist in many jurisdictions and address multiple issues. In Canada, nutrition labelling became mandatory for all prepackaged foods in December 2007, while the United States put in place similar requirements in the 1990s and the EU has taken steps to harmonize food nutrition labelling standards across member states. More recently, a requirement to label the presence (quantity) of trans fats has been incorporated into food labelling regulations in many countries.

Regulatory intervention to govern the use of food labelling terms is ongoing, and includes recent proposals to overhaul the use of the “Product of Canada” designator on food products. Canada implemented regulations in 2009 requiring mandatory certification to the new National Organic Standard for any agricultural product represented as organic, and developed an official federal organic logo. The United States and the EU (among others) already had organic production and certification standards in place; each jurisdiction has developed separate national (supranational) standards, which often differ with respect to requirements for on-farm production processes (e.g., size of buffer zones) or required percentage of organic content (Sawyer, Kerr and Hobbs, 2008).

As in the case of organic standards, when different mandatory standards exist in different countries we have a recipe for potential trade tensions. Clearly, differences in public standards across countries may arise for legitimate reasons: different social objectives and priorities, differences in resource endowments and the availability of resources for implementing new production standards, or differences in the political economy of decision-making and the role of stakeholder groups in the policy process. However, regulatory requirements limiting the use of certain production technologies, or requiring identification and verification of specific inputs, have implications for the competitiveness of the agri-food sector in these jurisdictions relative to the agri-food sector in jurisdictions governed by fewer regulations. The potential negative trade effects are two-fold: there may be domestic pressure to regulate or restrict imports that do not meet these standards in the interests of creating a so-called level playing field, and high compliance costs may encourage relocation of production to third countries and precipitate calls for compensatory payments to domestic producers to prevent this from occurring.

Grethe (2007) discusses these issues in the context of high animal welfare standards in the EU, comparing the potential trade outcomes from different policies aimed at preventing the creation of “low animal welfare havens”, wherein production moves to countries with lower welfare standards. The policy options examined include labelling of non-animal-friendly imports (mandatory or voluntary), compensation of domestic producers through subsidies, tariff discrimination based on production processes, import bans, and the negotiation of new multilateral agreements addressing animal welfare. As Grethe argues, there is only weak theoretical justification for policies to prevent relocation that go beyond labelling schemes to address information asymmetry. In reality, however, these policies have been under consideration: the EU proposed an international agreement on trade rules pertaining to animal welfare (Hobbs et al., 2002), and compensatory payments to producers for the adoption of more stringent animal welfare protocols are already in effect within the EU (Grethe, 2007). Compensatory payments are inherently distortionary, particularly as they disadvantage producers in third countries that comply with equivalent standards but are not compensated for compliance costs. While tariff discrimination avoids the third-country effects, it is incompatible with WTO disciplines. A ban on imports on the basis of production methods would likely also be inconsistent with WTO obligations, as evidenced by the EU ban on beef produced using growth-promoting hormones, a ban that was successfully challenged by the United States and Canada through the WTO dispute settlement mechanism² (Kerr and Hobbs, 2002).

WTO Rules

Given that differences in the level, coverage and implementation of regulatory standards for food safety and food quality have the potential to create challenges for the WTO, it is useful to review how the WTO deals with trade measures that stem from differences in public standards for food safety and quality. The mandate of the WTO to remove barriers to international trade rests on the core principle of non-discrimination, which is described by three concepts: like products; national treatment; and most-favoured nation status. The concept of like products prohibits discrimination (the imposition of trade barriers) from being implemented on the basis of process and production methods (PPMs). Trade rules are supposed to group goods according to their end use rather than the means by which they were produced, the rationale being that it is goods, not PPMs, that are traded (Hobbs et al., 2002). A second core component of the principle of non-discrimination is national treatment, which means that like goods from foreign sources should be granted market access treatment equivalent to the treatment of like goods produced in the domestic market.

Finally, the most-favoured nation concept means that all like goods from foreign sources should be treated equally – granted the same market access – as like goods from the country granted the most favourable market access.

The principle of non-discrimination is the default principle unless exceptions are agreed to. GATT Article XX, on general exceptions, permits a number of trade measures, including those deemed “necessary to protect public morals” or “necessary to protect human, animal or plant life or health” or measures “relating to the conservation of exhaustible natural resources” (Hobbs et al., 2002). In some cases, the argument for trade measures for the “protection of public morals” is fairly straightforward, for example, a ban on the importation of pornographic materials. The “conservation of exhaustible natural resources” argument featured in the 1998 WTO ruling on the U.S. Shrimp–Turtle case, in which the WTO Appellate Body upheld a U.S. ban on the importation of shrimps harvested using methods that harmed sea turtles. As a number of authors have observed, the application of Article XX to ethical issues related to food production, such as animal welfare, is ambiguous (Blandford and Fulponi, 1999; Grethe, 2007). Expanding the “protection of public morals” to include ethical issues related to food production would open a Pandora’s box of exceptions to WTO rules, setting an unwelcome precedent that could open up Article XX to a wide variety of discriminatory trade measures on the basis of labour standards, environmental standards, etc. (Hobbs et al., 2002; Grethe, 2007).

Under the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS), WTO members are permitted to impose trade measures “necessary to protect human health, animal or plant life and health”. Public standards pertaining to food safety therefore fall under the remit of the SPS Agreement, which requires that any trade measures relating to food safety or an animal or plant disease be based on a scientific risk assessment. The WTO defers to external organizations for the establishment of internationally agreed standards and definitions of what constitutes an acceptable risk assessment, for example, the Codex Alimentarius Commission in the case of food products and the World Organisation for Animal Health (OIE) in the case of animal health.

Public (mandatory) standards pertaining to food labelling, packaging requirements, technical standards, etc., including those dealing with production and processing methods, fall under the remit of the WTO Agreement on Technical Barriers to Trade (TBT). As with the SPS Agreement, any trade measures imposed under the TBT Agreement must conform to the GATT principle of non-discrimination, including the stipulation that “like” products be treated the same. Whereas the SPS Agreement appeals to a scientific basis for determining the legitimacy of trade measures, clearly

this is not possible for disputes that arise over the potentially discriminatory nature of food labelling rules or technical standards. The TBT Agreement stipulates that members should base labelling requirements, standards, etc. on internationally agreed standards. It has been argued that the TBT Agreement is ambiguous or provides only limited guidance regarding the legitimacy of process-based regulations (Josling et al., 2004).

Nevertheless, the history of WTO dispute panel rulings with respect to a number of prominent recent trade disputes over food safety and food quality indicates that the WTO mechanisms do offer a means by which to address differences in public standards, albeit slowly in terms of the commercial losses that accrue before a dispute is resolved. The ruling in the U.S. Shrimp–Turtle case upheld a trade restriction based on the negative impacts of harvesting technologies on a protected species, while a 1991 GATT panel ruling in the U.S.-Mexico Tuna–Dolphin case produced a different outcome. Mexico challenged a U.S. ban on imports of tuna from countries that could not prove that their fishing methods avoided unnecessary harm to dolphins. A 1991 GATT panel ruled that a country could not ban imports for environmental reasons when the “exhaustible natural resource” lay outside its territorial jurisdiction. However, while a ban on imports was prohibited, the GATT panel also ruled that the United States had the right to label its domestic products as “dolphin-safe” (Blandford and Fulponi, 1999).

The long-running beef hormone dispute between the European Union and the United States and Canada, wherein the United States and Canada challenged the EU ban on beef produced using sub-therapeutic growth hormones was an important test case for the SPS Agreement. The EU argued that the ban was justified given consumer concerns over the use of this technology and, while the WTO panel ruled against the import ban, the EU chose to retain the import ban and accept retaliation. The beef hormone dispute highlights the challenges for the WTO architecture in dealing with protectionist pressure from consumer interests. The standard result from the partial equilibrium trade model that underlies the WTO infrastructure is that trade liberalization – the removal of trade barriers, the lowering of trade restrictions – benefits consumers through lower prices and concomitant gains in consumer surplus. Thus, it is inefficient domestic producers, not consumers, who are expected to ask for protection from imports. Once we recognize that many food markets are characterized by both horizontal and vertical quality differentiation, such that some consumers might differ in their perceptions as to what constitutes “high” quality, and that many of these food attributes have credence properties, it is plausible that some consumers will ask for an import ban or mandatory labelling for products they perceive as

harmful or of lower quality.³ Two key impending issues include the diverging public standards governing farm animal welfare, which seem a likely source of future trade disputes, and the introduction of mandatory country-of-origin labelling in the United States for a number of food commodities, including livestock and meat, which triggered a WTO challenge from Canada and led to the establishment of a WTO dispute settlement panel in November 2009 (WTO, 2010). While public standards for food quality and food safety continue to evolve, and evidently may sometimes lead to trade disputes, there has been a proliferation of private standards for food safety and food quality. The WTO has no jurisdiction over private standards.

Private Standards

Private standards for food safety and food quality can be distinguished on two dimensions: the source or scope of the standard and the economic function of the standard. Table 1 summarizes these dimensions and provides examples of each category of standard. Private standards emerge from a variety of sources and include proprietary standards established by firms, third-party standards established by independent standard-setting bodies and other non-governmental organizations, and voluntary consensus standards established by industry bodies or coalitions of firms. Private standards can also be distinguished by the economic functions they perform, including product differentiation, supply chain management, and liability reduction or protection of a firm's (industry's) reputation.

Private standards can enhance product differentiation if the standard is communicated to consumers through labelling or the presence of a logo on the final consumer product, both of which act as quality signals. Alternatively, the primary purpose of a private standard could be to enhance supply chain management by improving information flows and reducing transaction costs in the supply chain. Finally, private standards may serve primarily to reduce liability as a component of a due diligence defence in the event of a food safety problem. If effective, private standards can reduce transaction costs by facilitating longer-term supply chain relationships and in doing so lowering both the search costs of finding reliable suppliers and the monitoring costs of ensuring the quality of supplies. For this reason, a credible system of verification (often by a third-party certification body) is a necessary component of most private standards systems, both proprietary and consensus. While ostensibly voluntary, private standards can be *de facto* mandatory if a majority of the market adopts the standard as a requirement (Henson, 2006; Henson and Reardon, 2005).

Table 1 Categorizing Private Standards

Functions	Proprietary	Consensus	Third party
Product differentiation	✓✓		✓?
Enhance supply chain management	✓✓	✓	✓✓
Reduce liability/protect reputation	✓✓	✓	✓
Examples	 	  	 International Organization for Standardization  www.sPCA.bc.ca/farm

Proprietary standards are those put in place by individual firms and are unique to the firm. The examples provided in table 1 are private standards established by retailers. The UK food retailer Tesco PLC established its “Nature’s Choice” standard for suppliers of fresh produce in 1991. The codes of practice enshrined in the standard cover the use of crop inputs, pollution prevention, wildlife and landscape conservation, energy conservation and protection of human health (farm labour). An annual, independent third-party audit is used to monitor compliance with the standard (Tesco, 2010). The retailer has similar codes of practice for livestock products. Walmart has various supply chain management standards with which its suppliers must comply and which are aimed at enhancing efficiencies within the company’s distribution system. It has also implemented a proprietary Ethical Standards Program (ESP), which sets out a series of labour and environmental standards for suppliers

(Walmart, 2010). Proprietary standards can therefore serve multiple functions. In both of the examples provided here, product differentiation is clearly a primary objective, although enhanced supply chain management also features in Walmart's standards. The extent to which proprietary standards reduce liability and/or protect reputation (brand name capital) depends on the effectiveness of the standard in reducing the risks of food safety problems or assuring specific quality attributes, including the extent to which the standards are monitored or enforced.

Voluntary consensus standards represent another group of private standards and are established by coalitions of firms or industries to serve a collective purpose. Government may be involved, for example in facilitating the establishment of the standards, or these may be entirely private sector initiatives. Consensus standards have some of the properties of a club good: they are non-rivalrous but somewhat excludable. The benefits are shared among a specific group of firms – the “club”, the costs of providing the good are shared among the club members and the benefits are limited to club members. As with other club goods, enforceable property rights are important as they allow for the exclusion necessary for the club to function. In the absence of effective property rights, non-members could free-ride on the benefits produced by club members. Examples of consensus standards for food safety and food quality include initiatives from coalitions of food retailers, such as GLOBALGAP and the Global Food Safety Initiative (GFSI), while the Assured Food Standards program (the so-called Red Tractor program) is driven by a coalition of agricultural producer organizations in the UK.

GLOBALGAP, originally established as EUREPGAP in 1997, is a set of “good agricultural practice” (GAP) standards pertaining to food safety, the environment, animal welfare and worker health and safety. It is a business-to-business standard aimed at improving food safety and quality rather than providing quality signals directly to consumers; products are not usually labelled with a GLOBALGAP logo on the retail market. GLOBALGAP establishes a baseline set of minimum standards for a range of commodities, from fresh fruit and vegetables, flowers and aquaculture to livestock, combinable crops and feed manufacturing. The driving force behind the establishment of these consensus standards was a coalition of European food retailers (The Euro-Retailer Produce Working Group – EUREP) wishing to develop a common set of food safety and quality standards for suppliers of fresh produce and other agricultural commodities. Independent third-party audits are used to verify compliance with GLOBALGAP standards.⁴ Thus, the primary motivations were improved management of the supply chain, including reducing the transaction costs of sourcing reliable supplies, and reducing the retailers' exposure to the negative liability

and reputation effects from food safety problems. Product differentiation is likely a minor objective given that the GLOBALGAP standards are not proprietary to one retailer.

The Global Food Safety Initiative (GFSI), launched in May 2000 by CIES – The Food Business Forum – is a retailer-led attempt to build a common forum for benchmarking accepted food safety standards and provides another example of voluntary consensus standards. The GFSI is not involved directly in certification or accreditation activities. Rather than being a standard itself, the GFSI generates guidance documents that assist in the establishment of standards defining food safety management practices and good agricultural practices based on common principles. The benchmarking process establishes whether a standard and its certification system can demonstrate compliance with the GFSI guidance document. For example, the GFSI acknowledges a number of food safety standards, including the BRC (British Retail Consortium) Global Standard, the Dutch HACCP code, the EFSIS (European Food Safety Inspection Services) standards, the IFS (International Food Standard) and the SQF 2000 (Safe Quality Food) code originating in Australia (GFSI, 2004). It is an attempt to consolidate private food safety standards to reduce duplication. As with the GLOBALGAP standards, the primary economic function relates to efficient management of supply chain relationships and reductions in transaction costs. Based on a series of interviews with sixteen leading food retailers and four standards owners across a number of OECD countries, Fulponi (2005) reports an intention among retailers to eventually source 100 percent of supplies through a GFSI benchmarked standard, but an acknowledgement from most firms that they will probably continue to add proprietary, firm-specific standards.

The third example of a consensus standard provided in table 1 is the Assured Food Standards program established by a coalition of producer organizations in the United Kingdom. Unlike the GLOBALGAP and GFSI standards, the “Red Tractor” logo of the Assured Food Standards program features prominently on food labels and acts as a signalling mechanism in consumer markets. The program provides quality assurances with respect to food safety, animal welfare, environment, and country of origin (UK).

Finally, there are third-party private standards, such as the ISO (International Organisation for Standardization) quality management and environmental standards, or food quality standards established by non-governmental organisations or other third-party interest groups to verify a range of food quality credence attributes, often relating to on-farm production methods. Table 1 provides the example of an animal welfare standard established and certified by the SPCA (Society for the Prevention of Cruelty to Animals) in Canada. While the ISO standards tend to be business-to-

business standards that reduce transaction costs and facilitate supply chain management efficiencies, other third-party standards such as the SPCA standard act primarily as quality heuristics in consumer markets.

Potential Trade Effects of Private Standards

Do private standards for food safety and food quality divert or reduce trade, or can they instead facilitate international trade? The chief argument for private standards having a deleterious impact on international trade revolves around the burden of compliance costs. These can be significant, particularly if a majority of the market requires adherence to private standards, making them *de facto* mandatory, and particularly in the case of developing countries (Henson, 2006). The burden of compliance tends to be higher on exporters from countries with lower public standards, given the more extensive upgrading and investments in technical capacity required. Indeed, both public and private standards for food safety and quality can be a challenge for developing countries in terms of the costs of compliance given infrastructure challenges, including the capacity for verification, certification and testing. If these effects are substantial, private standards can be trade diverting, putting exporters in some developing countries at a competitive disadvantage vis-à-vis exporters in countries with higher public standards for food safety and quality. An alternative view, however, is that compliance with the food safety and quality standards of importing countries has a positive effect, acting as a catalyst driving infrastructure improvements and investment in developing countries, in which case the effect could be to increase trade flows. There is a dearth of empirical studies examining the impact of food safety and quality standards on trade between developing and developed countries, and most are confined to public standards or international third-party (ISO) standards.⁵

Proprietary private standards may be trade reducing if they require asset-specific investments by suppliers in order to meet the idiosyncratic production protocols of a specific buyer. Increasing concentration in the food retailing sector compounds this problem, wherein access to global supply chains is channelled through a relatively small number of multinational firms. Though as Williamson (1986) observes, even a competitive market can reduce to one of bilateral dependency once asset-specific investments have been made. This leads to the classic hold-up problem, where investments can be inhibited by the risk that a buyer could act opportunistically ex post to appropriate rents once the supplier has made an asset-specific investment. Embedding requirements for significant asset-specific investments within proprietary codes of practice or private standards without the requisite contractual safeguards to

guard against opportunistic recontracting by the buyer is problematic. *Ceteris paribus*, either suppliers will need to receive a risk premium sufficient to offset the risk of opportunistic behaviour by the buyer, or in the long run these supply chain relationships will be contractually unstable (Williamson, 1986). Contractual safeguards in this context could include required codes of practice that are unequivocal and communicated clearly to suppliers; retailer investments in brand-name capital (reputation) that would be damaged by repeated opportunistic behaviour toward suppliers; and the use of independent third-party auditors to verify suppliers' compliance. Voluntary consensus standards are less subject to asset specificity problems, particularly if they encompass multiple suppliers and multiple buyers and are the dominant collective private standard.

The trade-facilitating effects of private standards include their potential to engender faster harmonization of standards, access to multiple supply chains and greater product differentiation. As Henson (2006) observes, the processes of harmonization and mutual recognition (equivalence) among private standards may be occurring more quickly than is possible for national public standards, particularly those that require multilateral negotiations. Indeed, the GFSI is an example of a coordinated attempt to formalize mutual recognition of equivalence between various private food safety standards. Provided that retailers do not treat consensus standards as a base to which they add additional proprietary standards, a widely adopted consensus standard that encompasses a number of major food retailers in different countries, such as GLOBALGAP (EUREPGAP), can provide suppliers who comply with the standard with access to multiple supply chains in multiple countries. Finally, private standards for food safety and food quality encourage product differentiation and could lead to differentiated markets. It is likely that this would encourage trade in (higher value) differentiated food products.

Clearly, private standards can be trade enhancing, diverting or reducing under different circumstances, and the outcome can be expected to differ across products or industries. The extent to which asset-specific investments are required, the current status of food safety and food quality standards in an exporting region (hence the costs of the "compliance gap"), the competitive structure of the food retailing sector, and the degree to which private standards are primarily proprietary or widely adopted consensus standards are likely to be some of the key determinants of the trade impact of private standards. Empirical work to examine the effects of private standards on trade is needed.

Empirical Challenges

Previous empirical analysis of the effects of food safety standards on trade has tended to focus on public mandatory standards (see, for example, Peterson and Orden, 2005; Otuski et al., 2001). In a recent analysis, Anders and Caswell (2009) examine the impact on seafood imports of the implementation of mandatory HACCP by the United States in 1997. Using a gravity model, the authors show that the effect of mandatory HACCP for developed-country exporters to the United States was positive, while exports from developing countries as a group were negatively affected, apparently supporting the view of “standards as barriers” rather than “standards as catalysts” for this group. However, a further, disaggregated analysis at a country level reveals a more nuanced picture: regardless of development status, larger seafood exporters gained from the introduction of stricter food safety regulations. Both developed and developing countries feature within this group, indicating that country-specific factors need to be taken into account before conclusions can be drawn about the effect of higher food safety standards on developing countries.

In an examination of the effect of private standards on food trade, Mitchell (2008) uses a gravity model to investigate the relationship between the adoption of EUREPGAP standards in Switzerland and the EU and international trade in fresh produce and nuts. The analysis compares trade patterns in these products with the United States, where EUREPGAP standards have not been adopted. Mitchell was unable to find significant differences in trading patterns pre and post EUREPGAP adoption. Clearly, one of the challenges with this type of analysis is determining when standards are *de facto* in place, since private standards are adopted as part of ongoing business decisions within firms, unlike a mandatory public standard that encompasses an entire sector and comes into force on a specific date. Controlling for other differences which may be affecting the trade flows between the markets is also necessary. Case study analyses would allow closer examination of the micro-level product and industry-specific factors that determine the trade impact of private standards (e.g., costs of compliance, differences in asset-specific investments, etc.). While it is difficult to generalize beyond the specific cases, case study analyses can help inform the design of future empirical work.

Conclusions

The WTO is a collection of member governments; it deals with the rules of trade between nations and is a forum through which nations negotiate with other nations regarding policies and regulations that restrict trade. Actual trade (transactions) usually occurs between private firms. Clearly the WTO has no jurisdiction over

private firms or the standards established by private firms or groups of firms. Yet the widespread adoption of private standards for food safety and quality undoubtedly influences supply chain relationships and access to markets. Analysis of the trade impacts of both public and private standards continues to be relevant.

Given its jurisdictional limits the WTO offers no mechanism through which to challenge private standards, even though a dominant voluntary consensus standard can become *de facto* mandatory in a market. Although the SPS Agreement does charge member states with taking “reasonable measures” to ensure that non-governmental entities comply with the SPS Agreement, suggesting that there may be a role for governments in ensuring that private standards are in compliance with a country’s WTO obligations, it nevertheless seems unlikely that “non-governmental bodies” would include private standards that are facilitating business-to-business transactions (Henson, 2006). In 2003 St. Vincent and the Grenadines raised a concern at the SPS committee over requirements for EUREPGAP certification for fresh fruits, leading to ongoing discussions of private standards at the SPS committee. These discussions appear to have focused primarily on issues of technical co-operation and strategies for facilitating compliance; for example, a joint UNCTAD/WTO informal information session on private standards was held in 2007 (WTO, 2008).

The extension of WTO jurisdiction over private standards is hard to envision and would be an unwelcome departure from its role as gatekeeper of the rules of trade between nations (not firms). Nevertheless, private standards for food safety and quality, as a legitimate market response to changing consumer preferences and evolving global supply chains, are here to stay and likely to gain in importance. Economic analysis, including case studies and quantitative analyses, that examines the underlying factors determining whether these standards divert, reduce or enhance trade on a specific country, industry and product level is necessary and can help inform strategies for adapting to and complying with these standards.

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Endnotes

1. In 2002, voters in Florida passed a ballot initiative amending state legislation to prohibit gestation stalls in pig production beginning in 2008; Arizona voters passed a ballot initiative in 2006 to prohibit the use of gestation stalls and veal crates by the end of 2012; similar initiatives have recently passed into law in Colorado and California (American Veterinary Medical Association, 2008a, 2008b).
2. It is worth noting that the EU chose to maintain the import ban in return for accepting retaliation against other EU imports.
3. See Kerr (2010) for a detailed examination of these issues.
4. See www.eurepgap.org and www.globalgap.org
5. For further discussion see Henson, 2006; Anders and Caswell, 2009.

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