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Do Private Standards encourage or hinder trade and innovation?

Philipp Aerni

Abstract

Humankind shares a common interest in the safety of the products it uses and consumes and an increasing interest in the way the product has been produced. In a globalized world, private standards play a role in ensuring the safety and sustainability of products and production methods. The comanagement of the public good 'food safety' by the public and the private sector is not new from a historical point of view. The industrial revolution in the 19th century was characterized by the emergence of new industries that made use of science and technology to create new products and services and it was industry itself that started the creation and enforcement of private standards through independent nonfor-profit standards organizations. The experience thus gained was later integrated into the design of national and international public standards. Such private standards are intended to ensure the safety of products made available through trade and innovation and as such would be in line with the WTO principle of non-discrimination. Yet the recent emergence of process-oriented international private standards may not always be in line with this principle. Buyer-driven private standards, especially if they are related to business-to-consumer (B2C) labels, are often more about corporate reputation management than sustainability. The present paper reviews the impact of such buyer-driven private standards on trade and innovation by looking at the governance of global value chains (GVC) by private standards. The conclusion is that business-to-business (B2B) private standards may indeed encourage more sustainable producer practices and reduce uncertainty in GVCs, but they are costly and often not sufficiently responsive to local challenges. B2C-based private standards need to become less influenced by advocacy groups in affluent societies that see private standards primarily as a tool to inhibit trade and innovation.

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Do Private Standards encourage or hinder trade and innovation?

Philipp Aerni

Humankind shares a common interest in the safety of the products used and consumed on a daily basis. There is also an increased interest in the way the product has been produced. In a globalized world, private standards play an increasingly important role in ensuring the safety and sustainability of products and production methods. The co-management of the public good 'food safety' by the public and the private sector is nothing new from a historical point of view. The industrial revolution in the 19th century was characterized by the emergence of new industries that made use of science and technology to create new products and services. Since existing public standards were either non-existent or ill-suited to ensure the safety of these products, it was industry itself that started the creation and enforcement of private standards through independent non-for-profit standards organizations. The knowledge and experience gained from these voluntary initiatives were later integrated into the design of national and international public standards. Generally, the objective of such private standards is to ensure the safety of an increasing number of products made available through trade and innovation. As such these standards would be in line with the WTO principle of nondiscrimination. Yet, the emergence of process-oriented international private standards at the end of the 20th century may not always be in line with this principle. Buyer-driven private standards, especially if they are related to business-to-consumer (B2C) labels, are often more about corporate reputation management than sustainability. The present paper reviews the impact of such buyer-driven private standards on trade and innovation by looking at the governance of global value chains (GVC) by private standards. The conclusion is that business-to-business (B2B) private standards may indeed encourage more sustainable producer practices and reduce uncertainty in GVCs, yet since their process-oriented approach involves a great administrative burden, they are costly to implement and often not sufficiently responsive to local challenges. B2C-based private standards may have their merits but need to become less influenced by advocacy groups in affluent societies that see private standards primarily as a tool to inhibit trade and innovation.

1. Introduction

The transboundary nature of global value chains (GVCs) represents a challenge to global governance that is simultaneously addressed by public and private sector entities – not always to the advantage of trade and innovation. In order to understand the role of standards in global governance, it is necessary to look at the historical background and the different types of GVCs. A GVC can be understood as a 'network of labour and production processes whose end result is a finished commodity' (Hopkins and Wallerstein 1994: 16). As such, GVCs must comply with formal and informal rules in countries where products are being grown, mined, manufactured or assembled, and where they are being sold to end-users. At the same time, they must ensure that all players in the value chain follow the same technical standards that

ensure unification, simplification, modularization and interchangeability. Since the beginning of the industrial revolution in the 19th century, companies have used standardization as a means to reduce uncertainty, manage reputation, enhance market reach, control quality and fuel innovation. Since profit-oriented companies are often not in a position to design and implement standards for the entire value chain, the first standardization organizations have represented a joint effort by all stakeholders in the value chain to reduce risk and uncertainty. They were set up as private non-profit organizations that cover their costs by providing standard-related services. The standards were built on the principles of openness, transparency and consensus. Eventually private standardization organizations helped to create national standards organizations and contributed to the formation of the International Organization for Standardization (ISO) after World War II (Ping 2011). This historical path applies however only to the countries that actively participated and contributed to the European-driven industrial and scientific revolution in the 19th century. There was not much need for such standards in countries in the rest of the world where informal barter exchange still dominated the domestic economies. Regardless of whether they were European colonies or not, these countries were characterized by a dual economy: an informal domestic economy with little or no division of labour, and a formal business set up by state-owned overseas companies, which was designed to export raw materials to meet the increasing demand for such goods in the owner's country of origin.

In the course of the 20th century, when these colonies became independent nations and joined international voluntary standards, they started also with the creation of national standardization agencies. Yet, without being able to draw much on prior experience from nonprofit private standardization organizations, they had little experience of their own and lacked the technology to enforce standards. International voluntary standards became de facto mandatory with the establishment of the WTO in 1995 (Busch and Bain 2004) because the standards must comply with the WTO core principle of non-discrimination. Under the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), trade measures that are considered "necessary to protect human health, animal or plant life and health" are permitted if they are based on risk assessment and are in compliance with the principle of non-discrimination. In this context, the SPS Agreement refers to international standard-setting bodies, such as the Codex Alimentarius Commission based at the Food and Agriculture Organization of the United Nations (FAO) in Rome. Standards for product labelling requirements fall under the WTO Agreement on Technical Barriers to Trade (TBT Agreement). The agreement uses the requirement of 'like products' to ensure that different products are not discriminated against on the basis of different process and production methods (PPMs). The only exceptions to non-discrimination are written down in GATT Article XX. These exceptions are based on non-trade concerns such as the need to protect public morals as well as the lives of humans, animals and plants. Yet, ethical concerns related to food production can be quite ambiguous and in some cases could be considered as nontariff trade barriers, as some of the verdicts of WTO dispute settlement cases have indicated (Blandford and Fulponi 1999, Cottier and Delimatsis 2011).

Unlike public standards set by governments, private standards are currently not subject to WTO disciplines. This is important in view of the renewed trend at the end of the 20th century towards the creation of private standards, especially when it comes to regulating process and production methods (PPMs). Private standards today comprise proprietary standards established by firms, ¹ 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 (Gibbon et al. 2011). In addition to these "business to business" (B2B) standards, large retailers increasingly use their own particular "business to consumer" (B2C) labels, the aim of which is to signal to consumers that the products so-labelled are addressing their sustainability concerns to the greatest extent possible. These labels have become important tools of reputation management, but are rarely based on evidence-based risk assessment (*Guardian* 2013).

Some of the technical B2B private standards (except proprietary standards) have emerged from the need to cooperate in a particular global value chain to increase flexibility, speed, interchangeability and interoperability in the global assembly line through mass customization and modularization in global manufacturing (Smith et al. 2012). These standards include international technical protocols and platforms with requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are dependable and result in an end-product of the desired quality.²

Such standards contribute significantly to trade facilitation and the global economic integration of the developing world. They enable domestic companies in developing countries to become suppliers of standardized products and services in a GVC and thus benefit from knowledge and technology transfer and the development of human capabilities that eventually allow these companies to climb up the value chain through innovation (ISO 2010).

Yet, this trend does not necessarily apply to buyer-driven international private standards that are dominant in the global retail industry. These standards are prevalent in labour-intensive value chains that still follow the classical north—south division of labour with developing countries offering the advantage of cheap labour and easy access to natural resources and developed countries being the largest consumer market for such products. Since the global business in consumer products is demand-driven, the power in the value chain is with the global retailers that are largely concerned about their reputation in affluent consumer societies. This reputation depends on the media portrayal of their presumed motives rather than their actual performance, not just in terms of delivering value for money to the consumer

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¹ Proprietary standards owned by a firm are highly controversial especially in the IT industry where specifications for hardware or software may be IP protected and therefore controlled by a single company. Once such proprietary standards become 'de facto' standards in industry, they gain tremendous value thanks to network externalities that create lock-in effects (Pai 2012). Such private "de facto" standards are not governed by a standards organization and therefore do not reflect the basic principles that should guide standards: openness, transparency and consensus. As a consequence, they are not just facilitating innovation and trade but can also actively block it to increase the profits of the company that owns the standard. Microsoft was able to successfully create such a 'de facto' proprietary standard and the emergence of the open source movement in the IT industry must partly be understood as a response to combat the trend towards proprietary private standards with open standards.

² See definition of standards by ISO (http://www.iso.org/iso/home/standards.htm)

but also with regard to their effective contribution to sustainable development (Aerni and Bernauer 2006). Especially with regard to B2C private labels, it is therefore the alleged consumer perceptions and general belief systems in affluent countries rather than the real economic, social and environmental concerns in poor countries that influence the standardsetting process. Western consumer advocacy groups claim that the affluent consumer is less concerned about the price of imported footwear, clothes, bags, food and flowers than the conditions under which the product has been produced. Even though social science research indicates that this may not really be the case for the average Western consumer (Miller 2001, Johnson 2008, Horne 2009, Aerni et al. 2011), the claims of advocacy groups matter. Buyerdriven B2C social and environmental standards are primarily meant to signal to consumers, or rather to consumer advocacy groups, that the retailer is on their side in the fight against environmental degradation and worker exploitation. Private B2C labels often come on top of private B2B standards that are jointly set up by a retailer consortium to ensure the safety and sustainability of products, processes and production methods in the global food value chain. Yet, the hazard analysis and control point (HACCP) systems required as the technical basis for meeting B2B standards (in addition to more qualitative sustainability benchmarking systems) are costly to implement. Since global retailers are profit-oriented companies and as such unwilling to assume these costs, they make use of their standard-setting power to transfer responsibility and costs to actors further down the value chain. They do so through private accreditation institutions that provide third-party certification (TPC) to the suppliers wishing to gain access to the global market (Hatanaka et al. 2005). The accreditation is obtained from a global standard setting body. The most prominent and influential of these is GLOBALG.A.P, the worldwide standard that aims to assure that suppliers of agricultural products worldwide comply with Good Agricultural Practices (GAP). It is designed to create openness and transparency for the suppliers that intend to gain access to the global market (Hatanaka et al. 2005). However, the system is not really based on consensus, since the standards were set by the global retailers while involvement of other actors further down the food supply chain was marginal (especially farmers in developing countries) (Freidberg 2007). The lack of involvement of farmer organizations is also reflected in the high cost of compliance. Large and vertically integrated suppliers in the food chain may be able to cope with these additional costs but small suppliers are unlikely to meet the new requirements unless they become part of a larger corporate entity or a producer cooperative that is assisted financially and technically by the public sector or NGOs to implement these costly standards. Moreover, such standards often pursue a one-size-fits all approach taking into account farmers' experience as well as the local socioeconomic and agro-ecological contexts in which these farmers operate (Freidberg 2007).

Due to their process-oriented approach and the retailers' desire to please particular advocacy groups, B2B and especially B2C may rarely comply with the WTO's principle of non-discrimination and they tend to discourage technological innovation on the supply side since the consumer and environmental advocacy groups which shape sustainability perceptions regard economic and technological change as being part of the problem rather than part of the solution (Aerni 2009).

Private standard-setting bodies in agricultural production, such as GLOBALG.A.P, have partially responded to the criticism that their global private standards are too costly and follow a one-size-fits-all approach. Their response has been to create local G.A.P. standards and offer training programmes on how to effectively comply with required standards (GLOBALG.A.P 2013).

In addition to buyer-driven standards in the food chain, there are also private standards set by input suppliers and food manufacturers (largely in response to collectively comply with the buyer-driven standards). These standards are closer to the producer and therefore are often more responsive to the local environmental and social context of production.

Finally, there are the labels used by Alternative Food Networks (AFN). AFNs reject global private standards believing that all the rhetoric about stakeholder dialogue, traceability and good corporate citizenship merely serves as a means to defend of the powerful in the food chain (Freidberg and Goldstein 2011). AFNs are based on a joint vision of an ethical 'foodscape' forged out of personal relationships of trust and loyalty. These visions are however not necessarily based on a rejection of international agricultural trade. Fair trade, for example, is regarded as 'shortened' by a combination of technology and socio-political solidarity (Renting et al, 2003).

All these factors lead to an ever-increasing number of standards and certification regimes that may confuse consumers more than they reassure them. However, most of the standards in the global food chain matter as B2B labels rather than as business to consumers B2C labels. Moreover, the proliferation of B2C labels with its sometimes contradictory signals to consumers is partially addressed the Global Social Compliance Programme (GSCP) that was created by retailers in 2006. The GSCP's purpose was to create a platform to promote the exchange of knowledge and best practices in order to build comparability and transparency between existing social compliance and environmental compliance systems.³

In this paper, we address the role of private standards in the governance structure of GVCs in general and cast a critical eye over the multiple challenges posed by the rise of buyer-driven private standards in the 21st century. In this context, we document the evolution of the global certification system for good agricultural practices (B2B standards) and how it tries to cope with the challenge of ensuring safe and environmentally friendly agricultural production without diminishing the possibilities for small-scale farmers to participate in the global trading system. We then critically discuss the risk of private labels that even go beyond the global standard with the purpose of promoting ethical, fair or organic trade. The paper concludes with some recommendations on how to cope with the challenge of private standards in international trade and development.

2. Global Value Chain (GVC) Management and Innovation

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³ See http://www.gscpnet.com/about-the-gscp.html

The growing cultural and geographical distances, rapid technological change, and the increasing number of actors involved in GVCs make it necessary to design and implement industry-specific transboundary initiatives for quality control as well as compliance with national and international public standards (Gereffi and Korzeniewicz 1994). The importance of non-market coordination in setting and enforcing product and process parameters along the value chain (Humphrey and Schmitz 2001: 1) is also reflected in the growing size of government public affairs and compliance departments within large multinational companies. It indicates the growing importance for companies to be involved in and to influence the design and implementation of international voluntary standards. In addition, they need to make increasing efforts to comply with ever stricter national and international mandatory standards on issues related to the protection of public health and the environment.

Yet, GVCs also play a crucial role in the generation and diffusion of innovation. The inclusion of companies in developing countries in a GVC puts them on a steep learning path enabling them to acquire new technical and business skills. This generates spillovers across the domestic economy in terms of capacity building and technical upgrading. Even though firms in developing countries are primarily focused on incremental innovation and the absorption of new knowledge and skills, some have managed to contribute to path-breaking innovations within larger collaborative networks that include the private sector, civil society and national research institutes. Since the linkages between R&D institutions and the domestic private sector in developing countries are often poor or inadequate to bring about innovation, companies benefit more from organizations that facilitate the diffusion of innovation and skills through their assistance in compliance with standards that are required to participate in GVCs. Such assistance can come from public institutions concerned with metrology, standards, testing and quality (MSTQ), third-party certification agencies or private consultancies specialized in providing knowledge-intensive business services (KIBS). They all ensure the inflow of knowledge and technology from external sources (Pietrobelli and Rabellotti 2011). This is particularly true for technical standards.

2.1. Technical standards as a collaborative effort within a specific industry

Industry-specific value chain governance is primarily concerned with technical challenges. Its rules are characterized by a high degree of complexity. They rely on accurate and fact-based codification of procedures. Suppliers must therefore acquire advanced technical capabilities to comply with the requirements. The main purpose of this type of self-regulation is a joint design of a common technical standard that enables better industry-wide collaboration on product development. Often suppliers can count on the assistance of national standards organizations and the ISO. Yet, with the advance of information and communication technologies, such common technical standards are increasingly embedded in global product platform architectures that allow for mass customization at relatively low transaction costs (Nepal et al. 2012).

Private regulatory initiatives that are purely technical in nature may sometimes respond to the need for self-regulation in markets that are characterized by rapid technological change. In

other cases, it is the trend towards mass customization in many GVCs that creates demand for technical standards that make modularization and integration in GVCs possible and reliable.

These B2B technical standards may not be able to prevent glitches in the GVCs that result in defective products with costly consequences for the company concerned (global product recalls, litigation). But these types of private standards are not controversial on the political level because they generally increase consumer welfare without generating unknown additional risks (e.g. not every country needs a different type of socket). Generally, they illustrate the many positive and necessary features of private standards because they facilitate trade, spread knowledge, disseminate innovative advances in technology, and share good management and conformity assessment practices (ISO 2010).

Many developing countries that have managed to integrate parts of their industries into GVCs were able to do so because their governments recognized the need for standardization, quality assurance, metrology and testing to enable them to participate in international trade. Thanks to governments acting as facilitators of private sector development as well as to the emergence of globally active and knowledge-intensive business services (KIBS), many developing countries have managed to climb up the value chain in international trade through the adoption of technological innovation and the acquisition of technical and business skills. KIBS assist companies in the transition from mainly informal business practices to formal business transactions that are largely compliant with national public regulation as well as complex and industry-specific international private standards. As such they essentially contribute to the construction of an entrepreneurial infrastructure that enables many developing countries to eventually become emerging economies that attract a large amount of foreign direct investment (FDI). FDI then further enhances knowledge, skills and technology transfer, and thus the ability of these countries to improve their own home-grown industries, and makes them internationally competitive (Pietrobelli and Rabellotti 2011).

Globally active firms that source from and sell to companies in different parts of the world must engage in coordinating activities to create a governance structure that reduces the risks and maximizes the benefits of complex GVCs. Such coordinating activities can take place through industry-specific transboundary regulatory initiatives (Kaplinsky 2000, Sturgeon 2001). They have the purpose of lowering transaction costs for businesses involved in the development of an innovative product and ensuring the safety and quality of the end-product. Depending on the power relations and the challenges within a particular value chain (e.g. existing public regulatory frameworks, closeness to end-users and consumers), the governance structure and thus also the purpose and nature of private standards can look quite different.

2.1 Governance

Gereffi et al. (2005) developed a theory of value chain governance in which they distinguished five types of value chain governance that reflect (a) the degree of complexity of information and knowledge transfer, (b) the extent these transfers can be codified and (c) the ability of actual and potential suppliers to comply with the requirements.

The first type of GVC is termed *market-based*. It is characterized by the small size of buyers that rely on competent suppliers in a value chain that is based on relatively easy and codifiable transactions. The small buyers tend to purchase ready-designed imported products and then sell them under their own label or under the supplier's own particular brand. This type of transaction provides small buyers with opportunities to engage in functional upgrading and allows them to invest more in design, product development and marketing, for example. Learning from spillovers and by imitation allows these small firms to capture knowledge for adaptive change (Schmitz 2004).

The second GVC type is more complex because it relies on *modular chains* with highly codified links and transactions. Suppliers must respond to customer specifications and learn how to produce components and modules in accordance with highly specified technical standards. Adherence to standards and delivering on time is part of the learning process. Suppliers must also learn to innovate or at least to keep abreast of technological advancements in order to cope with the specific demands from lead firms. For that purpose they also require the support of technical consultants and accredited certification institutions. The business and precision culture that suppliers must adopt in the course of these upgrading efforts in the modular value chain also generate positive externalities for other domestic sectors that are connected to the respective supplier (Pietrobelli and Rabellotti 2011).

The third GVC type has more of a *relational* nature. Transactions in such GVCs cannot easily be codified and they rely heavily on tacit knowledge. Collaboration is based primarily on long-term commitment and characterized by social and/or spatial proximity. In the absence of fully codified standards, trust and reputation play a crucial role (Sako and Helper 1998). Learning efforts and trust-building measures may require more time and involve higher transaction costs, but they tend to bind parties into continued interaction and provide more flexibility to do things in a different way than is possible in strictly abiding by codified standards.

Where the competence gap between the lead firm and supplier is large, a relational chain can quickly become part of a larger *captive* chain with a dominant lead firm making up for the lack of ability to codify transactions with increased control through hierarchical structures and vertical integration. This fourth type of GVC tends to enhance power concentration and control of the supply chain. Suppliers in relational chains can avoid this outcome by becoming active learners in the GVCs rather than just passive suppliers.

Once they move up the value chain from passively supplying components for branded endproducts towards becoming designers of branded final products themselves, suppliers in relational chains can eventually become lead firms in their own right.

In order to avoid this, lead firms in captive chains may try to prevent functional upgrading to ensure that suppliers continue to be dependent on them. If there is only one single lead firm then the trend may be towards vertical integration and intra-firm trade between one big transnational company and its subsidiaries (Gereffi and Korzeniewicz 1994).

The fifth type of GVC represents a sort of alternative to vertical integration in the sense that the lead firms (global retailers) make use of their position at the top of the hierarchy to coordinate the GVC without having to assume responsibility for all its actions and transactions. For that purpose, they make use of private standards as strategic business tools that enable them to access new markets, coordinate operations according to their preferences, provide product quality and safety assurance and enhance their reputation with consumers by complementing their brands with niche premium products that respond to social and environmental concerns expressed by consumer advocacy groups (Reardon et al. 1999, Hatanka et al. 2005). Yet, by designing private standards that address social and environmental concerns they codify what is in many ways not codifiable because there is no one-size-fits-all approach to environmental and social challenges. In fact, local practices developed by farmers over a long period of time to make the best use of their available resources and ensure a safety net for their dependents may suddenly be in conflict with buyerdriven standards and thus be abandoned (Freidberg 2007). The difficulty of codifying and measuring the improvement of social and environmental standards is addressed by the standard-setting firm through the reduction of complexity of auditing. An audit may then primarily consist of a benchmark exercise about procedures and steps undertaken to comply with the standards, rather than reporting on the actual outcomes in terms of environmental and social impacts and economic opportunities on the ground (Kogg and Mont 2012, Freidberg 2007). The enforcement and monitoring of these procedures and steps, as required in certification and labelling schemes, is left to independent third-party certification organizations. This allows retailers (Bredahl et al., 2001):

- to differentiate agrifood products by attributes of special consumer concern
- to ensure consistent implementation of standards regardless of the product's origin
- to minimize transaction costs, financial liability and reputational risks.

The rapid proliferation of third-party certifiers globally and the breadth of standards that certification covers have produced a very complex set of institutional mechanisms that are difficult to categorize (Hatanaka et al. 2005).

Even though there is no doubt that such buyer-driven standards can have positive impacts on social and environmental sustainability, their primary purpose is reputation management – first of all to avoid becoming a target of international advocacy groups and second to assure customers that retailers share their concerns about food production. Since innovation in labour-intensive industries that supply global retailers may be portrayed by consumer and environmental advocacy groups as undesirable technological change (possible loss of jobs, possible new risks), buyer-driven private standards do not necessarily encourage product and process innovation in agriculture (Choi and Krause 2006: 637, Lee et al. 2012).

2.2. Moving up the GVC through effective National Innovation Systems

Generally, the bigger the gap in institutional frameworks between the lead firm's home base and the country from which it sources its supplies, the more likely that the value chain will be

governed by captive (vertical integration) and hierarchical structures (buyer-driven standards). For the lead firm it is essentially a trade-off between lower production costs and higher transaction costs (caused by uncertainty) that determines its decision to invest in a developing country (Altenburg 2006). However, governments in developing countries may assist domestic firms in their efforts to move up the value chain through the creation of a national innovation system (NIS) that reduces the complexity and costs of domestic transactions (e.g. designing a system of efficient standards, creating testing and quality assurance institutions) and encourages weak hierarchical forms (e.g. investing in research, education and training, establishing innovation clusters, facilitating public-private partnerships and joint ventures that include technology transfer). Public assistance of domestic firms through national innovation systems thus enables these firms to cope better with the more complex transactions in global business and the costs of technology transfer and training. As the NIS of Taiwan illustrates, local firms in previously captive value chains can be empowered by government assistance through improved access to learning, responsive public research institutions and the creation of an entrepreneurial infrastructure that lowers the costs and uncertainty faced by firms trying to eventually move beyond the restrictions of a hierarchical value chain through local innovation, functional upgrading and the construction of domestic value chains (Tsai and Wang 2005). As a result, captive value chains are being transformed into modular and relational chains that give suppliers more space to innovate and broaden and strengthen their position in the value chain.

It is however more difficult to transform hierarchical value chains that are indirectly governed through buyer-driven private standards into more innovative and empowering types of value chains. This because retailers tend to be more concerned with potential risks of innovation in the value chain than with its potential benefits. As a consequence, buyer-driven standards tend to be rather defensive. They may encourage collaboration on the joint implementation of standards but not collaboration on innovation. This is especially true for products that rely on a collaborative partnership to manage the high supply risk and avoid the potentially high financial losses (Kraljic, 1983). Collaborative innovation is only possible in cases of mutual direct dependence between supplier and buyer (Ahuja 2000). This is not generally the case in the global food supply chain (Kogg and Mont 2012).

3 The Challenge of Governance by Private Standards in Value Chains

In general, there are two main reasons for companies to govern value chains through private standards. First, private standards enable the creation of differentiated products allowing companies to generate an added value. Implementing this strategy requires close coordination and communication with suppliers to successfully meet changing product specifications and transmit information about market requirements. Second, pressure is increasing on final buyers to meet labour, environmental and product safety and quality standards (Busch and Bain 2004). These factors do not necessarily require stronger value chain governance as long as suppliers are in a position to meet the demands set by third-party certification entities. Yet, many suppliers, especially when it comes to food production in developing countries, lack the

means and/or the capacity to meet these demands. Therefore they must be assisted by a producer organization, public sector institutions or NGOs that help them to comply with standards. If such support is unavailable, small producers are likely to be excluded from global food value chains and therefore unable to benefit from trade and knowledge transfer (Lee et al, 2012). However, if a way can be found to reach also those farmers who are dealing with unfavourable conditions, compliance with social and environmental standards can certainly have positive effects. Such farmers, however, are likely to remain dependent on outside support and experts (government subsidies, foreign aid) to cover the costs and make up for their lack of expertise to cope with private standards. The ambiguity of buyer-driven private standards in the global food value chain therefore deserves closer attention from a historical, environmental and social point of view.

3.1 Private Standards in Agriculture

3.1. Historical context

Even though the regulatory trends today tend to suggest that public standards in food and agriculture are increasingly becoming irrelevant in view of the rise of private standards (Bush and Bain 2004), the first efforts to ensure safety and transparency in the food chain date back to private sector initiatives during the industrial revolution of the 19th century (Freidberg 2007, Freidberg 2009). This was the time when various technological breakthroughs in transportation and refrigeration facilitated the so-called cold-chain revolution that helped food retailers to keep products 'fresh' despite long transport distances and increasing time-lags between the harvesting and the consumption of food. The need for retailers to set standards emerged when actors in the grocery business started to cheat in their claims about the quantity and quality of the food sold. Private standards enforced by voluntary standard-setting organizations were a way to reassure consumers that the food they consumed was safe despite long-distance transportation and refrigeration. Many governments were already responding at that time to consumer concerns about innovation in the food supply chain. For example, the public in France did not trust the reassurances of the industry that refrigeration is a convenient and safe way to keep products fresh for a long time. As a consequence, the French government banned refrigerated meat imports from overseas until World War I (Freidberg 2009). Yet, public perception was already framed at that time by the stakeholders that benefited from the status quo, such as the French cattle farmers and the distributors of their meat products. They feared competition from cheap foreign meat imports from Argentina and fuelled public fear about refrigeration technology by referring to 'scientific' studies that claimed to have identified potential health risks caused by refrigerated meat (Freidberg 2009). Despite such public bans, early standards to ensure food safety and quality were created by the food industry itself, based on scientific expertise and experience. In the course of the 20th century, food safety increasingly became a political concern and eventually it was declared to be a public good by national governments which started to establish national food safety agencies in charge of monitoring and enforcing mandatory public standards on food safety.

These food safety agencies performed well in countries that were able to build upon wide experience with private standards organizations that had been set up earlier on by the private sector. Many developing countries were not able to draw on such prior experience and thus their ability to enforce public food safety standards and their effectiveness were correspondingly weak (Ping 2011).

With the creation of global food value chains in the course of the 20th century, food safety became a global public good that was expected to be managed on the international level. As a consequence, FAO and the World Health Organization (WHO) established the Codex Alimentarius Commission in 1963 to create harmonized international food standards, guidelines and codes of practice to protect the health of the consumers and ensure fair practices in the food trade. Since then, the Codex has developed more than 200 standards covering processed, semi-processed or raw foods intended for direct sale to consumers or for intermediate processing; more than 40 hygienic and technological codes of practice; evaluated more than 1000 food additives and 54 veterinary drugs; set more than 3000 maximum levels for pesticide residues; and specified more than 30 sets of guidelines for contaminants. Currently the Codex Alimentarius Commission has 186 Codex Members and 219 Codex Observers (50 Intergovernmental Organizations (IGOs), 153 NGOs, 16 UN agencies).

The advantages of having universally uniform food standards for the protection of consumers were recognized by international trade negotiators during the Uruguay Round on the General Agreement on Tariffs and Trade (GATT). As a consequence, the SPS Agreement and TBT Agreement of the WTO both encourage the international harmonization of food standards. The SPS Agreement even cites Codex standards, guidelines and recommendations as the preferred international measures for facilitating international trade in food.

After the end of the Cold War, a new wave of globalization occurred in the business of food and agriculture. While the public sector substantially reduced its support for agricultural research and development (R&D) in the early 1990s, many large agrochemical companies increased their R&D expenditure mainly because the revolutions in information technology and biotechnology offered new opportunities for agribusiness to develop new agricultural products and services to help farmers to produce more with less and with a more benign impact on the natural environment (Kingsbury 2011, Banks and Melves 2012). Investment in agricultural biotechnology was primarily a business response to the stricter regulation on the means used for plant protection in the 1970s and 1980s (Aerni 2004). Since biotech crops could produce their own pesticide, there would be less need to spray it, as is the case with Bt crops (Bernauer 2003).

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⁴ In addition to the Codex Alimentarius Commission (CAC), there is also the World Organisation for Animal Health (OIE) and the International Plant Protection Convention (IPPC). These so-called 'three sisters' produce international standards regarding food safety, animal health, and plant health respectively. These international standards for sanitary or phytosanitary measures are explicitly mentioned in the SPS Agreement of the WTO (ISO 2010).

⁵ See also http://www.codexalimentarius.org/members-observers/

Yet, at the same time, food production slowly moved from a supply-driven to a demand-driven economy. This process shifted market power in the global food chain from agribusiness to the supermarket chains that are most anxious about their reputation with food consumers in affluent countries (Gereffi et al. 1999). Since these consumers tend to associate technological change in food and agriculture with risks related to food safety and the environment rather than benefits for farmers and the environmental management, retailers have been less than enthusiastic about advertising the benefits of technological change to consumers, even though their entire cold chain and the move towards pre-packaged convenience food is largely a product of it. Instead consumer marketing in retailing became increasingly focused on reassuring the consumers that they share their values about safe and 'natural' food (at times equating healthy with natural), the protection of wholesome family farms and the natural environment (Freidberg 2007, Aerni 2009).

Consumer anxiety about technological change in agriculture was further increased in response to several food safety scandals over the past two decades relating to food produced in Europe (e.g. methanol in Austrian wine production, traces of polychlorinated biphenyls (PCBs)/dioxin in Belgian chicken eggs, bovine spongiform encephalopathy (mad cow disease), rotten meat or 'Gammelfleisch' in Germany, etc), in China (e.g. the use of unhygienic starting materials as food ingredients, and melamine in milk and other dairy products) and in other export-oriented developing countries (Vogel 2012). Most of these food scandals happened despite stringent food safety regulation in the public sector and strict codes of conduct in the private sector, but the response in politics and business was nevertheless 'more of the same'. In Europe, in particular, food safety regulation is widely considered to be costly and ineffective because decisions on the level of EU Member States are driven by politics rather than proper risk assessment (Paarlberg 2008, Alemanno 2013, Masip et al. 2013). In 2002, EU Food safety law (Regulation EC/178/2002) made the *precautionary* principle (PP) the guiding principle for policy decision-makers who wish to protect consumers from exposure to the potential risks of novel food while seeking more complete scientific and other data. Even though the principle would, de jure, have to comply with the principles of non-discrimination and proportionality and should be considered provisional, de facto, this has not been the case. For example, the PP has become a political instrument used by EU Member States to block permission to cultivate the few GM crops that have been approved by the European Food Safety Agency (EFSA) and authorized by the European Union. Often, government justifications for banning GM crops refer to consumer concerns and public resistance against genetic engineering in agriculture, rather than scientific evidence of risk. Scientific evidence for the concerns raised appears to have become largely irrelevant (Bernauer and Aerni, 2008, Tosun 2013, Masip et al. 2013). The retail industry in Europe is even less bound to take into account the scientific evidence when deciding to remove certain products from the supermarket shelves or ban certain means of plant protection and engineering in the food production process. As a consequence large retailers have responded to the public resistance against GM food at a very early stage by also removing the approved GM products (as long as they are labelled as such) from their shelves.

3.2. Buyer-driven Private Standards in the 21st century

Several economic and technological changes occurred after the Cold War that contributed to a shift from a supplier-driven to a buyer-driven global food business.

First of all, the establishment of the WTO in 1994 and its effect of making previously voluntary international standards de facto mandatory led many governments in developing countries to upgrade their national food safety systems and open up their economy for foreign direct investment. These regulatory changes encouraged national retailers in Europe and the United States, which already faced a largely saturated home market, to go global and initiate a trend towards 'supermarketization' in emerging economies (Reardon et al. 2005). This has largely led to the transformation of domestic procurement systems with local supermarket branches becoming the major buyer of locally produced food. In 2003, the amount of food that supermarkets in Latin America bought from local farmers was already 2.5 times greater than the amount that was exported from the region. This positive effect on rural development should not be underestimated (Reardon et al. 2005).

Second, major socioeconomic and political changes in affluent societies in Europe and North America shifted the power in the global food chain from producers and processors towards retailers. Generally, the end of the Cold War made it difficult for governments to make deals with powerful political stakeholders behind closed doors because keeping state secrets became less legitimate once it could no longer be justified by the possibility that a global war could break out. This led to a shift towards more accountability and transparency in politics that also increased the influence of public opinion in politics and thus the power of taxpayers and consumers. Yet, this power was seized not by the public itself but by unelected advocacy or intervener groups that claim to represent public concerns (Luhmann 1993). These advocacy groups raised awareness in politics about the possible negative social and environmental consequences of international trade, new technologies and economic globalization and their protest targets became those stakeholders they held responsible for driving the process of global economic and technological change. Thus the main protest targets in the global agribusiness chain have become the large agrochemical companies (Monsanto, Du Pont, Dow), global food processors with famous global brands (Nestle, Unilever, Coca Cola) and fast food chains (McDonalds). Even though these corporate stakeholders invested heavily in technological innovation to make their production-systems more efficient and sustainable, this did not help them much to appease protesters. This is because the protesters did not attack them primarily for what they do but for what they stand for (Aerni and Bernauer 2006), namely driving global change and exposing people to risk and uncertainty for the sake of making profits. This sort of framing appeals to the affluent public in developed countries which tends to take the benefits of modern technology for granted while considering its possible risks to be increasingly unacceptable. Since the potential risks of new technologies in agriculture are perceived to be uncontrollable, unobservable and potentially catastrophic they have especially low public acceptance rates (Marris et al. 1997). Professional advocacy groups that claim to act in the public interest further amplify the public's fears about agricultural technologies by using dramatic language and apocalyptic images that maximize the emotional impact of their organized protest events disseminated through different

channels of communication (Nelkin 1995). As such, they have gained public trust as fearless challengers of corporate interests and as advocates of potential victims and the environment. Consequently, public trust has become a private political resource that provides the advocacy groups with public legitimacy, ensures a steady stream of income through donations and membership fees and attracts the interest of multinational corporations that are interested in gaining public legitimacy through joint projects with advocacy groups and other NGOs that have gained public trust (Aerni and Bernauer 2006). This, however, poses a dilemma for the trusted advocacy groups because if they are affiliated too closely with stakeholders that the public distrust for representing power and money, this could eventually affect their own trustworthiness with the public ('Were they exchanging public trust for money and power? Are they still representing the public interests?). As a consequence, cooperation between business and advocacy groups is primarily limited to the establishment of an independent third-party institution that involves representatives from both sides in implementing a particular sustainability initiative.

Retailers that are especially concerned about their reputation with consumers (and thus also the public at large) have gone to great lengths to distance themselves from unpopular 'agribusiness' in order to make public interest groups (that resent agribusiness) more approachable. In this context, they have largely adopted the language of protesters when it comes to concerns about the environmental and social impact of modern agriculture. This has also enabled them to win the support of well-known international environmental NGOs when it comes to the design and implementation of global private standards to improve the social and environmental conditions in agriculture (Freidberg 2007). The adoption of the attitude of environmental NGOs has however had an impact on the framing and content of private standards. Since the constituency of these NGOs is the anxious public in affluent countries rather than innovative agricultural producers in developing countries, private standards tend to be designed primarily to appease Western consumers rather than to facilitate cost-effective and innovative ways for producers to improve their environmental and social practices and participate in international trade (OECD 2012). Such private standards are therefore based on the implicit assumption that modern agriculture is the problem rather than part of the solution. This baseline assumption has ironically led to costly private standards that have shifted the sourcing of fresh vegetables for supermarkets away from smallholders and towards plantation-scale enterprises (Dolan 2005, Bain and Busch 2004, Lee et al. 2012). At the same time it has led to a proliferation of claims, labels and certificates in the marketplace that are managed and enforced by third party certification systems (TPCs), mainly based on B2B labels, but with the purpose of communicating to consumers the commitment of the retail industry to shared environmental and social values.

3.2.1. Third-party certification systems and process-oriented standards

The need for TPCs emerged in response to widespread consumer anxiety combined with increased regulatory responsibility and intense media scrutiny of the global food supply chain. Retailers who were most dependent on their reputation with consumers responded to social pressure with new voluntary standards, but this time not primarily to improve product safety and product quality as was done before, mainly by the suppliers themselves, but to improve

the processes of food production on and off the farm (Hatanaka et al. 2005). In other words, they established process-oriented standards in addition to product-oriented standards in order to address the concerns of consumer advocacy groups that go beyond mere food safety. Process-oriented standards based on the HACCP concept are also applied in public standards and have been recommended by the Codex Alimentarius Commission since 1993. Yet, process-oriented private standards even go beyond HACCP. They require suppliers to adhere to codes and standards of 'best practices' meant to ensure the social and environmental sustainability of their agricultural production systems. While social standards focus mainly on ensuring at least minimal levels of worker safety, health and terms of employment, the environmental standards aim at ensuring a minimum use or even a ban on chemicals for crop protection, a minimum use of nutrients and energy and a system of waste collection and if, bound for Europe, a guarantee that the product is free of GM organisms. Retailers themselves, however, were not in a position to enforce these standards themselves because they would be perceived as lacking the required independence. Moreover, they were not interested in pushing for vertical integration in the supply chain that would make them directly accountable for flaws in the system. Instead they preferred to maintain a hierarchical value chain of indirect governance in which they could not be held directly accountable for hazards, but that would nevertheless communicate to consumers their commitment to accountability and transparency in the food chain (Freidberg 2007). For that purpose they helped create TPCs in charge of enforcing the standards. In this system, an accredited third party issues certificates to suppliers.

A certificate usually represents a written assurance that a product, process or service is in conformity with the applicable standards. As such its label or symbol indicates that compliance with standards has been verified and approved by the standard-setting body that accredits certification bodies (Hatanaka et al. 2005). While the certificate is a form of communication between seller and buyer, the label can also be a form of communication with the end-consumer. In the TPC system, suppliers are therefore not dealing directly with the large retailers but with local accredited certification. These national or regional certification bodies must in turn be accredited by a global standard-setting body from which they receive their accreditation. Suppliers thus receive their certification from the local branch in this 'independent' TPC. But this requires that they pay the certification fee, hire consultants who help them to upgrade their equipment, cover annual inspections and external audits and even pay for the analysis of residues, and tests of soil probes in laboratories (Hatanaka et al. 2005, Freidberg 2007). This may be manageable for capital-intensive, large-scale suppliers but certainly not for small-scale producers as the case of GLOBALG.A.P, the largest and most widely applied TPC scheme, illustrates.

3.2.2 GLOBALG.A.P

GLOBALG.A.P is a not-for-profit organization that aims at ensuring safe, sustainable agricultural production worldwide through voluntary standards for the certification of agricultural products around the globe. G.A.P. stands for good agricultural practice – and GLOBALG.A.P. is the worldwide standard that assures it. GLOBALG.A.P. was originally formed in 1997 as EUREPG.A.P, an initiative taken by European retailers to respond to

numerous food safety scandals and the introduction of GM food in Europe. It set the global private standard for product safety, environmental sustainability and worker safety and welfare. The goal was to harmonize previous private standards and procedures and develop an independent certification system for G.A.P.

The GLOBALG.A.P system today relies on control points and compliance criteria (CPCC) not just for fresh fruits and vegetables but also for feed crops, livestock and fish products. In total it encompasses 16 standards that cover more than 400 certified products. The CPCC protocol is compiled from numerous control points that take the form of "major musts" and "minor musts". The CPCC themselves have been drawn up for each of these standards by a technical committee consisting of retailer and supplier representatives. The benchmarking process is based on a one-to-one comparison principle where private or public schemes existing in different regions or countries are contrasted with GLOBALG.A.P. These schemes usually address certain requirements identified for the particular geographical locations and marketplaces that need to be met to qualify for the GLOBALG.A.P standard. Countries that are not yet in a position to meet the high global standard can first become eligible for the LocalG.A.P standard. This provides an achievable level of assurance and reliability that helps producers gain access to new local and regional markets. There is also a GLOBALG.A.P addon, which allows producers to become recognized for going beyond the global standard. It raises their status as a producer and offers buyers specific assurances tailored to their interests and preferences (GLOBALG.A.P. 2013)

GLOBALG.A.P. recognizes other farm assurance schemes via benchmarking. Accredited certifying bodies on the national and regional scale must follow strict criteria to become eligible. Once they comply with all requirements they become part of the online certification database that customers can use to check producers and validate certificates. To ensure that accredited certification bodies are conducting their audits in line with GLOBALG.A.P. requirements and procedures a Certification Integrity Program (CIRPO) has been put in place that issues warnings or even removes those organizations that repeatedly fail to comply from the database. Currently there are 1400 trained inspectors and auditors working for 142 accredited certification bodies to perform independent third-party producer audits and issue certificates for 130,000 producers in more than 110 countries.

In developing countries national GAP schemes have been established with the support of governments. They have almost become a prerequisite for enlarged market accessibility, including for small-scale farmers. Small-scale farmers would not be able to comply with the GAP private standards requirements (especially if they are illiterate) unless they are assisted by consultants from governments and NGOs. These consultants do often not work with single farmers but with farmers' cooperatives in order to obtain group rather than individual certificates as these are cheaper and require less individual effort. Nevertheless, even under these circumstances many retailers are reluctant to source from suppliers with outgrower

schemes⁶ because ensuring that outgrowers are doing every little step correctly is nearly impossible.

This is especially true for agricultural products where GLOBALG.A.P is just one of the players in the business of global standard-setting. As an *international standard-setting body* it is in competition with many other B2B labels such as the Dutch MPS-ABC scheme which aims at phasing out almost all means of plant protection classified in toxicity class 1.⁷

3.2.3 B2B and B2C Labels in the Kenyan Flower industry

In the case of the cut-flower export industry in Kenya where outgrower schemes have been nearly abandoned, it is not uncommon for a producer to hold five or more different certificates. Some may be individual company standards imposed by large retailers, which are adopted throughout their supply chains and are mainly designed to communicate a commitment to sustainability to consumers (e.g. Tesco's Nature's Choice, Carrefour's Filières Qualité, Coop's Naturaplan, etc). Some are collective national standards set by collective organizations that operate within the boundaries of individual countries, including industry associations and NGOs. In the case of Kenya, the Kenya Flower Council (KFC) administrates one of the most prominent national standards. The KFC Code of Practice (CoP) has references to more than 23 different Government statutes relevant to floriculture; the principles of the International Labour Organization (ILO), International Code of Conduct (ICC), Ethical Trade Initiative (ETI), as well as the Horticulture Ethical Business Initiative (HEBI). It is also fully benchmarked to GlobalG.A.P. and Fair Flower Fair Plants (FFP) and many other international and individual standards that prevail in export markets. With its CoP, KFC ensures that growers comply with the ever changing international and local standards. The main thrust of the KFC CoP is social welfare, safety and health at the workplace, environmental conservation and protection, good agricultural practices, training, and quality management. Complying with the KFC CoP is no longer just about demonstrating corporate social responsibility (CSR) but has become *de facto* mandatory for the flower export industry. Generally, the proactive stance of the Kenya Flower Industry has indeed improved its record of environmental (e.g. less nutrient effluence, less pesticides, less water) and social (e.g. regular working hours, higher salaries, social safety measures, decent housing, schools for workers' families) and sustainability (Hale and Opondo 2005, Riisgaard 2007, Mekonnen et al. 2012). Despite its size and growing economic importance in Kenya, the Kenyan flower industry is considered to be one of the less polluting agricultural producers thanks to substantial investment in sustainable technological change and continuous upgrading. This has however increased the gap between small-scale producers that sell in informal domestic markets that do not have to comply with any standards and export-oriented producers that are governed by several standard-setting bodies. Often small-scale producers buy their input from

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⁶ Outgrower schemes enable the participation of small-scale farmers as suppliers of larger agricultural export companies

⁷ This is not always practical because a very low dosage of a pesticide that belongs to toxicity class 1 can help avoid the unsustainable use of many other pesticides.

local Agro-dealers without being offered much advice about the purchased means of plant protection and its impact on human health and the environment if used inappropriately. Smallscale producers are therefore increasingly considered to pose a risk when they participate in export production as outgrowers who obtain their inputs from a cooperative or agribusiness in return for selling them the produce destined for exportation (Clapp and Fuchs 2009). Most flower businesses have abandoned such outgrower schemes because they lack the control mechanisms to ensure that all producers comply with the complex and costly standards. As a consequence, flower exports in Kenya have become a capital-intensive business that is increasingly detached from the local agricultural economy and coping with a wide range of B2B and B2C private standards has become increasingly complex and burdensome. At any rate, process-oriented B2B standards that also take into account the social and environmental conditions under which a product has been produced have become almost mainstream in the international trade in cut flowers and they seem to be complying with the principles of ISO standards (ISO 14001). A rough estimate suggests that between 50% and 75% of flowers imported into the EU adhere to one or more of the social and environmental standards (even though the Dutch auction system that still handles around 60% of the flower trade in Europe, does not require such standards). The share of certified products in imports continues to grow in most countries.

The private standards 'landscape' is therefore also highly dynamic. While private standards initially emerged in the area of food safety (examples are the British Retail Consortium (BRC) or the Global Standard and International Food Standards (IFS)), they now encompass environmental protection, ethical trading (e.g. the Ethical Trading Initiative (ETI) or fair trade (Fair Trade International (FLO)), animal welfare (e.g. Freedom Food), organic production methods (e.g. IFOAM standard), etc. (Henson and Humphrey 2010).

Of these countless sustainability labels, no more than a handful of standards are explicitly communicated to European consumers by means of a consumer label (B2C). The leading label in terms of flowers sold is believed to be the Fairtrade label (Fair Trade Labelling Organization (FLO), Max Havelaar). However, the share of labelled flowers in the European consumer market has been rising quite rapidly over the past few years. Sales of Fairtrade flowers, for example, have more than tripled since 2004. In addition, an increasing number of supermarket and garden centre chains have chosen to use their own private labels to communicate whether an item has been produced in a fair and sustainable way. In this context, it could be safely argued that the closer the label is to the consumer, the more likely that the label is less about communicating product/worker safety and environmental sustainability than about communicating values as a form of reputation management and product differentiation (Henson and Humphrey 2010). This trend is not only obvious in the flower retail business but in retailing in general. Tesco's Nature's Choice, Carrefour's Filières Qualité, Marks & Spencer's Field-to-Fork, and Coop's Naturaplan, are just a few examples.

In addition, there are a wide range of private standards and labels covering whole farm sustainability, specific crops, organic products and food safety.⁸

3.2.4 The problem with B2C private labels

If B2C standards are mainly tools to communicate values as a form of reputation management and product differentiation, then questions must be raised as regards the added value in terms of environmental sustainability in agriculture, the claims of adhering to principles of openness, transparency and consensus, and the compatibility with the principle of non-discrimination. It may be true that B2C labels are mostly based on B2B labels and that there are numerous hybrid forms where the B2C label is handled by an independent private entity or a joint national retailer initiative (e.g. Business Social Compliance Initiative (BSCI) in Switzerland).

There are nevertheless worrying trends that have been most obvious with 'free from' labels. Products that are marketed as being 'free from' GMOs (genetically modified organisms), aspartame, monosodium glutamate (MSG) and parabens tend to be more about values and common fears than about scientific evidence. It could even be argued that by labelling products as 'free from', supermarkets are playing on people's fears, which are based on the rumours that have circulated about these substances (Guardian 2013). B2C labels are therefore more likely to contravene the WTO principle of non-discrimination than B2B labels in the food chain. However, B2C labels may often just be a cheap add-on to B2B labels and national bans that are already in place (e.g. the ban on GMOs in most European countries) and therefore do not affect international trade directly.

B2B private standards and the associated B2C private labels have also been subject to broader criticism. They have led to audit fatigue, consumer and supplier confusion, duplication (with the multiplication of overlapping audits per supplier), inefficiencies, high costs and a focus on audits rather than remediation. ¹⁰ The Global Social Compliance Programme (GSCP) has been set up by the leading retail companies to address the need for consistency as well as the root

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⁸ – Standards that cover *whole farm sustainability* and have not yet been mentioned in the text include: Assured Food Standards (AFS), European Initiative for Sustainable Development in Agriculture (EISA), Environmental Farm Plan Program (Canada EFP), Food Alliance, IOBC Guidelines for Integrated Production, LEAF Marque, Protected Harvest, Rainforest Alliance Sustainable Agriculture Standard (SAN), Sustainable Agriculture Practice Standard (SCS 001)

[–] Standards that cover *specific crops* include: Basel Criteria for Responsible Soy Production, Common Code for the Coffee Community (4C), Roundtable on Sustainable Palm Oil (RSPO), Roundtable on Responsible Soy (RTRS), UTZ Certified (coffee)

[–] Standards that cover *organic food* include: EU Organic Scheme (EU 834/2007), International Federation of Organic Agriculture Movements (IFOAM), USDA National Organic Program (NOP)

[–] Standards that cover *food safety* include: QS System, Safe Quality Food (SQF 2000 Code), (SAI Platform 2009)

⁹ Examples of organic labels are EKO in the Netherlands or Biosuisse in Switzerland. They mandate a private non-profit foundation with a public task as the certification and inspection body for organic production. Fairtrade comprises the Ethical Trading Initiative and its link to Tesco in the UK or Max Havelaar/Fair Trade and its link to Coop in Switzerland. There is also the EU Ecolabel on the supranational level. The Ecolabel Regulation requests Member States and the European Commission to ensure coordination between the EU Ecolabel and other national schemes. It is a voluntary scheme designed to encourage businesses, services and market products to advertise that they are kinder to the environment (BTC 2010).

http://www.un.org/partnerships/Docs/GSCP_Guide.pdf

causes of noncompliance. It will enable retailers and brand manufacturers around the world, in whatever industry, to work towards mutual recognition of audit results. This may make business easier for suppliers but it still does not address the growing confusion that consumers face when confronted with all kind of 'goodness' labels (Freidberg 2007).

3.3. Alternative Food Network (AFN) Labels

Alternative Food Networks are strongly linked to the Food Sovereignty Movement that had its roots in the protests against agricultural trade liberalization of the 1990s and in anxiety about the loss of cultural identity in post-material affluent societies (Aerni 2011). However, the Alternative Food Networks aim to go beyond mere protest by creating new forms of local and personalized and sustainable food production and consumption schemes. These networks involve farmers who are not just unhappy with globalized agricultural trade but also with the imposition of standard regimes that do not take into account their practical experience in coping with sustainability challenges and that tend to ignore particular socioeconomic and agro-ecological contexts in which food is produced. On the demand side they involve local restaurants, schools and individual citizens that wish to source food from local producers who are known for the quality of their products and the sustainable management of their land. This re-localization of the food system has been widely hailed as a viable alternative to global industrial agriculture. It manifests itself through many interesting local direct marketing initiatives such as local farmers' markets, veggie box schemes, u-pick (free tasting after paying an entrance fee) on local farms and farm fairs, on-farm stores, and speciality shops, which have emerged in Europe (partially linked to food scares) and North America (mainly linked to resistance to industrial agriculture) in the vicinity of big and affluent cities (Goodman et al. 2012). Their goal is to shorten the food value chain by cutting out at least some of the intermediaries and thus to make trade in food more safe, personal and fair. This shorter food value chains should help to sustain rural livelihoods that, in turn, help to preserve culinary traditions, valued cultivars and the provision of ecosystem services (Ilbery and Maye 2005).

Again, these trends are not new but emerged in the 19th century in response to the first great food scandals resulting from a long food chain, most related to fraud and adulteration of food (as also observed in the 21st century in China). Many cooperatives were founded (some of which eventually grew into large retailers in the 20th century) to ensure that the products their members were consuming were correctly measured and sufficiently pure. However, today's AFN networks are based on the common view that "sustainability must have its price" reflecting the true cost of food (Pollan 2006). Earlier AFN initiatives also had the goal of providing members with more affordable food (by cutting out intermediaries).

In the United States, AFN direct marketing initiatives are largely linked to the belief in the merits of building a new, value-driven "community", also called Community Supported Agriculture (CSA) that values "good food" from local providers outside the mainstream industrial food chains (Freidberg and Goldstein 2011).

In Europe as well as in North America, AFNs reflect a phenomenon of affluent societies in search of ways of expressing their post-materialist values. There are however two main aspects that are ignored. First of all, despite the claim to be an alternative to consumer markets, AFNs are still markets, no matter how embedded they are in a community. In fact community-supported agriculture (CSA) schemes are successful not because of the regular social contacts of participants but the shared discontent with industrial agriculture. The irony of this is that while in the past, "community" implied a refuge from the market, largely reflecting informal self-help organizations, the CSA schemes of today are based on a notion of community that is very much embedded in the market logic (farmers selling their produce to members who do not necessarily share any common grievances) (DeLind 2002). Second, AFNs rely heavily on the technology and infrastructure of the industrialized world. Reliable, fast and convenient means of transportation, communication technologies, electricity and a functioning logistic system, clean water and a food chain that helps preserve 'fresh' food are largely taken for granted. These are all presumed products of capitalism. Such products however do not exist in many least-developed countries. Getting the farm produce to the markets in time is often too costly for farmers who cannot rely on decent roads and means of transportation. If AFNs hardly exist in the global South, then this is because of the local context: a community-supported agricultural scheme that caters to affluent consumers depends on conditions that are beyond community control (such as public sanitation and infrastructure, enforceable regulatory institutions, and overall prosperity) (deFilippis et al. 2006). Moreover, the very experience with Western conceptions of 'intentional' development (policies, institutions and processes designed to foster socioeconomic progress) influences the way people conceive and participate in AFN initiatives. Such initiatives, funded mostly by well-meaning Western donors and implemented by rather opportunistic local NGOs (focusing on the acquisition of foreign funding rather than effective local demand), are likely to be perceived by local farmers as just another development project. They know it will require listening to outside experts and showing some degree of community spirit in return for access to project benefits (Freidberg and Goldstein, 2011). This illustrates how the intrinsic motivation of the original self-help organizations is eventually being replaced by the extrinsic motivation to gain access to outside sources of funding in return for showing concern for the 'community'. All this illustrates that even local initiatives that reject industrial agriculture, as well as the conventional 'sustainability' labelling schemes launched by global retailers that aim to respond to public grievances about industrial agriculture, may still be based on the foundation of modern industrial economies.

4. Conclusions

Private standards have played a crucial role in ensuring product safety and preventing fraud since the early days of the industrial revolution in the 19th century. However, as we have illustrated in this paper, there are different types of private standards that aim at achieving different purposes. Most private standards are B2B standards that are usually based on the principles of openness, transparency and consensus and they primarily focus on ensuring the quality and safety of the end-product in the value chain. These standards represent the foundation of international trade and as such they helped facilitate the integration of GVCs

and thus greatly contributed to economic empowerment, technical innovation and consumer welfare. Becoming part of GVCs is crucial for developing countries in gaining access to crucial codified and tacit knowledge that eventually allows them to build up their own industries and increase their share in international trade.

Buyer-driven private standards that are dominant in the global retail industry may also be mostly focused on B2B transactions, but they are nevertheless different in the sense that the market power of global retailers in the demand-driven GVC of labour-intensive consumer products allows them to set their own terms of reference. While they also aim at ensuring the quality and safety of the end-product, their private standards tend to be process-oriented rather than product-oriented.

GLOBALG.A.P. is probably the most prominent example of a voluntary buyer-driven private standards system that has become a *de-facto* mandatory standard for importing agricultural products to Europe, the largest importer of high-value agricultural goods.

One could argue that these private standards largely follow the trend of national and supranational public standards that focus more and more on regulating processes and production methods, taking into account the social and environmental context in which a product has been produced. For example, the HACCP system is a typical example of a process-oriented food safety standard that has been adopted in most countries as a mandatory or voluntary standard (Hobbs 2010).

National public standards, however, are bound by the principles of the WTO Agreement, no matter whether they are product or process-oriented. They need to comply with the principles of national treatment and most-favoured nation, ensuring that national public standards are non-discriminatory. As regards national public food standards, the SPS Agreement of the WTO requires them to be in line with the international food safety standards set by the FAO/WHO Codex Alimentarius Commission. There are exceptions that allow for a temporary ban if there is not sufficient scientific evidence to ensure that the imported product is safe for domestic consumption – and there is Article XX of the GATT Agreement that allows for further exceptions (e.g. for offences against public morals) that can either be straightforward (e.g. a ban on pornography) or rather ambiguous (e.g. agricultural production methods that may not considered sustainable).

Public standards dealing with food labelling, packaging requirements, and technical standards, including those dealing with production and processing methods, fall under the TBT Agreement of the WTO. This agreement stipulates under the GATT principle of non-discrimination that "like" products must be treated the same. Members should therefore ensure that labelling requirements, standards, etc. follow the same agreed international standards. The TBT Agreement, however, does not offer clear guidance on the legitimacy of process-based regulations (Josling et al., 2004). Mandatory food labelling standards exist in many countries and deal with multiple issues ranging from nutritional contents to GMO and organic labelling. The *de-facto* ban on GMOs in Europe has been a topic of dispute between the EU and the United States and resulted in a WTO ruling that faulted the EU regulatory process on 'undue delay'. Government-supported mandatory and voluntary labelling schemes

on organic products or 'GMO free' products are also controversial and have the potential to lead to further trade disputes (precedents include the U.S. Shrimp—Turtle case, U.S.-Mexico Tuna—Dolphin case, and the US—EU dispute on Hormone-treated beef).

At any rate, public standards face the scrutiny of WTO member states which are likely to make use of the WTO dispute settlement mechanism if they feel discriminated against by national public standards. Many past WTO disputes have already dealt with public discriminatory standards and labels and provided some clarity about the legitimacy of process-oriented standards.

This is however not the case with private standards which are not subject to WTO disciplines. Private standards that regulate the international trade in agricultural products are *de jure* 'voluntary standards' that are set by the respective retail companies or by an independent private standard-setting body or NGO, but in reality they have become *de facto* mandatory.

These buyer-driven private standards must however be distinguished as to whether they are B2B or B2C standards. B2B standards in the food chain are mainly set by independent third-party bodies and designed to ensure the safety and sustainability of supply-chain management as well as to reduce liability in the event of a food safety problem. B2C standards, in turn, may be based on B2B standards but they tend to be set by retail firms themselves, are proprietary in nature, and largely serve the purpose of reputation management and product differentiation (Henson and Reardon 2005). The labelled credence goods are not just meant to act as quality signals but also to communicate to consumers the 'goodness' of the company in terms of promoting sustainable agriculture and social values (Freidberg 2007).

Do buyer-driven private standards for food safety and food quality hamper or facilitate international trade? The argument that the extent to which they hamper trade is related to the burden of compliance costs. These can be significant, particularly if the private standards are de facto mandatory – especially in developing countries where public standards are already hard to enforce (Henson, 2006). Since producers in developing countries are expected to cover the costs of compliance themselves and since they can hardly count on public support in helping them to upgrade and invest in the necessary technical capacity required, there is definitely a risk that the smaller producers may be excluded from international trade, unless they become part of a larger production entity or enjoy the support of an external donor (Essaji 2008, Jaffee and Henson 2004). Moreover, the proliferation of private B2B standards in the regulation of trade in agricultural goods, on top of the already strict public standards, is likely to increase the administrative burden for suppliers, further strengthening the power of the buyers in the value chain (through barriers to market entry). Ultimately they may also offer only marginal benefits in terms of increased quality, fairness and safety, compared to the already existing public standards (Freidberg 2007, Fuchs et al. 2008). However, compliance with the private B2B food safety and quality standards of importing countries may also have the positive effect of acting as a catalyst, driving infrastructure improvements and investment in developing countries. In this case, the effect could lead to an increase in trade flows (Martens and Swinnen 2008). GLOBALG.A.P, in particular, has made some efforts to make it easier for developing countries to comply with its standards through more flexible

arrangements that would also make it easier to participate in international trade (Freidberg 2010).

There is however some evidence that non-tariff trade barriers (e.g. high costs of compliance with public and private standards in affluent food importing countries) tend to account for the fact that least developed countries (LDCs), in particular, are unable to translate lower tariff-trade barriers into an increase in agricultural exports (Henson and Loader 2001). For example, the EU's "Everything But Arms" arrangement (EBA), which offers full duty-free and quota-free access to the EU for all exports from LDCs, with the exception of arms and armaments, has been unable to substantially increase imports from these countries since its enactment in 2001 (Häberli 2008).

Nevertheless, it can be expected that even LDCs will eventually be able to increase their exports once their governments embark on policy reforms that enable rapid catch-up growth through the improvement of infrastructure, public sanitation, and vocational training on a national scale, as well as more funding for technical assistance and advisory services in support of agricultural producers.

The true challenge may not be related to B2B standards, whether they are public or private, or supplier-driven or buyer-driven, but to the B2C standards that large retail firms increasingly attach to B2B standards in order to distinguish themselves, not necessarily with their consumers, but with the consumer and environmental advocacy groups that claim to represent them. These advocacy groups see agricultural trade and new agricultural technologies as part of the global sustainability problem rather than as an essential part of coping with the global challenges related to climate change and food security. This article has illustrated that their views may be driven by good intentions but are based on wrong baseline assumptions. For example, small-scale farmers in developing countries face different challenges to those faced by farmers in developed countries. They need economic and technological change to become sustainable, since they are at the beginning of the process of structural change in agriculture, not at the end, as in developed countries. Moreover, semi-subsistence farming in developing countries is not a freely chosen life-style, as often portrayed in Western media, but rather reflects the lack of access to finance, education, training and technology that would enable impoverished farmers to eventually earn an additional income through increased productivity and off-farm employment that would ensure a better future for their children. Unlike in developed countries, where most people are worried about industrial farming and want the family farms to stay small, the problem with farming in developing countries, especially in Africa, is that farms are actually getting smaller due to high population growth rates in the countryside and lack of off-farm employment opportunities. This has become one of the major causes of deforestation and environmental degradation as well as hunger and malnutrition.

B2C labels are likely to further entrench the wrong perceptions of the global sustainability challenges among affluent consumers and tend to discourage farmers in developing countries from embracing the opportunities offered by economic and technological change. It is understandable and legitimate if retailers use such tools for the purpose of reputation

management and product differentiation, but if the claims of the numerous 'sustainability' labels cannot be validated in practice or are even counter-productive in enabling sustainable change in developing countries, then they must be subject to more scrutiny. The trend towards using B2C private labels as a sort of polit-marketing rather product marketing has been identified in earlier publications (Freidberg 2007, Aerni et al. 2009) and a recent article in the *Guardian* highlighted the tendency for B2C labels to mislead consumers and cause increasing public anxiety about fictitious food risks (*Guardian* 2013). The discriminatory nature of such B2C labels is also increasingly trade-relevant in light of the growing sourcing power and dominance of global retailers in the agricultural value chain.

The WTO offers no mechanism for tackling the challenge posed by private standards, even though the SPS Agreement does ask members to take "reasonable measures" to ensure that non-governmental standard-setting bodies comply with the Agreement's principles. In 2003, St. Vincent and the Grenadines raised a concern at the SPS committee over requirements for EUREPG.A.P (now GLOBALG.A.P) certification. The discussions, however, focused primarily on issues of technical co-operation and strategies for facilitating compliance and did not really ask for the extension of WTO jurisdiction to cover private standards. This would also be hard to justify in view of the fact that the WTO was conceived to be a gatekeeper of the rules of trade between nations – rather than firms (Hobbs 2010). Nevertheless, B2C labels, and their claim to legitimacy through their attachment to B2B private standards, need to become a topic for discussion in international trade negotiations. First of all because of the trade-relevance of firm-owned B2C labels and second because of the lack of evidence supporting the claims made by such labels. Often the additional discriminatory measures included in B2C labels against certain ingredients and production methods (rejected by powerful environmental and consumer advocacy groups in affluent countries for being 'risky' for society and the environment) lack any foundation in empirical research and practical experience. In fact, retailers do not even claim that the discriminatory measures have anything to do with factual evidence but only that such measures would respect consumer concerns. In view of the fact that empirical research provides increasing evidence that the radical stance of consumer and environmental advocacy groups does not actually represent genuine consumer concerns (Miller 2001, Johnson 2008, Horne 2009, Aerni et al. 2011, Goodman et al. 2012) a public debate should be launched to discuss to what extent private B2C labels used by global retailers as instruments to promote product differentiation and reputation management are really merely reflecting a private affair of a private company or whether they also have public relevance because they may cause negative externalities.

As noted at the beginning of this article, private standards are nothing new. They played an important role in reassuring consumers in the early stages of the industrial revolution in the 19th century that products were safe despite the absence or lack of enforceability of public standards. The early experience of private standard-setting bodies also played a crucial role in the creation of national and international public standards and helped to promote trade and innovation in the 20th century. However, the new trend towards private standards is more ambiguous because it is now harder to justify the need for them in the presence of globally recognized public standards. This is especially so when private B2B standards are combined

with a company's reputation management strategy that also includes highly discriminatory B2C labelling standards, in which case such private standards tend to prevent trade and innovation in agriculture, rather than to enable it.

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