

Supply chains, contractual governance and certification regimes

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Abstract Contractual governance of the food supply chain is on the rise. In this paper we focus on a particular set of instruments for transnational governance of food supply chains: transnational contracts and agreements. Looking at transnational contracts as instruments for implementation of transnational private regulation, we compare different mechanisms for the enforcement of safety and sustainability standards in global food supply chains. We conclude that the regime of contractual remedies follows different logics from the ones of regulatory and certification regime. (1) The former aims at redressing the victim of the breach inducing compliance through a re-active approach; whereas the latter pro-actively tries to restore compliance with regulatory process in order to pursue regulatory objectives. (2) The former focuses mainly on products, the latter on process. (3) The former concentrates on individual transactions while the latter focuses on the interdependence of contractual relationships along the chain and creates collective governance mechanisms. This paper suggests that the combination of the two sets of remedies may reinforce coordination and cooperation along the chain, therefore improving the level of quality, safety or sustainability of certified production. A

The article is based on empirical research and numerous interviews with firms and certification scheme owners; it is the result of joint research, discussion and elaboration by the authors; however, paragraphs 1–3, including subparagraphs, have been written by Fabrizio Cafaggi and paragraphs 4 and 5, including subparagraphs, have been written by Paola Iamiceli; paragraph 6 has been written jointly.

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higher level of awareness about the impact of standards and certification on the contract rules on remedies can have other positive consequences: it may improve contract drafting, leading the parties to coordinate different remedial systems when addressing the consequences of the breach and the ones of certification remedies; it may help courts to better define the scope and preconditions of contractual remedies and their effects on transnational regulation; it may guide law makers and standard setting institutions, when providing principles, rules or guidance concerning the consequences of the breach within contracts and along the chain, particularly in the food sector. From this perspective, the current work conducted by Unidroit and Fao for the production of a Legal Guide on contract farming could represent an important opportunity to define the links between multiple remedial regimes in food chains.

Keywords Food global value chain · Safety and sustainability standards · Certification · Remedies for breach

JEL Classification K12 · K13 · K32 · L14 · L66

1 Contractual practices and supply chains: changing unit of analysis

In this paper we focus on a particular set of instruments for transnational governance: transnational contracts and agreements. These are generally standard contracts combined with guidelines issued by the chain leader defining rules with which participants have to comply. We consider contracts in broad terms as including agreements that do not necessarily qualify as enforceable contracts within the traditional toolkit of private laws.¹ Secondly, we consider global supply chains rather than individual transactions as the web of contracts along and around the chain that governs production and distribution processes. Here we want to capture interconnectedness via contracts among the different yet interdependent nodes of the chain. This is particularly important when considering the role of regulatory provisions and those of certification since regulatory compliance along the chain requires a higher degree of coordination than commercial exchanges within the chains.² Thirdly and more importantly, we consider not only the contractual documents but also the practices developed within the value chain, which may specify but sometimes even contradict the texts. Contracts concluded by enterprises operating in different business and institutional environments are embedded into functional and territorial contexts, reflected in contractual practices rather than

¹ F. Cafaggi, and C. Cutler, “Contractual Governance in Transnational Regulation: A Conceptual Framework”, paper presented at the conference held in Victoria (Canada) on 6–7 September 2012, on Legitimacy of Private Transnational Governance by Contract, on file with the authors.

² The necessity to move from individual transactions to supply chains has been long advocated by management scholars calling for an approach that emphasises the interdependences rather than the specificities of individual transactions (Grandori and Soda 1995; Choi and Wu 2009; Pilbeam et al. 2012).

texts.³ The weight of regulatory practices does not necessarily imply a dominance of the informal over the formal; rather it forces the re-consideration of the boundaries between the two.⁴

Transnational commercial contracts, especially within supply chains, have come to perform multiple functions. In addition to the conventional exchange-facilitating function, they are increasingly deployed as instruments for implementation of transnational regulation.⁵ The inclusion of regulatory provisions concerning safety, environmental and social standards is becoming increasingly popular in supply chains,⁶ where strong leadership is exercised either by retailers or by big multinational producers.⁷ Sales or distributorship contracts contain clauses with provisions making explicit references to regulatory regimes included in codes

³ There is a long and ongoing debate in contract scholarship between textualists and contextualists, which we can only refer to in this context (Scott and Triantis 2000; Scott 2003). For the purpose of this research project we take a contextual rather than a textual approach. See also F. Cafaggi, and C. Cutler, “Contractual Governance in Transnational Regulation: A Conceptual Framework”, cit.

⁴ We interpret the recurring findings that associate the growth of the informal dimension with the increase of trust as rebalancing the role of practices *vis-à-vis* the text. As we shall see this is particularly important for regulatory practices linked to contractual performance of regulatory provisions. See also F. Cafaggi, and C. Cutler, “Contractual Governance in Transnational Regulation: A Conceptual Framework”, cit.

⁵ On the different functions of contract law see Schwartz and Scott (2003). On the regulatory function of commercial contract law see Cafaggi 2013.

⁶ See Unilever General Terms and Conditions, § 6.3: “Each supplier (...) (a) shall ensure that the HACCP principles referred to in the General Food law and Hygiene regulations and any other EU legislation (...) as well as other locally applicable food safety legislation are applied from the intake of ingredients and components through manufacture to the distribution of the products with respect to the control of microbiological, foreign body, allergens and chemical hazards and that there is documentation evidencing the application of such principles” available at <http://www.unilever.com/aboutus/supplier/termsandconditions/index.aspx>, last visited on 25 September, 2013. With regard to Walmart, see *Standards for Suppliers Manual. A Guide to help Suppliers understand the expectations and obligations of Walmart's Standards for Suppliers*, January 2012, p. 2: “our supplier agreements will be modified so it is clear any factory used by a supplier complies with all the laws of the jurisdiction in which it operates, specifically including laws related to environmental protection, worker safety and labor conditions. (...) Our Supplier Manual provides specific guidance to factories on how they can comply with these environmental and ethical sourcing requirements.” For the case of Nestlé see the following clause: “In order to prevent bodily harm to persons or damage to goods or property, the supplier shall comply with applicable law and regulations pertaining to safety, health and the environment and with regulations issued by Nestlé from time to time. The supplier ensures that its employees and third parties rendering services to the supplier comply with the same regulations. The supplier is liable for its employees and third parties rendering services to the supplier regarding the execution of the services and production of the goods” (General Conditions of Purchase of Nestlé Nederland B.V., art. 4, (available at <http://www.nestle.nl>, last visited on 17.8.2012). A clause in a horticultural crops supply contract in Kenya reads: “The production procedures should conform to Good Agricultural Practice (GAP) as required by various codes and regulations e.g., Kenya Standard Code of Practice for the horticulture industry, EUREPGAP, etc.” (FAO database). Not all specific codes or regulations are mentioned or exemplified; a passion fruit supply contract provides: “The Company commits to supply saplings, in accordance with technical standards and free from diseases and pests, and in its turn also commits to receive the fruits, compatible with its needs, meeting the quality and identity standards demanded by the juice industry” (FAO database).

⁷ On the role of retailers in global food value chain governance, see Gereffi et al. (2005), Hatanaka et al. (2005), Havinga (2006), Blair et al. (2008), Henson and Humphrey (2009), Gereffi and Lee (2009), Fuchs et al. (2011); K. Sorsa, “The evolution of CSR standards in the coffee value chains—transition pathways to sustainability”, paper presented at the Law and Society Association Annual Conference held in Hawaii in June 2012, on file with the author.

of conduct, guidelines, framework agreements, memoranda of understanding, making them binding via contract (Cafaggi 2013b). Incorporation of regulatory standards may or may not be associated with explicit references to certification contracts that impose additional obligations and remedies in case of non performance. When no explicit reference to the certification contract is made in the supply contract, the correlation between obligations and the remedial interaction is governed by the functional links between the contracts. In some cases the use of standards affects the very core of the exchange contracts (e.g. influencing price determination or remedies against breach, such as termination) or fosters the evolution of supply contracts towards more collaborative patterns and lengthy relations.⁸ Moreover, the source of the regulatory regime, whether internal or external to the chain, private or public, may determine the enforcement choice and the coordination of multiple co-existing remedial systems.⁹

There is a reciprocal influence between standard setting and supply chain structure. Regulation, both public and private, does affect technologies of coordination in supply chain¹⁰; correspondingly, the socio-economic determinants of the supply chain structure, just highlighted, influence the choice between alternative regulatory strategies and the choice of instruments. The application of common regulatory standards along the chain influences the architecture of the chain and the contractual practices. The exchange dimension, which, in the conventional account determines the form of the chain, thence becomes only one factor and sometimes not the most important or the determinant.

1.1 Coordination via contracts in global value chains

Global production systems are organised around global supply value chains (GVCs). Within GVCs important variations concern (a) the structure of the contractual relationships among the different participants and the information flows, (b) the allocation of contractual and market power, and (c) the criteria for the allocation of compliance costs, for remuneration and the distribution of revenues (Gereffi et al. 2005). The drivers of these differences among GVCs are related to

⁸ See, in particular, Fairtrade International, Generic Fairtrade Trade Standard, part. par. 2.3 (setting rules of clarity, transparency and minimum contents of contracts between producers and buyers); par. 4.1 (aiming to “create sustainable trade partnerships between producers and their buyers, which enable producers to have long-term access to markets under viable conditions”); par. 4.2 (on pre-financing practices); par. 4.3 (on price determination incorporating premium for Fairtrade Standard compliance).

⁹ There is a significant difference if the regulatory provision comes from a code of conduct or a policy of the leading MNC (a buyer like Walmart, Tesco, Carrefour) or if the regulation comes from NGOs led organisations either supporting final consumers or smallholders. For the purpose of this paper, we assume that these regimes are at least comparable. In subsequent research based on empirical findings we plan to explore how different types of food safety regimes affect the governance of the chain.

On the role of Fairtrade standards in the area of public procurement of automatic coffee machines, see the recent decision of the European Court of Justice, 10 May 2012, Case C368/10, acknowledging the reference to the conditions governing the performance of a contract to social considerations.

¹⁰ In particular both the nature of the standard and its source, whether internal or external to the supply chain, may play a significant role (see Humphrey and Schmitz 2008).

On the evolution of these standards see K. Sorsa, “The evolution of CSR standards in the coffee value chains—transition pathways to sustainability”, cit.; Raynolds 2009.

numerous factors among which worth mentioning are: (1) the degree of market concentration at the different level of the chains, (2) the size of the firms involved, (3) the technological features of the commodity and its production process, and (4) the regulatory requirements to be met, including health and safety, environmental and social standards. Although many of the considerations developed in this paper may have general application, the analysis herein proposed will have special regard to the agri-food sector. Building on the distinction between modular, relational and captive linkages, we claim that contractual instruments, including practices, constitute particular forms of coordination along the chain that respond to different communication systems.¹¹ The relationship between contractual practices and information is debated. There is agreement on the fact that tacit knowledge and, more broadly, not easily codifiable information, imposes the use of relational contracting as mode of coordination.¹² Much more contested is the view that codified information can result into modular or captive linkages and thence into different forms of standardised contracts characterised by higher level of completeness than relational contracts. The importance of the structure of the contractual relationship requires further elaboration on information, length and the role of intermediaries.

(1) GVCs coordinate firms in various ways depending on how information flows, its mode and degree of codification, and its relationship with transaction specific investments (Gereffi et al. 2005; Sacchetti and Sugden 2003). Information production is related to the competences and capabilities of the participating enterprises. Asymmetric distribution of information translates into different capability sets, which in turn impinge on the choice of inter-firm coordination. A high level of asymmetric information tends to translate into forms of hierarchical and codified transmission. A lower level of asymmetry may translate into sharing and joint production. Incentives towards information sharing are also related to trust which affects the choice of instruments. There is some evidence that a high level of trust, linked with duration of the relationship, is correlated to informal instruments (Macaulay 1985; Deakin et al. 1997, 2003). From our perspective, this would translate into the increasing importance of practices in relation to the contractual text (Pilbeam et al. 2012).

(2) The length of the chains and their shape are often associated with the type of commodity which determines, together with the market structure, the number of suppliers involved and degree of modularity. The role of networks in enabling better innovation systems and fostering more sustainable development strategies, especially in the agri-food sector, is widely recognised (World Bank 2012). From this perspective collaborative inter-firm relations would allow at lower costs forms of knowledge transfer, technical assistance, professional qualification, particularly in favour of small-holders (World Bank 2012).¹³

(3) The length and the structure of the chain are also influenced by the number and roles of intermediaries and this affects the distribution of value across participants.

¹¹ The distinction was outlined by Gereffi et al. (2005) and developed by Humphrey and Schmitz (2008).

¹² For a development of the theoretical perspective introduced by Gereffi et al. (2005) in the area of social and environmental standard certification, see Reynolds (2009).

¹³ See also K. Sorsa, “The evolution of CSR standards in the coffee value chains”, cit.

The increasing role of certification is extending governance to third parties whilst reducing the direct relationship between participants to the chain in relation to monitoring and, to a limited extent, sanctioning (ITC 2011a).

These differences exist not only across but also within sectors. For example, in the agri-food sector variations among commodities translate into very different forms of supply chains in terms of length, density and trans-nationality (Raynolds 2009; Ponte 2009; Cafaggi and Iamiceli 2010). Recently the emergence of values based supply chains (VBSC) has been documented (Stevenson and Pirog 2008). These chains are characterised by several attributes concerning the relationships among enterprises and with the final consumer. Trust, transparency, equitable allocation of costs and profits, sustainability feature prominently in these chains when private regulatory codes are included. They starkly depart from the conventional GVCs led by retailers or final producers where hierarchy rather than collaboration is the dominant characteristic. In the former there is a correlation between the increased regulatory burden and the allocation of costs with formal commitment of the chain leader to increase prices in order to finance development.¹⁴ In the latter the additional regulatory obligations become a cost for the suppliers that have to squeeze its margins to meet them.

Despite the differences between the two models both resulting from the inclusion of regulatory provisions, some general patterns can be identified. Standardised commodities tend to be produced in longer chains where there are many trading intermediaries, primarily trying to reduce search costs. Not-standardised commodities, for example specialty food or high premium products, tend, instead, to be produced within shorter chains where there are fewer intermediaries, which produce added value beyond reducing search costs (Cafaggi 2012a; Cafaggi and Iamiceli 2010).¹⁵

There is an important gap between the current legal framework and the development of trans-boundary supply chains. Legal systems are mostly organised around individual contracts whose regimes are not strongly influenced by the market structure and by the size of the firms.¹⁶ The legal unit of analysis continues to be the individual contract, often neglecting contractual interdependences along chains and the functional differentiation of contractual relationships based on market structure (Goetz and Scott 1981). Notice however that many of the economic approaches also look at individual transactions rather than capturing functional interconnectedness.¹⁷

¹⁴ See for example the Fairtrade production contract guidelines that refer to price premium linked with development (see footnote n. 8 above).

¹⁵ A comparable consideration emerges in Raynolds (2009), where the role of mission-driven buyers within fair trade supply chains tends to be linked with direct relationships with suppliers without the involvement of conventional intermediaries.

¹⁶ Although there is an increasing trend towards differentiating MNCs from SMEs within national and EU legal systems. See for example the recent proposal of Regulation on EU sales that introduces a tripartite status based taxonomy between MNCs, SMEs, and consumers.

¹⁷ For example in Transaction cost economics (TCE) the unit of analysis is primarily the individual transaction. If our approach were to be operationalized through the lenses of TCE what should be economised are not the costs of individual transactions but those related to the sum of transactions taking place within the supply chain. The aggregate unit of analysis may bring about different results from those that can derive from segmenting individual transactions and find solutions that would make economies.

Building on previous work, in this article, we advocate a different perspective that tries to reconcile the legal approach and economic realities (Cafaggi 2013a). We take supply chains as the functional unit of analysis and look at how contract law, private regulatory and certification regimes, sanction breaches of regulatory provisions concerning safety and sustainability. We refer to the food sector as main field of application. Using commercial contracts as vehicles of regulatory implementation strengthens the contractual interdependence along supply chains and influences its governance by creating control systems that ensure coordination in complying with chain of conduct codes (Cafaggi 2013b). The performance of regulatory functions via contracts results in complex contractual architectures rather different from conventional commercial contracting, where two parties, and potentially also the arbitrators, are involved. Not only is coordination among chain's participants needed to ensure that process standards are complied with but also a transfer of knowledge between parties along the chain is necessary to implement regulatory provisions. Often farmers and small producers do not have sufficient knowledge about the content and the procedures to meet regulatory requirements. Assistance from buyers is therefore needed to instruct suppliers about regulatory technologies and their implementation and to ensure compliance with international standards. Contractual governance supports the development of systems-level innovation based on coordination and strict collaboration among participants (World Bank 2012).

We will explore the interactions among the different transnational regulatory regimes in food safety and sustainability,¹⁸ focusing on the consequences of the breach of contractual regulatory provisions which at the same time constitute regulatory violations and breach of certification contracts. By comparing different

Footnote 17 continued

Clearly this approach imposes collective action considerations that could be neglected when the single transaction is considered (see Williamson 1979, 2009).

¹⁸ Without any intent to build new definitions, we will adopt a wide concept of sustainability within the framework launched in 1987 by the World Commission on Environment and Development (WCED Report 2013), part. p. 41: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs". For a recent survey on this concept and its implications in supply chain management, see Gimenez and Tachizawa (2012). These concepts are referred to by the recent Safa Guidelines, adopted by FaO in June 2012. See SAFA, Sustainability Assessment of Food and Agriculture systems Guidelines (Test Version 1.0), p. 12, quoting from FAO. 1989. Sustainable development and natural resources management. Twenty-Fifth Conference, Paper C 89/2—Sup. 2. Food and Agriculture Organization of the United Nations, Rome: "Sustainable agriculture and rural development (SARD): management and conservation of the natural resource base, and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations. Such sustainable development (in the agriculture, forestry, and fisheries sectors) conserves land, water, plant and animal genetic resources, is environmentally non-degrading, technically appropriate, economically viable and socially acceptable. "Sustainable development": development processes that protect the natural resource base and eco-system functions, enhance economic resilience and promote human rights and well-being in a manner that preserves future generations' ability to secure their needs".

remedial regimes for the same violations we want to show how different remedial logics can complement or conflict with each other, and which results these interactions may have on the contractual architecture of the supply chain and its coordination mechanisms.¹⁹

We first show the hypotheses in which coexistence of multiple remedial systems might emerge in practice (par. 2). Then, we engage in a comparative analysis of different systems, namely contractual, regulatory and certification ones. In doing so, we present the selected variables for the comparative analysis (par. 3 and 4) and subsequently focus on some specific remedies (par. 5 and sub-paragraphs). In the last section, we elaborate on the relationships among these coexisting systems exploring possible complementarities (par. 6).

2 The coexistence of multiple remedial systems for a single regulatory violation of transnational commercial contracts

The use of transnational commercial contracts as instruments of regulatory implementation produces important changes in contractual governance of the supply chain. Not only does it increase the number of actors participating to the chain's governance but it also multiplies the regimes regulating contractual performances along the chain. Both public and private regulators enacting the rules incorporated by reference in transnational commercial contracts acquire direct or indirect monitoring and sanctioning power in case of non compliance. When these standards are subject to certification scheme owners may significantly interfere in the governance. These transformations are not without consequences for contractual practices. The role of certifiers in particular is likely to change the relationships between contracting parties by assuming part of the functions normally performed by the chain leader in monitoring and sanctioning the breach.²⁰ Here, we refer to third party certification schemes (hereinafter TPC), where the certifier is distinct and somehow independent from both the certified producer and its contractor/buyer (Hatanaka et al. 2005; Marx 2012). This evolution should be seen in the light of the growing relevance of process standards and the necessity to monitor compliance during performance rather than at the end of the process when the product is delivered. Certification contributes to increasing the relevance of process obligations that conventional sales contract only partially takes into account. However the emergence of new types of contracts in agri-food chains, in particular farming and production contracts, suggests that the focus has become an intertwined combination of product and services that is difficult to reconcile with traditional sales.

¹⁹ We have explored the organisational impact of regulatory provisions on supply chains and the use of contractual networks in Cafaggi and Iamiceli (2012).

²⁰ While doing so, certification has a direct impact on contract rules. For example certification may condition the price payment by the buyer. See, for example the following clause provided by a supply contract for a gherkin supply contract in India: "Farmers should submit the crop management record certifying that he has used the fungicides and insecticides recommended/issued by the company. After receiving the certificate only the payment will be made to the farmers" (FAO database).

When focusing on the remedies against violation of standards along international food value chains, we adopt a functional approach to define relevant contractual transactions: lacking a harmonised legal form, univocally qualifying contracts for the supply of agri-food products in international food chains, we will refer to “supply contracts” or to “sale contracts” (as well as to “suppliers” or “sellers” and to “buyers”) without deriving any further implication in respect of the legal qualification of the contractual relationship and the applicable piece of relevant legislation either at domestic or at international level.²¹

Having clarified this we can observe that, when a regulatory provision is breached in transnational commercial contracts, multiple remedial systems are triggered, simultaneously or sequentially:

- first, the *contractual regime* with the different array of remedies, primarily aimed at compensating the victim of the breach but also including the repair or replacement of unsuitable components and even more radically rejection and termination;
- second, the *regulatory regime* referred to in the contractual provision whose main objective is to ensure regulatory compliance²²;
- thirdly, if relevant, the *certification regime* which may be referred to in the contract between the buyer and the seller or may be the specific subject matter of a separate contract between the certifier and the certified (usually the seller/supplier).

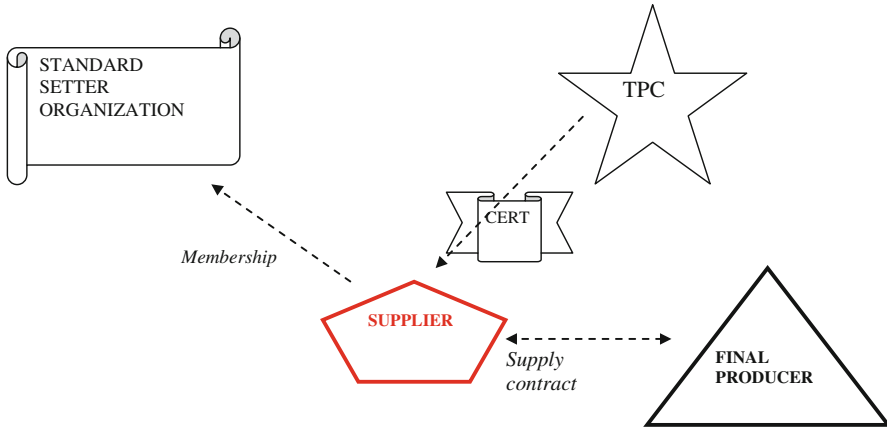
These remedial systems may not concern the same party if the subscriber of the regulatory body is the buyer rather than the seller. Accordingly we sketch the different hypotheses

- I. The first hypothesis occurs when the party breaching the regulatory provision in the commercial contract is the same as the one who signed the code incorporating the regulatory regime and the certification contract with certifier. Here, the code violation may lead to the application of sanctions as provided by the code, by the

²¹ Lacking harmonised specific legislation at the international level, domestic legal systems differ widely in terms of approaches and definitions, including legislation on various named contracts such as, for example: “production contracts” (USA, Iowa, House File 322, § 2 (2000)); “agricultural production contracts” (Chapter 505 of the Illinois Compiled Statutes (ILCS), Section 17); “contrat d’intégration” (France, L. no 64–678 of 6 July 1964, reproduced in art. L. 326 of the Code rural—amended by L. no 80–502 of 5 July 1980); “contratos de integración” (Spain, Autonomous Community of Cataluña, law 2/2005, see; last access: June 19, 2013); “relações contratuais entre produtores integrados e agroindústrias integradoras” (Brasil, legislative proposal by the Senate, n. 330/2011, available at http://www.senado.gov.br/atividade/materia/detalhes.asp?p_cod_mate=100728; last access: June 19, 2013). These are among the contractual schemes which are considered as relevant in the area of so called “contract farming”, intended by Fao as “an agricultural production system carried out according to an agreement between a buyer and farmers, which establishes conditions for the production and marketing of a farm product or products” (FAO 2012). For a more extensive legal and comparative analysis, see Pultrone (2012).

²² Our focus is on the transnational private regime but similar problems arise when there is a public, international or domestic regime. The use of administrative enforcement by public regulators may however produce different types of complementarity from those analysed in this paper.

certification contract and by the supply contract requesting standard compliance. Sanctions from the different regimes will concern the same party.

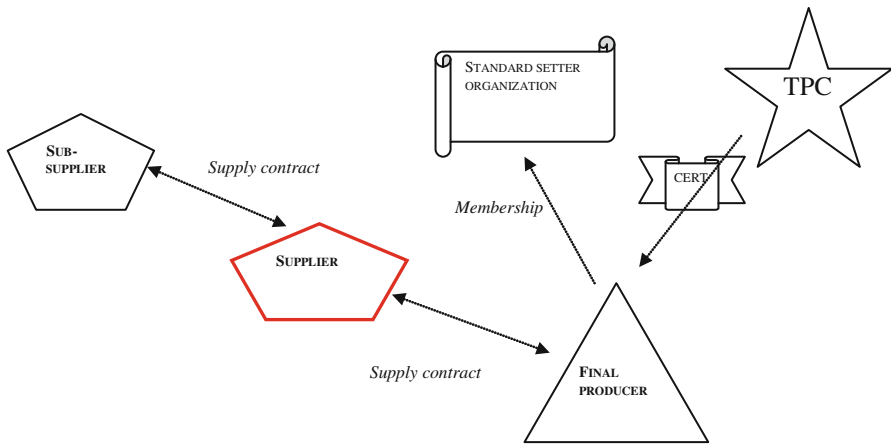


II. A more complex situation arises when the party, who has undertaken the contractual obligation to comply with the private standard, is not the same party that subscribed to the private regulatory regime. This occurs for instance when a buyer (e.g. a final producer) subscribes to a private food safety standard and imposes on the suppliers the contractual obligations to comply with the standard which he has committed to. In this circumstance, the breach of contract by the supplier may correspond to a breach of the code by the buyer for failure to monitor compliance with the regulatory commitments in the contractual supply chain. Unlike the previous example (under I)), where the breaching party was also infringing the code, here there is a split: the seller/supplier breaches the contract while the buyer/final producer infringes the code of conduct if the supplier is not compliant. The buyer will be subject to the sanctions of the regulatory regime, while the supplier will be subject to the sanctions for breach of contract, which presumably will incorporate some of the consequences of the violation of the code.

II.i. When a TPC scheme is in place, then the situation may be more complex. Depending on the structure of the supply chain and on the type of process to be monitored, the final producer may decide to be the sole holder of the certificate or to request suppliers to be individually certified under the same regulatory regime.²³ In the former case, suppliers will be subject to contractual liability under the contract with the buyer/final producer whereas the buyer/final producer will be subject to sanctions for breach of both the certification contract and the code of conduct (see figure below). In the latter case final producers and suppliers all fall into the situation described in the previous example (under I). It is worth mentioning that, since the certifier is himself subject to accreditation, the certified parties may be subject to additional monitoring by the accrediting bodies in case of delay or non-

²³ See below par. 5.3.1. in this article.

application of sanctions by the certifier. This can happen for example when this certifier's conduct causes the revocation of his/her accreditation and/or the cancellation of the certification agreement with the standard setter.²⁴



III. An even more complex situation arises when the breach of contract and the violation of the standard by the supplier imply liability, contractual or extra-contractual, for another actor along the chain in addition to the sanctions generated by the violation of the code. This is the case where a supplier or a final producer breaches a food safety code of conduct and the retailer, who sells to the final consumer, is liable *vis-à-vis* the consumer for non-conformity with a standard whose due compliance is shown on the label.²⁵ In this case, an additional remedial regime may be triggered along the chain as induced by the consumer's action and the consequential measures activated by the retailer against the suppliers in breach.²⁶ Tort claims may arise between parties not within privity of contract both against the breaching party and in case of failure to detect the defect against the certifiers (Ferrari 2010).

For analytical purposes we shall focus on the first example to illustrate comparatively the different remedial logics before elaborating more on the second hypothesis where, as a result of the seller's violation, two sanctioning systems concern the seller and one concerns the buyer for failure to monitor.

²⁴ On this possible cause for cancellation of the certification agreement see GLOBAL G.A.P.(EUREP-GAP), General Regulations, Integrated Farm Assurance [hereinafter GlobalG.A.P. Reg.], part II, par. 4.1.2.(ix). In case of lost accreditation by the certifier, regulatory schemes usually provide for information duties enabling certified enterprises to transfer their contractual position into a contract with a different certifier, who will be in charge of monitoring. See also IFOAM accreditation contract: "In the event of breach of this contract by the Licensee, the Licensor may (...) [r]equire the licensee to inform their certified operators in the event of a withdrawal of accreditation (...)"; for a similar provision, see GlobalG.A.P. Reg., part II, par. 4.4.1(v).

²⁵ See Directive 1999/44/EC of 25 May 1999 on certain aspects of the sale of consumer goods and associated guarantees, art. 2.2, lett. d.

²⁶ See Directive 1999/44/EC, cit., art. 4. See also Cafaggi (2009b). For a recent comparative law survey on tort claims related to food safety, see Ferrari (2009).

We assume that the violation gives rise to a double breach, one related to the supply contract and one related to the certification contract. However, given the different focus on process obligations, it could happen that a breach of the certification contract may not translate into a breach of the supply contract but simply in an obligation of the certified to modify the process and to ensure compliance even before delivery where, in many instances, the breach materialises. In this case the linkages are between remedies in the certification contract and obligations in the supply contracts.

3 Setting the comparative analysis among different remedial systems: the relevant variables

The following analysis is aimed at comparing (i) contractual remedies against noncompliance, as provided by contract law, with (ii) remedies provided by regulatory schemes and by certification agreements. The latter may be formally designed as private rules of regulatory associations and/or as rules provided by the parties within certification agreements, which are contracts themselves. Therefore, the comparison between (i) and (ii) aims to consider, on the one hand, the ordinary regimes for exchange contracts, mainly seen through the lens of default rules in general contract law, and, on the other hand, the certification contractual arrangements as well as, when existing, the articles of association, as application of contract and organisational law in the specific domain of implementation of standards.

We develop the comparative analysis between the two sets of rules (combining regulatory and certification regimes) on the basis of the following variables:

- (a) the pro-active or re-active features of the remedies: we distinguish between compliance induced through *ex post* cooperation and compliance induced by deterrence and threat of sanctions;
- (b) the impact of the remedy on the process (including production and marketing/trading processes) and/or on the product;
- (c) the impact of the remedy on the single transaction and/or on the supply chain.

Table 1 shows the structure of the analysis whereas the results will be presented in the text and tables below (see par. 5 ff.).

3.1 Pro-active versus re-active remedial systems

The primary aim of contractual remedies, associated to damages, is compensating the victim for the breach (Treitel 1976, 24)²⁷ and providing the party in breach with correct incentives to choose between performance and breach.²⁸ Indeed, the aggrieved party is entitled to a sum equal to the loss suffered as a consequence of

²⁷ The concept of breach and non-performance is widely discussed in contract theory, although general attention to the creditor's expected benefits from the contract is paid. It is also discussed whether minor or only substantial inconsistencies should be considered as relevant for qualifying a breach (see Torsello 2006, 612).

²⁸ From the perspective of Law and Economics see Posner (2007, 119); Hermalin et al. (2007, 94). Comparing front-end and back-end investments in contract design: Scott and Triantis (2006). See also

Table 1 The general framework

	Contractual remedies	Remedies in regulatory and certification schemes
a. Re-active versus pro-active remedial approach		
b. Product versus process		
c. Single transaction versus supply chain dimension		

the breach, including loss of profit.²⁹ In most legal systems this represents the main remedy provided by general contract rule and, in fact, the most used also at international level (Uncitral 2012, 227). In a supply contract context, part of the loss, consisting in lost or reduced value, may be recovered through the remedy of price reduction: in this case damages may be claimed only for losses other than the reduced value of the goods.³⁰

Specific performance, to ensure the expected result of the promised performance,³¹ is often subject to limitations and in fact less used.³² When markets are thick and alternatives available, the aggrieved party will prefer to claim mere compensation and enter into alternative transactions rather than relying on the execution of a judicial order for the enforcement of a contractual duty. Specific

Footnote 28 continued

Triantis (2009), considering in this respect the interaction between remedies and conditions and considering both as (alternative or complementary) means for risk allocation.

²⁹ See art. 74, United Nations Convention on Contracts for the International Sale of Goods (1980) [hereinafter CISG], which so defines damages for breach of contract. See also, in arbitral case law: China 30 November 1997 CIETAC Arbitration proceeding (Canned oranges case), available at <http://cisgw3.law.pace.edu/cases/971130c1.html>; China 26 October 1996 CIETAC Arbitration proceeding (Cotton bath towel case), available at <http://cisgw3.law.pace.edu/cases/961026c1.html>.

³⁰ Having regard to sales contracts, see, on CISG, art. 50, Uncitral (2012, 243), citing CLOUT case No. 248 [Bundesgericht, Switzerland, 28 October 1998]. The same relationship between price reduction and damages features in art. 120, Annex to the Proposal of European Regulation on Common European Sales Law.

See German case law in art. 50, CISG, Oberlandesgericht Karlsruhe, 7 U 101/04, 8 February 2006, available at <http://cisgw3.law.pace.edu/cases/060208g1.html> (English translation), rejecting a claim for price reduction and damages allegedly suffered by a Hungarian company, entered into two contracts with a dealer from Germany, for the delivery of Hungarian wheat, which turned out to be contaminated with excessive lead content and vomitoxin. The claim was dismissed for failure of proof and lack of due notice pursuant to art. 39, CISG.

For an example of a contractual clause on price reduction, see a Zambian contract for the supply of paprika, reading: “Purchaser retains the right to down-grade produce which does not comply with the quality standards as laid down in paragraphs 5 and 5.1, and adjust prices in accordance with the actual quality level of delivered produce. Purchaser retains the right to reject non-marketable produce due to unacceptable quality and/or chemical residue levels that may damage the reputation of Purchaser. Unsatisfactory or nongraded lots of paprika shall incur a grading charge” (FAO database).

³¹ See Treitel (1976, 6), defining “enforced performance in its broadest sense” as “a process whereby the creditor obtains as nearly as possible the actual subject matter of his bargain”.

³² See art. 28, CISG, referring to domestic law limitations as regards the issue of judgments for specific performance. For a comparative view see M. Torsello, *Remedies for breach*, cit., p. 617 ff., part. p. 620.

performance becomes attractive when markets are thin and specific investments high. The right to cure of the breaching party is also subject to limitations³³ and in case law it has been held that the aggrieved party is free to opt for mere compensation without being obliged to seek cure as a prior remedy.³⁴

In addition, in the case of non-conforming goods, parties can ask for replacement or substitution. However, these remedies can be subject to limitations as well.³⁵ Moreover, the ‘cure’ concerns the product but does not oblige the breaching party to remove the cause of the non-conformity from the supply chain when the defect is process related. Therefore, if, for example, the non-conformity is due to a defect in the monitoring system (Haccp), the contractual remedy cannot seek removal of the source of the non-conformity, but simply repair or replacement of the product. It can fix the outcome but does not address the cause, which in repeat interactions along supply chains may be a problem.

This remedial system in contract law is *re-active* because it provides *ex post* remedies intended to re-establish a given order without necessarily affecting the probability or future recurrence of violation. Unlike the *re-active*, a *pro-active* remedial system, even when providing *ex post* measures against violation, primarily aims to induce compliance with a given rule influencing human behavior, removing causes of breach, triggering cognitive and organisational responses to achieve conformity through cooperation rather than threat.³⁶ In this different perspective, corrective measures are highly prioritised whereas compensation does not represent a viable and available alternative. In fact the existence of an harm or damages is not a requirement to issue a sanction in certification regimes. As we see below, this is

³³ See art. 48, CISG, providing for a right to cure within the limits established by art. 49 (on termination for fundamental breach) and provided that the cure does not cause to the buyer unreasonable delay and unreasonable inconvenience. See also art. 109, Annex to the proposal of European regulation for a Common European Sales Law, enabling the buyer to refuse an offer to cure when (a) the cure cannot be effected promptly and without significant inconvenience to the buyer; (b) the buyer has reason to believe that the seller’s future performance cannot be relied on; or (c) delay in performance would amount to a fundamental non-performance. The extent of the right to cure is indeed a very critical topic within legal scholarship and practice. For a contribution on the debate accompanying the drafting of the CISG, see Schneider (1989). For a comparison between CISG and PECL under this respect: Yovel (2005). For a critical view on the proposal of Common European Sales Law, see also Wagner (2013).

³⁴ See Russia 12 March 1996 Arbitration proceeding 166/1995, available at <http://cisgw3.law.pace.edu/cases/960312r1.html> that, applying the CISG, acknowledges the buyer’s right to choose the remedy, namely compensation, rejecting the seller’s proposal to replace the defective goods.

³⁵ See art. 46.2, CISG, stating that the goods’ substitution is subject to the conditions of a fundamental breach and a notice requirement. Also debated is whether the buyer may claim substitution when the seller offers an effective cure (Schneider 1989, 82). On this aspect see the clause n. 7.1 in Unilever General Terms and Conditions of Purchase of Goods, that vests the Buyer with full discretion as to the choice between mere rejection and replacement without referring to any right to cure for the seller: “If any Products do not comply with the Contract or are in any way defective (“defective” in the context of Products for the purposes of this Agreement means Products not in compliance with this Agreement), the Buyer may at its discretion reject and/or require the Supplier to replace the Products at the Supplier’s cost and expense. This right to reject and/or replace shall be without prejudice to any other remedy to which the Buyer may be entitled to under the Contract or by law”.

³⁶ For example, according to ISO 22000 (7.10.2) corrective actions imply that the causes of the nonconformity have to be identified and that contractual parties need to evaluate actions to ensure that those nonconformities are eliminated and do not recur again.

the case for most regulatory and certification regimes where compliance with the code is stated as the primary objective.³⁷ Furthermore the definition of breach differs. Certification schemes allow variations along performances all above the breach threshold. The idea is that performance can meet the standard 100, 80 or 60 % but none of these constitutes a breach. The breach line is only below 60 % compliance with requirements, often distinguished between major and minor.³⁸

The differences in objectives might be based upon different premises. The underlying premise in certification and regulatory regimes seems that most of the times breaches are not the outcomes of intentional and rational choices by the breaching party; rather the result of negligent mistakes or coordination problems along the chain which can be repaired within a cooperative relationship between certifier and certified.³⁹ Even within escalating system the harsher sanctions are meant to induce compliance rather than punishing the infringer or compensate the victims. In sum the logic of contract remedies focuses on the consequences stemming from breach and in particularly the losses suffered by the victim.⁴⁰ The logic of certification focuses on the causes of the default and the means to ensure compliance after the infringement.

3.2 Remedial impacts on product v. process

Across western legal systems contract law is mainly construed upon the exchange model of economic transactions. A contract, so goes the conventional wisdom, mainly serves the purpose of favoring exchanging goods or services for value (Reimann and Zimmermann 2006). Within this domain, sale of goods represents the reference model for general contract law also in the most recent developments (Grundmann 2010).⁴¹ Relative little attention in sales is paid to process related

³⁷ See for instance UTZ Certifies Certification Protocol, version 3.0 September 2012, p. 4.6, Non compliances: warnings, suspension and cancellation, available at www.utz.org, last visited 27 September 2013.

³⁸ See GlobalG.A.P. Reg., part I, par. 6.2.

³⁹ See UTZ Certified Certification Protocol fn. 40 requiring corrective action by the certified be agreed upon with the certifier, p. 4.6.1(a). GlobalG.A.P. Reg.], part I, par. 6.4.3(a)(i), providing for the certification contract cancellation in case of fraud by the certified party.

⁴⁰ An exception is related to product recall which is not really a remedy for breach of contract; it is rather a remedy in torts that require cooperation along the chain. See for example art. 11 of the Unilever General terms and conditions (as quoted in footnote n. 56). For a general analysis of how product recall is affecting contractual relationships see Cafaggi (2012a).

⁴¹ With regards to recent evolution of European Contract Law, see Communication from the Commission, *A Common European Sales Law to Facilitate Cross-Border Transactions in the Single Market* (COM/2011/0636 final). See the critical view expressed by the European Law Institute, *Statement of the European Law Institute on the Proposal for a Regulation on a Common European Sales Law COM(2011) 635 final*, available at http://www.europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/S-2-2012_Statement_on_the_Proposal_for_a_Regulation_on_a_Common_European_Sales_Law.pdf. More recently the European Parliament has proposed to limit the scope of this draft regulation to distance contracts. See *Draft European Parliament Legislative Resolution on the proposal for a regulation of the European Parliament and of the Council on a Common European Sales Law* (COM(2011)0635–C7-0329/2011–2011/0284(COD)), 18 February 2013 and the subsequent Report by the European Law Institute, *1st Supplement: Reactions to the Draft Report of 18 February 2013 of the EP Committee on Legal Affairs*, 17 June 2013.

requirements, generally associated with other types of contract, primarily service contracts. Process related obligations deal with ‘facere’ rather than ‘dare’. Reaction to non compliance calls for changes in production process rather than product repair or replacement. Process related standards are associated with collective contractual governance (see below 3.3)

In conventional contract law the concept of compliance with contractual duties along supply chains is then mainly built upon the one of conformity of goods or warranties, depending on legal traditions.⁴² These concepts are mostly focused on characteristics of goods or services that relate to their structure and function as aptness to satisfy the buyer’s expectations.

To what extent these expectations incorporate compliance with standards concerning products only (e.g. the quantity of animal fat included in a food product) or processes also (e.g. the adoption of traceability techniques, good agricultural practices including integrated crop management, compliance with environmental requirements like carbon foot print or pests control) depends on contract drafting and to some extent to the qualification of the contract. However, lacking explicit reference to process-related obligations, it can be questioned whether the current notion of conformity and the one of warranty are wide enough to cover these aspects.

Only partially can this result be achieved through a broad interpretation of the criterion of fitness for purpose or the one of merchantability as referred to warranties (being these expressed or implied) or having regard to other requirements concerning product processing or handling (e.g. packaging, transportation and the like), which can be implied in a sales contract.⁴³ In some cases this approach has led to the recognition of contractual duties concerning, for example, the segregation of contaminated inputs whose presence is hardly observable *ex post* as product-related quality (e.g. in the case of commingling between GM and not-GM product).⁴⁴ By contrast, in other cases compliance with standards is not intended to necessarily influence the quality of the product, even indirectly, since standards may serve the

⁴² We hereby adopt a broad concept including both warranty and conformity of goods. See art. 35, CISG, on goods’ conformity to the contract; § 2–313 ff., U.S. Uniform Commercial Code (Article 2, on Sales) on express (express warranties by affirmation, promise, description, sample) and implied (merchantability, fitness for particular purposes) warranties; art. 99–100, CESL Proposal.

⁴³ See the provisions cited in the footnote above from CISG, UCC and CESL Proposal. For an example see Court of Civil Appeals of Alabama, *Harris Moran Seed Company, Inc. v. E.A. Phillips*, 2040746. June 23, 2006, where the Court considers “unmarketable” tomatoes grown from defective plants sold as “Mountain Fresh” variety, grown from seeds originally received by the seller from a Chinese producer affected by hybridisation with a female parent plant not timely removed before self-pollination. Here the defective process of seed manufacturing has determined the production of “off-type seeds”, that were not Mountain Fresh tomato seeds.

⁴⁴ Compare the Monsanto case decided by the U.S. District Court, E.D. Missouri, 19 Sept. 2003, where farmers growing non-GM corn and soybean filed an action against Monsanto for lost profits occurred because of defendant’s supply of GM products which led the European market to boycott all American corn and soy as a result. A similar case is the one discussed by the same U.S. District Court, E.D. Missouri, Eastern Division, In *Genetically Modified Rice Litigation*, No. 4:06MD1811 CDP, June 7, 2010 (2010 WL 2326036 (E.D.Mo.)), where a company, developing a GM rice, failed to segregate the supply of this product enabling contamination with non-GM rice into the market. Some contracts or general terms and conditions indeed are broadening the scope of warranty and include process related obligations.

different purpose of protecting the interests of the environment, of workers or local communities.⁴⁵ In these cases, contractual remedies designed around product related obligations may fail to ensure effective compliance.

Indeed, this approach, generally favouring product-related criteria to assess compliance, influences the system of contractual remedies as well, as these are much more focused on the consequences of the breach related to the final good rather than on the process to produce it. Although different approaches might emerge in specific contracts, mainly in service contracts, a general tendency of contract law in favoring products-oriented remedies over process-oriented ones can still be observed.⁴⁶ More specifically, contract law does not usually provide the party not in breach with injunctive relief that can direct the breaching party to change production process and adapt it to the requirements of the contract. This shortcoming is highly relevant especially when process rather than product standards are at stake. The non-breaching party can specify the result it seeks to achieve but cannot generally impose at remedial stage changes of the production process via injunctive relief in order to ensure compliance with the suppliers' undertakings.⁴⁷ Some case law shows that even contractual damages may be rejected in a purely sales contract perspective if no express warranty for services can be identified in the contract.⁴⁸

By contrast, regulatory and certification remedial systems, including to a certain extent quality assurance regimes, prioritize the focus on process over product

⁴⁵ See par. 5.2. below.

⁴⁶ A distinction can be drawn in this respect between sales and construction contracts, for instance, since the consideration of the processing dimension is absolutely limited, if not absent, in the concept of conformity pertinent to the former contracts whereas definitively existing in the latter case. This distinction influences the set of available remedies against defective execution, enlarging the scope of specific performance in construction contracts as opposed to sales contracts (compare, for instance, art. 1667 and art. 1492 in the Italian Civil Code; see Trib. Florence, 12 November 2008, n. 3945, in *Giurisprudenza locale—Firenze 2008*) and taking into account costs of correction in assessing damages (see, for instance, *Panorama Village Homeowners Association, Respondent, V. Golden Rule Roofing, inc., et al., Appellants.*, No. 44993-1-I, Court of Appeals of Washington, Division One, 102 Wn. App. 422; 10 P.3d 417; 2000 Wash. App. LEXIS 1467, filed on 7 August 2000, quoting from the U.S. Restatement of Contracts, Second, par. 348, which refers to the proportionality between costs of remedying the construction defects and the probable loss in value).

⁴⁷ It is interesting to read a former request, later abandoned, by plaintiffs bringing action against Monsanto (see footnote no. 44 above) aimed at an injunction requiring Monsanto to “control and/or prevent contamination of non-GM crops, soil and farming, storage and transportation equipment; to implement and monitor an effective Insect Resistance Management Plan; and to adequately test GM seeds for human health and environmental safety”.

In fact in many cases court litigation occurs when correction is not possible or useful anymore, whereas lack of correction (by either party or both) is debated as a ground for liability; see, for example, *Mt. Whitney Farms, Llc. et al. v. Sandstone Marketing, Inc.*, F062505 Court of Appeal, Fifth District, California. Filed 24 June 2013, where farmers were found liable for not complying with good farming practices by delaying the planting schedule, failing to apply herbicides and to protect land from rabbits.

⁴⁸ See Supreme Court of Nebraska, *Lesiak v. Central Valley Ag Cooperative, Inc.*, No. S–10–323..27 Jan. 2012, concerning the breach of a contract for the supply of chemicals, fertiliser and seeds as coupled with soil testing and consulting services in favour of the farmer: here the Court awarded damages in torts (for damages caused to the crop) and not in contracts because, lacking an express warranty, an implied service warranty cannot be held under the Nebraska's Uniform Commercial Code, neither is it provided by common law out of sales contracts, being that it is a warranty limited to construction contracts.

substitution or compensation for damages. Codes of conduct define process obligations related to safety, environmental and social requirements.⁴⁹ The increasing attention to sustainability is changing both the typology of contracts, their content and the mechanisms of compliance. Certification regimes ask certified to fix what went wrong in the production process causing products' fallacies; if necessary they require changing the organisational framework of production and its governance by contract. As it is shown later, this happens not only as a consequence of the increasing importance of process standards over product standards (Henson and Humphrey 2009),⁵⁰ but also as an effect of evolutionary dynamics within product standards themselves as for example safety management standards. Indeed, even when standards refer to (the safety or quality of) a product, corrective measures aim at revising the process before dealing with the product (see par. 5.2). Clearly a major factor is determined by the increasing interest expressed by consumers and NGOs in compliance with environmental and social standards, which can hardly be captured in the product but have become the subject matter of contractual obligations owed by the seller to the buyer and increasingly by the retailer to the consumer. Examples include from bans against child labour to shade-grown plantations aimed at the conservation of migratory birds. Process requirements are included in the contract via the incorporation of codes of conduct, guidelines and principles that become mandatory and legally enforceable before courts or before private dispute resolution mechanisms (Cafaggi 2013a). This process comes with some tensions. Sustainability requires collective governance of processes along the chain which are hard to reconcile with conventional sales contracts. The contracts include ever more exchanges between services (from the 'buyer') and goods (from the seller). These services include different segments of the chain and need some form of governance beyond the specific bilateral transaction.

It is important to underline that, while referring to process, we consider the whole dimension of the economic value chain of a product, thence including not only manufacturing and packaging but also marketing and trading. In fact, the modes of accessing intermediary and final markets may play a major role in ensuring compliance with standards especially when commodities travel across jurisdictional borders characterised by different contract law regimes and standards (Coglianese et al. 2009). Moreover, being these the more critical phases for value allocation along the chain, influencing such access has a significant impact on deterrence, as it happens when decertification from a regulatory regime infringes seller's ability to contract with some exporters or other intermediaries.

⁴⁹ For instance the UTZ Code of conduct of coffee is divided into 175 control points grouped into 11 chapters related traceability and general management issues (chapters 1–2), good agricultural farm practices (3–9), social and environmental requirements (10–11). For a more general analysis in the area of coffee see ITC (2011b). See in the sector of soy the RTRS Principles and criteria for responsible soy production.

⁵⁰ Although the distinction between product and process standards is widely made, more recent contributions expand the analysis by looking at three main approaches: performance-based regulation, technology-based regulation and management-based regulation. See Humphrey (2012, 9), building on Coglianese and Lazer (2003).

In sum there is a growing relevance of product related standards both in the more conventional aspects of quality and safety and in relation to dimensions integrated within the concept of sustainability that used to remain outside of the domain of transnational commercial contracts. Certification regimes and the codes of conduct are more process sensitive. By incorporating these codes into transnational commercial contracts the combination between product and process obligations is changing as is the combination between sales and service provision.

3.3 The impact on the single transaction versus the impact on the supply chain

In a commercial context the current approach in contract law looks at the consequences of the breach affecting the parties to the contract but, due to the privity requirements, does not specifically address the effects on the contractual relationships along the chain neglecting the strong interdependencies between performances.⁵¹ If A breaches the contract with B and, for example, violates the code of conduct related to safety requirements, the effects of that breach on the contract between B and C are only partly internalized via the remedies owed by A to B.⁵² Contract law operates by segmenting relationships. Further down the chain what happens as a result of the first breach in the relationships between C and D, D and E and so on is not a matter to be litigated in the dispute between A and B, as the principle of privity of contract suggests.⁵³ This approach artificially fragments interdependent relationships taking place along integrated chains unless such interdependence leads to explicit mechanisms of contractual coordination as in the case of agency relations between subsequent buyers⁵⁴ or if sub-suppliers substantially enter into contract negotiation providing for distinct warranties, though

⁵¹ Technically this can be done by having contractual clauses in each contract that refer to the consequences of the breach and condition performances of downstream contracts accordingly. This and similar mechanisms presuppose *ex ante* calculability and low costs monitoring which hardly occur in global chains.

⁵² See United States: Minnesota State District Court 9 March 1999, Case Law on UNCITRAL texts (CLOUT) abstract no. 416, concerning a sale contract between a U.S. buyer, purchasing music board system from a U.S. seller, who had bought the items from a Canadian supplier. As the items were defective, the District Court dismissed the claim against the Canadian supplier because the CISG does not contain provisions with respect to the rights of parties that are not in contractual privity. On different legal regimes concerning damages arising out of multiple breaches along the chains see Cafaggi (2008).

⁵³ A different approach could emerge if C was considered a third party beneficiary with respect to the contract between A and B, provided that the contract allows such interpretation. See Unidroit Principle, under art. 5.2.1 (Contracts in favour of third parties). For a critical view on the interpretative pathways stemming from this doctrine in the US legal system, see Geis (2012). On the application of the privity principle to food safety liability cases in Common Law, Civil Law and Japanese law, see Ferrari (2009).

⁵⁴ See, with regard to the CISG: United States 30 March 2005 Federal District Court [Illinois] (Caterpillar v. Usinor Industeel), available at <http://cisgw3.law.pace.edu/cases/050330u1.html>, dismissing the claim proposed by a truck bodies purchaser against the company that had supplied steel to its seller for lack of privity between the two, lacking any relevant agency relationship between the parties. With regard to the criteria to assess whether an agency relation could be implied in order to comply with the privity requirement in a case of nonconforming tomato seeds, see Nomo Agroindustrial Sa De Cv, Plaintiff, v. Enza Zaden North America, Inc., et al., Defendants, 492 F.Supp.2d 1175, United States District Court, D. Arizona (March 19, 2007), making reference to the lack of exclusivity in the relation between a sub-supplier and a supplier of the plaintiff and to the lack of “control” of the latter over the former.

implied.⁵⁵ Recent contractual practices suggest that retailers define general terms and conditions not only identifying a lead supplier, which may be a single entity or a consortium, but also warranting direct claims towards third parties.⁵⁶ There is an increasing attention paid by multinational to second, third and fourth tier supplying layers and the necessity to reduce the degree of delegation to first tier suppliers.

This conclusion holds true in general but becomes of paramount importance when a regulatory provision concerning safety, traceability, environmental standards is breached. Take food safety provisions concerning the implementation of the hazard analysis and critical control points (HACCP).⁵⁷ This is a process standard that supply chains have to implement by identifying the critical control points along the chain. It assumes the creation of an organisational structure that coordinates the various critical points along the production process linked through bilateral contracts and general protocols. The objective is to detect hazards and react promptly to minimise risks of harms.⁵⁸ If one party defaults by not detecting the hazard or removing its consequences, the whole system is called to intervene and react in order to minimise the potentially harmful effects. According to the regulatory perspective the consequences of the violation (breach) should be fully internalised by all the other critical points that have to react and remove the hazard not detected. Not only are the consequences of individual defaults ‘socialised’ but so are the obligations to react and mitigate since they cover the whole relevant segment of the chain.

If we were to think in traditional contractual terms, we would say that in the case of breach of regulatory provisions there is a duty to cooperate among the different control points and that, after the breach, there is a duty to mitigate on each party, regardless of whether there is a direct contractual relationship with the party who

⁵⁵ See *Cardinal Health 301, Inc. v. Tyco Electronics Corp.*, 169 Cal.App.4th 116 (2008), where sufficient vertical privity has been found in the relationship between a sub-supplier and a final buyer of spring probe connectors since these two have directly negotiated the supply contract agreeing that an assembler, as middleman, would purchase the items and then sell the assembled product to the final buyer.

⁵⁶ See for example General Terms & Conditions of purchase of goods of Unilever ASCC AG (“Conditions”) 1.3 “The lead supplier warrants to Unilever and each buyer that it has full power and authority to enter into the contract on behalf of each supplier and to bind each of them to perform and comply with the contract. The lead supplier agrees to procure that each supplier supplies the products to each buyer on the terms and conditions of the contract as a supplier and fully complies with all obligations of a supplier under the contract. Each supplier accepts that Unilever may exercise the rights of each buyer under this agreement. Each supplier acknowledges and accepts that Unilever supplies the products or products incorporating the materials to other Unilever Group companies who supply them to third parties; each supplier agrees that the losses suffered by any such Unilever Group companies as a result of any breach of this agreement by the supplier shall be deemed to be losses also suffered by UNILEVER.” This provision however only concerns those lead suppliers that operate within a pyramidal group but does not capture instances where the lead supplier only has contractual control over the suppliers within the chain.

⁵⁷ HACCP is today incorporated in legislation and technical standards like ISO 22000 and usually explicitly referred to in contracts.

⁵⁸ Guidelines for the Application of the HACCP System, CAC/RCP 1-1969, Rev. 4-2003—Annex Page 24 ff., illustrating the process to identify the control point and enact proper means of effective monitoring where it is needed.

committed the breach.⁵⁹ Notice that a duty to mitigate in contract law rests on the aggrieved party himself with important theoretical implications on the efficient breach ‘doctrine’. Within the conventional efficient breach approach the choice of the breaching party is limited to the consequences of the immediate transaction and does not internalize third parties’ behavior along the chain involved in collective regulatory regimes. Indeed, the anticipation of due mitigating conduct by the aggrieved party might increase the incentives for an “efficient breach” on the other party.⁶⁰ Going back to the example above, in the context of a safety regulatory regime unlike under current contract law, under the code of conduct she has undertaken to comply with, E could be asked to cooperate and mitigate even if it is the furthest away from the contractual relationship within which the breach has occurred.⁶¹ While according to the traditional contractual account, it would not be legitimate to ask E to mitigate losses created by B’s breach in the context of the contractual relationship with A, the regulatory regime, included in each contract along the chain, allows for this result to be achieved and expands duties to cooperate and mitigate by recognising the functional interdependence among parties within the chain. Clearly the costs associated with mitigation would have to be compensated by the parties liable for the default if there is only one responsible for the malfunction.

Such an approach requires a form of contractual governance organised around the chain or the modules of the chain involved in the implementation of the regulatory provisions, going beyond contractual fragmentation still reflected in the conventional world of contract laws.⁶² Different tools can contribute to redesign the contractual structure along this line: the incorporation of regulatory provisions into the contractual texts of the parties involved; the provision of cooperation duties in favor of third parties acting along the chain; the use of assurance services by certifiers as enabled by contract to monitor over multiple actors.⁶³

⁵⁹ On the different logics characterising comparative negligence, the duty to cooperate and the duty to mitigate in common law and civil law systems and on their possible reconciliation within a common framework, see Cafaggi (2009a) and Porat (2009).

⁶⁰ In fact the duty to mitigate losses stemming from contractual breach can be interpreted restrictively following the reasoning in the text. See, for example, in a case concerning the unjustified refusal of a buyer to take proper delivery of meat, Germany 28 October 1999 Appellate Court Braunschweig (Frozen meat case), available at <http://cisgw3.law.pace.edu/cases/991028g1.html>, stating that the seller was not obliged to undertake a substitute transaction, since it would have needed the goods in case of a late request from the buyer and because the meat in question could be preserved through freezing, considering that the cost of such preservation did not exceed 10 % of the value of the meat.

⁶¹ Indeed contract law establishes a duty to mitigate merely within the direct relation between debtor and creditor. See art. 77, CISG. For an application in the field of non-conforming food, see China 17 December 1999 Rizhao Intermediate People’s Court, Shandong Province (Hang Tat v. Rizhao), available at <http://cisgw3.law.pace.edu/cases/991217c1.html>.

⁶² We speak generically of contract laws and a contractual approach, fully aware of the significant differences that exist in relation to many of the questions concerning the definition of breach and that of remedies.

⁶³ On the possibility of designing CSR related licensing contracts as third party beneficiary contracts (more precisely and restrictively “broadcasting contracts”) enabling designated interested parties to enforce CSR duties in case of breach, see Geis (2012, 1177).

In sum the focus of contract law remedies is on individual transactions and limit the consequences of the breach to the immediate parties and so does the duty to mitigate. Regulatory and certification provisions broaden the scope and include many components of global supply chains to react to breaches and ensure compliance with product and process standards.

Some interim conclusions can be drawn. It appears that the approach taken by commercial contract law differs from that of regulatory and certification regimes incorporated by reference. (1) The former aims at redressing the victim of the breach and so inducing compliance by deterrence through a re-active approach; whereas the latter pro-actively tries to restore compliance with regulatory process in order to pursue regulatory objectives by stimulating forms of cooperative enforcement. (2) The former focuses mainly on products, the latter on process. (3) The former concentrates on individual transactions while the latter focuses on the interdependence of contractual relationships along the chain and creates collective governance mechanisms.

The analysis below will compare the different, at times conflicting logics that today coexist when a regulatory provision is breached.

4 Issues and challenges through the lens of contract remedies theory

The illustration of the consequences of breaches concerning regulatory provisions poses some serious challenges to the traditional view in contract scholarship. In particular it calls on the necessity to review the perform/breach alternative and the so-called efficient breach doctrine. For two main reasons, worth elaborating further.

The first reason concerns the different incentive structures to be considered when moving from the single transaction to the supply chain unit of analysis. The consequences of the breach may go well beyond the welfare function of the individual party in breach and that of the victim. In fact, in a supply chain this is always the case since contractual performances operate within a coordinated structure and there are many ‘victims’ of a single breach that occurs at the beginning of the chain especially when specific investments along the chain make outside options costly or impracticable. The ‘value’ of the contract, especially one enshrined in the regulatory provisions, is not restricted within the exchange function.⁶⁴ Moreover, the decision to perform or to breach is influenced by the exposure of the party in breach to measure which could be activated by several actors along the chain, including regulators and certifiers. This situation is similar to the one arising in the case of third party beneficiaries to the contract, although, here, third parties might not be conceived just as another party to the exchange but could be seen as holder of distinct interests influencing the value of the linked transactions.⁶⁵ So, for example, a supplier may be required to comply with sustainable standards given the

⁶⁴ For a more general consideration concerning the limits of the mainstream scholarship on the centrality of the expectation interest in assessing contractual damages, see Triantis (2009).

⁶⁵ On the limits of the efficient breach doctrine for not considering the effects that performance or breach might have on third parties in general, see Hermalin et al. (2007).

pressure exercised on the chain by certifiers regardless the value of the single exchange transaction with the buyer.

Secondly and in relation to this, the ‘decision’ to breach a regulatory provision triggers a duty to mitigate on several chain participants besides the contractual partner of the party in breach. Whereas in contract law it is generally accepted that remedies, especially damages, are influenced by the aggrieved party’s ability to take precautions (before the breach becomes final) and/or to mitigate losses (once the breach becomes so) (Hermalin et al. 2007, 104), the supply chain would maximize internal mitigating opportunities but would request much more a complex analysis to assess which parties are in the best position to take precautions along the chain or to react to defaults; not being constrained by the single transaction borders, such analysis could resemble one in torts rather than in contract when considering joint and several liability.⁶⁶ Indemnification should follow similar patterns.

Some of the many challenges posed on current theories by the case of violation of standards along the chain can be sketched along the above proposed frame of variables.

(1) *Reactive versus proactive*. The conventional contract law framework based on the compensation principle and on the primacy of the expectation interest seems more consistent with a “reactive” rather than a “proactive” approach to contractual remedies. Indeed, that analysis assumes that parties react to the threat of measures, whose economic value is assessed against the expected benefits and costs of individual decisions (to breach or perform). That approach becomes problematic if and when it is acknowledged that parties may not be able to assess such values *ex ante* and that precautions (and their costs) are not easily observable or verifiable (Scott and Triantis 2006; Triantis 2009). In other words due to the interdependencies and to the difficulty arising in risk management of agri-food supply chain parties may not be able to quantify *ex ante* costs and benefits of the breach/performance alternative and in the case of breach link the cost to the choice of remedy by the aggrieved party. By using a “pro-active” approach, as exemplified below, regulatory and certification schemes rely on a different incentive structure, based on the transfer of relevant knowledge reducing the costs of compliance and increasing the value of the parties’ economic activity in the medium-long run. The breach in that context is not the expression of an exit option from the individual relationship or from the chain; rather it is the result of a regulatory failure. At the very core, parties to the chain fear termination much more than damages as a consequence of their breach.⁶⁷

(2) *Product versus process*. Whereas the mainstream theory tends to assess the value of a transaction in terms of product value in order to judge the alternative between performance and breach, such assessment is much more complex if the contract calls for compliance with process standards. Indeed not all process standards involve a straightforward upgrade of a product and, whether, this upgrade

⁶⁶ From a broader perspective see Triantis (2009), considering how “[i]n the two decades following the emergence of the efficient breach theory, contracts scholarship broadened its analysis (in parallel with economic tort theory) to incorporate a variety of incentive and risk-bearing goals”.

⁶⁷ For a similar consideration concerning franchise and loan contracts, see Triantis (2009).

might not be priced in the market. In some cases related to environmental protection the introduction of standards aims at creating a market which does not exist⁶⁸; in other cases, it aims at protecting social values or third party interests, which would be hard to incorporate into product pecuniary values to be easily defined. The performance/breach assessment would then fail to capture this dimension according to the conventional approach.

(3) *Single transaction versus chain dimension*. In the perspective of the theory on contract remedies, the shift from the single transaction dimension to the chain dimension would trigger at least two types of challenges. One would require an examination of the extent to which and by which means parties along the chain can activate measures reacting to the breach and directed at ensuring compliance. As we show below, regulatory and certification schemes tend to provide for some extension of monitoring and sanctioning powers along the chain, thereby influencing the incentive structure underlying the decision to comply or to defect. Another aspect worth mentioning concerns the type of interest at stake: regardless the legitimacy of third parties' action against the breaching party, to what extent can the legitimate plaintiff recover a loss which goes beyond his/her individual domain, being linked, for example, with reputation effects extending throughout the chain? Can remedies connected with the use of certification be considered as an attempt to incorporate this different value in a way that damages would not be able to do?

By providing evidence of current practices, the analysis below will try to elaborate on some of the lines sketched by these considerations.

5 Addressing remedies for violation of standards in food global chains: evidences from practices

This section of the paper is aimed at comparing different remedial systems for violation of standards within transnational value chains, distinguishing between remedies provided under contract law and remedies provided within regulatory and certification regimes. We refer to the food sector as the field of application.

In doing so, we shall focus on remedies aimed at correcting the problems that led to a nonconformity.

5.1 Ensuring regulatory compliance by fostering cooperation along the chain: re-active versus pro-active approaches

The focus of the remedy in contract law is on the consequences of the breach, whilst in certification and regulation it is on the causes of non-conformity outlined above. This is even more important in the food sector due to the possible impact of a breach on human health or other relevant public interests, including social and environmental ones.

As seen in par. 3.1, although in theory corrective action could be enforced through specific performance, in practice this remedy is not always available under contract law and, if enacted, it is confined to the transactions' outcome without

⁶⁸ From the perspective of system level innovation, see K. Sorsa, "The evolution of CSR standards in the coffee value chains—transition pathways to sustainability", cit.

affecting the risk of recurrence of violation in the future. Also replacement of defective goods, when applicable, is unable to ensure continuous compliance and, in any case, its use may be restricted to particularly serious forms of breach. Moreover in the area of food products the availability of corrective measures may be even more limited. Indeed, unlike other areas like cars or electronics, a non-conformity is generally not subject to cure or repair but only to replacement and recall from the market.⁶⁹

Although case law is quite limited, it should be acknowledged that, following this framework, in practice, in the food sector like in many others, damages are by far more used than specific performance and corrective remedies in contract law. Moreover the priority of damages is not superseded by any general rule prioritising prevention, cure and correction over mere compensation. The lack of such escalation and the final availability of monetary measures as potentially and wholly satisfactory for the victim represent distinctive elements of a remedial system which is *reactive* rather than *pro-active*.

By contrast in regulatory and certification schemes the purpose of the remedies is to correct the flaws in the production process and preventing (an increase in) risks rather than sanctioning, which happens only as a last resort. Prevention is driven by prompt intervention more than by incentives induced by *ex post* remedies following the breach.⁷⁰ Reporting duties, periodic auditing, corrective measures are widely prioritised to *ex post* sanctions like rights cancellation and contract termination.⁷¹

⁶⁹ The same can be observed when loss is suffered by producers operating at the upstream part of the food supply chain. See, for an example, *Nomo Agroindustrial Sa De Cv, Plaintiff, v. Enza Zaden North America, Inc., et al., Defendants*, 492 F.Supp.2d 1175, United States District Court, D. Arizona (March 19, 2007), comparatively assessing the adequacy of repair, replacement and price refund in electronics and agriculture and considering these remedies inadequate in case of defective seeds, given the impact that the use of seeds determine on the harvested crop. For a different example in a Jamaican contract for the supply of roots and tubers, see the following clause: “In the event the Seller breaches the quality specification, the Buyer’s sole and exclusive remedy and Seller’s sole and exclusive liability shall be limited to replacement of non-conforming produce with conforming produce or return of the purchase price”.

This approach corresponds to the focus on product withdrawal in the extra-contractual domain, as provided under the Directive 1999/34/EC amending Directive 85/374/EEC on the approximation of the laws, regulations and administrative provisions of the Member States concerning liability for defective products that extends such liability to agricultural products (see art. 1). On food safety measures including a rapid alert system, crisis management and emergencies, see Regulation (EC) No 178/2002, laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety, part. art. 50 ff.

The need to comply with (European or other state) legislation requesting product recall may produce a direct impact on contractual remedies as provided by sales contract. See, for example, the following clause excerpted from the General Terms and Conditions of Purchase of Goods of Unilever ASCC AG, § 11: “If there is a recall of any of the Products, any of its ingredients and components or any product incorporating the Products (“Recalled Product”), the Supplier shall provide reasonable assistance to Unilever in developing a recall strategy and shall cooperate with Unilever and the Buyers and any applicable governmental agency, entity or authority (“Governmental Body”) in monitoring the recall operation and in preparing such reports as may be required”.

⁷⁰ On the precautionary principle in the food sector, see Regulation (EC) No 178/2002, cit., art. 7.1.

⁷¹ See, for example, *GlobalG.A.P. Reg., part I, par. 6.4.1* on the warning procedure following breach. See also, for a concrete example: *Food Safety Plus™ Pty Ltd, HACCP Certification Terms and Conditions*: “If your organisation is issued with one or more non conformance, certification is withheld until such time as all critical and major non-conformance(s) are closed out or downgraded to minor non-conformance(s), and corrective actions are indicated for all minor non-conformances. This may involve a follow up visit by the food safety auditor.”.

Regulatory schemes also tend to escalate corrective measures distinguishing between minor and major nonconformities.⁷² Moreover, they call for cooperative practices in the relation between certifier and certified firm.⁷³

With prevention as a prior objective, regulatory schemes tend to emphasise the importance of monitoring steps along the whole production process through site visits, sample analyses and the like. The predetermination of standards offers a guide and a framework facilitating monitoring both in cases of second party control (as enacted by the buyers) and in cases of third party certification (as enacted by independent assurance services providers). Incorporating these logics, the supply contract does not only impose compliance with standards but, when requesting certification from the supplier, may also leave more space for corrective remedies as enacted by the buyer within the contractual relation with the supplier.⁷⁴

At this point it should be acknowledged that this methodology is not unknown in contract practices either, although here we observe a different approach. Indeed, scholars claim that, in order to lower certain types of transaction costs, parties tend to incorporate into commercial contracts (or to even autonomously develop) specific standards for performance assessment.⁷⁵ In fact, a more proactive approach in inter-firm collaboration contracts is also described by scholars engaging in the observation of contractual practices in the context of technology services or innovation enhancing collaboration: monitoring procedures are indeed provided along the collaborative relation as a means for prompt error detection, adoption of corrective measures, problem solving, enhancing innovative solutions (Helper et al. 2000; Collins 2003; Jennejohn 2008; Geis 2009; Gilson et al. 2009).

Though revealing very important trends in contract theory and practices, the issue is to what extent these analyses represent the core and the common approach taken by contract laws. Indeed, they might rather show that the conventional framework of

⁷² See for examples the Chain of Custody Policy of the Rainforest Alliance, sub par. 6, setting different correction procedures depending on the seriousness of non conformance. See also GlobalG.A.P. Reg., part I, par. 6.2.

⁷³ See, in the specific area of coffee production, UTZ Certified Certification Protocol (2010), § 7.1, providing for a consensual procedure aimed to resolve non-compliance through agreement between certifier and certified firm.

⁷⁴ See for example in a Thai contract for the supply of asparagus the following clause: “In the post-harvest practices, if the Buyer or the Buyer’s agent discovers that the place and the procedure of washing, culling, cutting the green asparagus output is not healthy according to the EUREP GAP standard, the Buyer can suspend the acceptance of that Seller’s green asparagus output on a case by case basis until a correction is undertaken and that correction must be approved by the Buyer in order that the purchase and sale under the contract may continue.” (FAO database).

⁷⁵ Depending on different practices, this methodology might include: (1) service levelling (more focussed on development of standards); (2) acceptance procedures (providing for testing by customer step by step); (3) second party periodic audits extending to financial, operational, security and data management; (4) periodic benchmarking provided by a third party who is knowledgeable in the industry and able to assess effective performance against a panel of comparable service providers (Blair et al. 2011).

contract law may be far from what enterprises materially expect when engaging in collaborative relations,⁷⁶ especially if innovation-enhancing activities are at stake. They also show that some firms, mainly larger firms, turn to “tailor-made” contractual design in order to better shape the structure of incentives and the plan of their collaboration.⁷⁷ On the contrary in relationship between MNCs and SMEs along the chain the former impose general terms and conditions that the latter can only take or leave. The costs of this contract drafting may be high, requiring specialised and often interdisciplinary skilled service providers. From this perspective, the legal services market shows fundamental weaknesses worldwide and access to it is in any case limited for most firms, mainly small and medium ones, due to financial or organisational constraints.⁷⁸

Regulatory and certification schemes might be able to address some of these weaknesses: (i) providing enterprises with monitoring mechanisms and procedures that contract default rules do not provide given that they are focused on the value exchange in bilateral transactions and (ii) offering a map for contractual design at lower costs rather than the ones imposed by the access to legal services in the global markets. Whether accuracy of monitoring provided under regulatory and certification’s schemes is high enough to induce the proper level of performance along supply chains, is beyond the scope of this paper (Choi 1998; Blair et al. 2008; Ferrari 2010).

5.2 Product and process in non-conformity

There is a significant difference between the definition of nonconformity in regulation and contracts, especially contracts related to goods exchange (sales). The distinction can be explained and simplified by saying that contract performance and breach are mainly focused on product standards,⁷⁹ while in regulation, including that of goods, they are concerned more and more with process standards (Henson and Humphrey 2009, 4).⁸⁰ Clearly this would not be entirely accurate if, instead of sale of goods, one considers service contracts where processes historically have played a more important role. Yet, as we know, sales law has played a paramount role in defining the principles of contract law and it is still safe to say that in contracts standards are primarily designed around products rather than processes. Moreover, food supply chains mostly rely on the use of goods or service exchange contracts, although increasing use of more sophisticated contractual schemes is taking place in practice in the form of contract farming or agricultural production

⁷⁶ Following the observation of Hadfield (2012).

⁷⁷ It might be worth noting that contracts analysed by Blair et al. (2011), Geis (2009), Gilson et al. (2009) are all concluded among at least one sizeable corporation.

⁷⁸ With special reference to the US market, see Hadfield (2012).

⁷⁹ See part. art. 35, CISG, stating the requirements for conforming goods.

⁸⁰ See also European Commission Communication, *Best practice guidelines for certification schemes in food* (OJEU, 2010/C, 341/04), part. par. 1.1, where attention is paid to management systems as well.

contracts where the service component is becoming rather relevant.⁸¹ The latter, introduced by many domestic legal systems, suggests the necessity to link goods and services given the increasing relevance of production processes for the quality of the final product. Often the production by the supplier is linked to transfer of knowledge and service provisions by the buyer aimed at ensuring better quality and safety and compliance with regulatory requirements. As seen in par. 3.2, this increasing relevance of compliance with process-related standards within the contractual relationship may lead to extend the concept of conformity and the one of warranties (either express or implied) to the extent that such compliance influences the quality of the product. However, it remains doubtful whether this type of nonconformity may lead to injunctive reliefs and corrective remedies rather than price reduction and damages.

In regulatory regimes concerning food chain, non conformity may have different meanings from contract laws, both domestic and international. In a narrow sense, as we have seen, it coincides with regulatory compliance and may be associated with a process standard.

There is however a deeper change going beyond the difference between product and process standards. Looking at many of the sustainability standards, new concepts of best practices emerge and its close link with (non) conformity becomes clear. Parties have to comply with good agricultural practices (GAP) which often refer to the compatibility with the environment and with local norms defining policy choices about the balance between agricultural development and environmental protection.⁸² These practices often refer to the respect of communities' rights and the duty to compensate when traditional land use rights are relinquished.⁸³ Some of these standards represent ancillary regulatory tools complementing ordinary process standards: even if exempted from the ordinary sanctioning system provided for other standards, they may be subject to verification so that publication of the assessment results within a specific database creates an important reputational effect within the community of subscribers.⁸⁴ Other schemes are more specifically focused

⁸¹ See above under footnote n. 21 for selected references to legislation and literature. In this framework as well the baseline is represented by the exchange of goods, though enriched through the incorporation of services, technical assistance, physical and not-physical inputs, finance. These elements draw a line for a more cooperative scheme beyond the mere exchange baseline.

⁸² See the references to good agricultural practices in GlobalGAP Risk Assessment on Social Practices [hereinafter, GRASP]; see below, footnote n. 84. And in reference to sector specific code see, in the field of soy, RTRS standard, principle 3(3.2), providing for compensation rights in favour of native communities that have relinquished land use rights, and principle 5 (Good agricultural practice), mentioning a specific obligation to respect for native forests and vegetation. On the factors encouraging the use of social and environmental standards, including the role of public interest-oriented investors, see Blair et al. (2008).

⁸³ Often these duties are specified in community development agreements signed by the interested community, the local governments and the landowners and affect contractual practices along the chain. Domestic legislation requires community to provide free prior informed consent (PFIC) to the use of land including agricultural use which protects the land from inappropriate and harmful practices (Cotula 2012, 2013; Cuffaro et al. 2013; Cafaggi 2013b).

⁸⁴ See GRASP Checklist, available at http://www.globalgap.org/cms/front_content.php?idcat=126 (last visited on 31 October 2012). On the effectiveness of reputational sanctions in private and public regulation, comparatively, see Van Erp (2008).

on social and sustainability criteria and provide for an *ad hoc* certification showing compliance.⁸⁵

Looking at these systems as complementary, three situations should then be distinguished:

- i) one in which contract rules and regulatory schemes cover different types of nonconformity, e.g.: the former related with product quality (i.e. the percentage of animal fat), the latter with process standards (i.e. segregation of ingredients coming from different suppliers in order to ensure traceability); here, though related to the product, compliance with regulatory (process) standards does not necessarily influence product conformity with contract requirements (e.g. commingling of ingredients of different suppliers using similar production techniques in similar environmental conditions with equal percentage of animal fat may lead to equally conforming products);
- ii) one in which compliance with regulatory standards leads to nonconformity of goods also under contract rules (e.g. lack of testing on ingredients makes the product unfit for human consumption);⁸⁶
- iii) one in which compliance with regulatory standards may be totally irrelevant for product conformity since it affects on different interests such as the environment, the respect of human rights, the interests of local communities (for example, certified shade grown plantations are mainly due to ensure birds friendly environment).

Whether a link between compliance with regulatory standards and product conformity may be established (as in ii) does not only depend on technology and physical processes. It may also depend on the ability of the market to “commodify”

⁸⁵ This is the case of Fairtrade standards, Rainforest Alliance standards, Bonsucro (in the sugar sector), Utz certified (in the coffee sector, where social and environmental standards are complemented by reference to safety and health standards), and the like. For example, in the case of Fairtrade, certified holders are requested to comply with the following principle: “Fairtrade aims to create sustainable trade partnerships between producers and their buyers, which enable producers to have long-term access to markets under viable conditions. Above and beyond requirements in this Standard, it is important that these relationships grow stronger over time and are based on mutual respect, transparency and commitment.” On the convergence of these schemes towards a wider and mixed coverage of concerns including safety, social, environmental and sustainability standards, see K. Sorsa, “The evolution of CSR standards in the coffee value chains”, cit.

⁸⁶ From this perspective the example may be compared with the one in which a fault in packaging, refrigeration, uploading or transporting fruit generates defective products upon delivery. See art. 35, CISG, cited above. In international case law, see: *Conservas La Costella S.A. de C.V. v. Lanín San Luis S.A. & Agroindustrial Santa Adela S.A.*, Arbitration Proceeding before Compromex (Comisión para la Protección del Comercio Exterior de Mexico), Mexico, 29 April 1996 (Unilex database), in which a seller of canned fruit was found to have violated article 35, CISG, where the containers were not adequate to prevent the contents from deteriorating after shipment; Cour d’appel, Grenoble, France, 13 September 1995, in CLOUT database, case n. 202, where a seller sold cheese, that it knew would be resold in the buyer’s country, and the cheese was delivered in packaging that did not comply with that country’s food labelling regulations. See also, with regards to milk powder sales contracts, Germany 9 January 2002 Supreme Court (Powdered milk case), available at <http://cisgw3.law.pace.edu/cases/020109g1.html>, concerning seller’s liability for infestation of the powdered milk possibly due to a faulty processing of the milk; and Court of Civil Appeals of Alabama, *Harris Moran Seed Company, Inc. v. E.A. Phillips*, 2040746. 23 June 2006, cited above on non-marketable tomato plants as deriving from defective seeds.

such compliance in a way that influences product marketability. The use of sustainable labels helps to push this process forward, at least as far as parties are able to substantiate these labels with a clear reference to standards as requirements for product conformity and express warranty.⁸⁷

If this evolution might emerge at the level of compliance and breach, which type of complementarities do we then observe in terms of remedies? In this respect, it seems that the distinction between the *reactive* and *proactive* approach, the former being more linked with the contractual remedial system and the latter with the regulatory one, still holds. As seen in par. 3.1 and 3.2, both specific performance and correction of defective processes, which are necessary for the production of conforming goods, may be subject to limitations and more likely lead to the goods' substitution (also via secondary market) without guarantee of process correction in the specific transaction and (even less) in future ones.⁸⁸ Similar concerns regard the enforcement of duties or warranties which are not immediately connected with the quality of the product as characteristic performance, like in the case of social or environmental standards: in a contractual perspective these forms of breach may more easily lead to liquidate damages than provide for injunction reliefs.⁸⁹

5.3 Corrective remedies against nonconformity and the value chain dimension

A third related difference between the commercial and the regulatory logic is that the former concentrates on individual transactions while the latter extends to the web transactions within the supply chain.⁹⁰ This difference is linked to the previous distinction between product-related remedies (the contractual ones) and

⁸⁷ A similar pattern may be observed in the area of public contracting, where the inclusion of requirements concerning compliance with social standards is becoming more and more frequent. See European Court of Justice, 10 May 2012, Case C368/10, par. 61, acknowledging that “under Article 23(3)(b) of Directive 2004/18, the technical specifications may be formulated in terms of *performance or functional requirements which may include environmental characteristics*. According to recital 29 in the preamble to that directive, a given production method may constitute such an environmental characteristic”.

⁸⁸ See art. 28, CISG in particular, which makes specific performance subject to the limitations provided by the *lex fori* with respect to sales contracts, and art. 46, CISG, stating the conditions for specific performance, goods' substitution and repair. For an application in the food sector see Cour de Cassation, France, 23 January 1996 (case n. 150 in CLOUT database), in which delivery of conforming goods (wine, previously delivered as artificially sugared), due to be used in the buyers' production process, was awarded on the basis of art. 46, CISG.

⁸⁹ See, for example, in the U.S. case law on breach of warranties in food sector contracts, the following cases dealing with damages claims: Court of Civil Appeals of Alabama, Harris Moran Seed Company, Inc. v. E.A. Phillips, 2040746. June 23, 2006, cit.; U.S. District Court, W.D. Virginia, Danville Division, W.H. Rogers, Jr., et al., v. DOW AGROSCIENCES, LLC, et al., Defendants, No. 4:06CV00015, Oct. 31, 2006.

⁹⁰ Depending on how the chain is governed this might imply to a set of transactions within a module or to all the transactions.

process-related ones (the regulatory and certification measures); indeed, the process normally involves collaboration of several players and multiple transactions.

As mentioned some process standards are incorporated into product quality assurance and into warranties whereas others remain outside nonconformity assessments. Remedies may differ if they refer to nonconformity of goods for violation of process standards concerning quality or safety or if they refer to process standards related to the protection of environmental or community interests that can be integrated into the conventional notion of nonconformity with some difficulty.

Process standards presuppose collective contractual governance. This consideration implies that, within regulatory schemes, remedies concern the whole supply chain or at least those segments involved in hazard detection and reparation. A nonconformity triggers a wider enquiry. Cooperation among parties not directly linked by bilateral contracts is needed to identify the origins of the hazard; it is generally organised by making the product traceable, clearly defining the different steps of the identification of defects and remediation process in the case of nonconformity.

The focus on single bilateral transactions does not capture the interdependencies of the regulatory process associated with the implementation of the standards (1) when products do not conform with safety and quality requirements or (2) when processes do not comply with agricultural good practices and principles of environmental and social sustainability. While cooperation aimed at joint problem solving is necessary across the chain, the consequences of the breach may go beyond the single transaction domain with repercussions on the certification and the regulatory domain. Cooperation among supply chain participants is required both to prevent and to remedy the failure that created the hazard or did not detect it promptly.

Given this approach, contract law remedies show at least two possible shortcomings:

- compliance with contractual duties is generally required by the parties to the contract and not by third parties even if participating to the same chain⁹¹; however, looking at the general terms and conditions, ever more we see the emergence of clauses that bind the final or lead supplier for performances of the entire upstream chain;⁹²

⁹¹ However, legal doctrines exist to explain why cooperation duties can be enforced against third parties if these can be seen as contractual beneficiaries and/or the multiple transactions can be requalified as a unit. On this issue see Cafaggi (2008), Grundmann (2011), de Vincelles (2011), Whittaker (2011). For a more recent overview and a critical approach to traditional doctrines on third party beneficiary in contract law, see Geis (2012).

Case law on the privity principle and its impact on the access to remedies against breach of contracts along the chain has been cited above in paragraph 3.3, footnote 52 ff.

⁹² See above, footnote n. 56 on the Unilever contract clause.

- specific compliance with contractual duties may not be awarded if, in any other way, specific performance would affect existing relations between the liable party and a third party.⁹³

How do regulatory and certification schemes contribute to overcome these problems?

Ordinarily, they extend the scope of compliance well beyond the boundaries of the single certified firm and so follow the paths of the supply chain. As a consequence, implicit or explicit monitoring duties are imposed to such firm with regard to subcontractors and/or suppliers in order to ensure adequate compliance with the standards. When required by the complexity of the chain, monitoring duties are imposed on each participant that outsources part of the functions to third parties.⁹⁴ Furthermore the link between due diligence and monitoring the entire supply chain is expanding the scope of contractual definition.

5.3.1 *Different models for regulatory enforcement of corrective measures along the supply chain*

We here compare different models of regulatory coordination to ensure conformity or to react to nonconformity along the supply chain promoted by certification regimes and at times incorporated into the contractual governance. Here are the most common ones.

(i) *The multiple certification model.* All participants to the chain have an individual and separate certification and are personally responsible for taking due measures for compliance⁹⁵; in order to accomplish this result, the regulatory and certification scheme may request that the certification applicant provides a list of suppliers or differently ensures the involvement of each chain participant in the certification process or that it reports due certification to the certification body.⁹⁶

(ii) *The single certification model.* The certification holder remains a single firm in charge of monitoring duties, corrective actions and responsibility concerning the spheres of action of its subcontractors or suppliers⁹⁷; the certifier itself may in any

⁹³ See, for example, in the Italian case law: T. Torino, March 12, 2010 (Rep. Foro it., 2011, *Provvedimenti di urgenza* [5340], n. 31), rejecting a request for injunction since this would have implied the cure of an abuse of economic dependence by the means of avoiding a contract with a third party.

⁹⁴ See in coffee the UTZ Certified Code of Chain of Custody for Coffee, sec. C (Handling from green coffee to the final product), par. 1.1. See in the soy production sector (more particularly, production of Soybean Biodiesel from Argentina), the CARBIO Sustainability Certification Scheme for EU—RED Compliance, which introduces a Chain of Custody system based on certification of product/process at every single relevant step of the value chain in order to enable full traceability of products.

⁹⁵ See, for example, the UTZ Certified Code of Chain of Custody for Coffee, sec. B (Processing), par. 1.1. Notice that for handling green coffee a different rule is applicable to subcontracting (see footnote no. 97* above).

⁹⁶ See for example the abovementioned CARBIO certification scheme, p. 20, on record keeping duties concerning the list of buyers and suppliers along the chain.

⁹⁷ See: GlobalG.A.P. Reg., part II, par. 1.10 on producer group certification, imposing producer group full control over compliance by subcontractors. This is also the case of the Chain of Custody Standard endorsed by Rainforest Alliance (May 2012); see p. 11, stating that the Participating Operator shall annually perform on-site audits of subcontractors.

case retain the power to inspect and monitor over the certified firm's suppliers and/or subcontractors.⁹⁸

(iii) *The group certification model.* When there is group certification, a comprehensive certified unit is constituted with a central implementation system (CIS) or an internal control system (ICS) coordinating monitoring and adopting corrective measures; this unit is generally also the certification holder whereas no individual certification is requested for actors operating into the unit.⁹⁹

(iv) *The mixed model: coupling central implementation system and multiple certification.* A supply chain management system is established, ensuring compliance along the chain and monitoring the effective certification per each player; here certification is applied to each player but, unlike in the first case, a comprehensive control system is established with coordination and monitoring functions; moreover, the unit boundaries are determined following the whole supply chain approach.¹⁰⁰

To what extent can these models be seen as instances of supply chain certification exemplifying the role of coordination for remedial purposes? Although they introduce collective governance mechanisms for monitoring compliance with standards in multiple relations settings, these models do not always follow the chain structure.

Indeed, the above analysis suggests that the model of group certification (under *iii*) is generally conceived as targeting horizontal groupings of smallholders carrying on homogeneous activities. Only sometimes it is evolving towards more articulated groupings possibly resembling (segments of) supply chains.¹⁰¹ It is worthwhile specifying that, since the homogeneity of needs concerning standard compliance is still relevant under this respect, a difference between group certification and multi-group certification is introduced by some scheme.¹⁰²

⁹⁸ See GlobalG.A.P. Reg., Annex: I.5, Sublicence & Certification Agreement (V3.0), par. 5.2. See also the UTZ Certified Code of Chain of Custody for Coffee, sec. C, par. 1.1, cit.

See in a similar perspective UTZ Certified Certification Protocol, par. 2.1, specifying that the entity that is responsible for implementing and monitoring the requirements of the UTZ CERTIFIED Code of Conduct can be a group of producers (organized in an association or cooperative) or another entity (such as a processor or exporter) that buys the product from the producers and organises contracts and/or trains the producers according to the UTZ CERTIFIED Code of Conduct. In this instance the Internal control system is delegated by the certifier the task of making inspections and ensuring compliance (see point 5).

See also the case of the 4C Association establishing a "Common Code for the Coffee Community", whose guidelines provide that a 4C Unit can be a group of small-scale farmers who agree to register jointly, an already organised group such as a cooperative or a farmers' association, a collecting station, a mill, a local trader, an export organisation, or even a roaster, and that such Unit is mainly in charge of managing internal monitoring.

⁹⁹ GlobalG.A.P. Reg., part II, par. 1.1.1, setting the general requirements for producer groups, and, *ibidem*, par. 1.7 on monitoring procedures, corrective actions and sanctioning power of producer groups.

¹⁰⁰ This is the case of the Round Table on Responsible Soy Association (STRS) Chain of Custody Standard (2011), a regulatory scheme established by the STRS worldwide and followed by National Interpretation Guidelines, due to adapt standards and technical requirements to the local economic, institutional and legal setting. See also the MSC chain of custody certification regime available where different types of chain certification are described with the definition of nonconformity that refers to sites, process and product. Marine Stewardship Council certification requirements at BB6 p. B40 ff. available at www.msc.org last visited June 30th 2013.

¹⁰¹ More than GlobalGap, the 4C and the UTZ regulatory schemes seem to clearly move into this direction (see previous footnote and corresponding text).

¹⁰² See again the Certification Protocol of UTZ Certified, par. 2.1, stating that group members shall have a similar production system and be in geographic proximity whereas in multi-group certification

A more specific instrument for a supply chain compliance control is, however, attained in the fourth case among the ones above mentioned (the so called “mixed model” under *iv*): here explicit responsibility is given to the organisation in charge of the chain of custody along the filière.

(v) A different evolution of a multi-stakeholder organisation that is in charge of implementing standard compliance in the food supply chain is the one in which a comprehensive association is set up, including producers, traders, industry and civil society, to sustain and implement the regulatory scheme: in this framework, the compliant firm is at the same time subject to the rules of the association and to the sanctioning powers of its governing bodies (which are conceived as multi-stake as well).¹⁰³ Given the size and the openness of the association, however, here the supply chain logic tends to blur towards a sector or a commodity logics.

When conforming with a supply chain dimension, the remedial structure also changes accordingly. Indeed, when chain coordination is made explicit (either by vesting a control management unit with monitoring power or linking the several certification contracts with each of the chain’s participants), the agent entrusted with auditing and sanctioning powers may trigger correction along the chain without being barred by the privity principle and inducing cooperation among participants well beyond the conventional contractual perspective. For example, by monitoring the chain of custody of a given product due to be handled by different service suppliers, the certifier may become aware of nonconformities due to different actors along the chain, whose correction may prevent risk occurrence to a higher extent than it could be achieved should the corrective measure be limited to the first audited producer. This type of coordination is more likely to develop compliant behaviours and practices along the chain since all parties involved directly perceive the (collective as well as individual) benefits deriving from chain compliance.

Conclusively, the emergence of standard implementation coordinating structures, even these contractual, organisational or even informal, may be of primary importance to shape mechanisms of compliance in accordance with the supply chain dimension. In fact many of these structures tend to take the form of inter-firm networks fostering system level innovation (Cafaggi and Iamiceli 2012).

Footnote 102 continued

producers with a considerably different production system (in size, nature or geography) can be included provided that compliance is ensured by an internal control system manager at sub-group and multi-group level.

¹⁰³ This is the case of the already mentioned 4C Association, based in Geneva under the Swiss Law, and establishing a “Common Code for the Coffee Community”. If compared with other multi-stakeholder partnerships carrying on similar functions in the food sector (e.g. GlobalGap, the UTZ Certified Dutch foundation or the Round Table on Responsible Soy Association (STRS)), the 4C Association univocally links membership and participation in the regulatory scheme, whereas the two are not necessarily linked in the other partnerships mentioned.

5.3.2 *The enforcement of corrective measures along the supply chain: regulatory versus contractual approach*

Having described these models, one could conclude that the need for involving multiple actors along the chain reinforces the tension discussed earlier between the conventional approach to contract and regulatory approach. Indeed, contract law in its traditional interpretation not only focuses on liability and *ex post* remedies in general rather than on preventive and corrective measures; but, even considering the exceptions in the food area, it is also guided by the principle of privity, that prevents it from extending the scope of remedial provisions beyond the single transaction and the boundaries of the parties' domain (see par. 3.3). Different interpretations have been proposed to reconcile the traditional contract law approach with the supply chain dimension. However, the debate is still open.¹⁰⁴

From this perspective, the incorporation of the regulatory dimension into the framework of contractual governance goes beyond the reference to duties and standards: it also serves the purpose of assigning monitoring and corrective powers to actors not involved in assessing debtor's performance according to the conventional contractual perspective. It hence changes the contractual architecture (Cafaggi 2013b).

The combination between contract and regulatory tools generates advantages, since it stimulates a multiple and complementary source of information and risk detection along the production process and therefore increases the possibility of preventing accidents that may also negatively affect contractual performance. Even from this perspective, however, *the different logics of the two systems risk undermining the effectiveness of their combination if coordination is not adequately ensured*. It could happen, for example, that those who have the useful information about non compliance (e.g. final producers or retailers using more sophisticated detecting devices) may not dispose of prompt and effective remedies in terms of risk prevention and those who do dispose of such remedies (e.g. certifiers or other auditors) do not have useful and prompt information. Adequate coordination among remedies and their sequence should therefore be attained, starting from a sound contractual design and explicit coordination mechanisms among supply contracts, standard incorporation and certification agreements; an example could be the provision of information duties and “whistle blowing” measures as imposed by contracts beyond the reach of bilateral relations.¹⁰⁵

Table 2 summarises the main findings of the analysis developed in par. 5.1, 5.2 and 5.3.

¹⁰⁴ See footnotes n. 56 and 94* and corresponding texts.

¹⁰⁵ For an example in the textile sector, see Cafaggi and Iamiceli (2012), describing a certification scheme which imposes multiple certification along the supply chain and the duty to report the certifier any infringement which is detected by whoever certified enterprise.

Table 2 Corrective remedies against non-compliance

	Contractual remedies	Remedies in regulatory and certification schemes
a. Re-active versus pro-active remedial approach	Compensation is the primary goal. Specific performance is subject to strict conditions; so for goods substitution (see artt. 28 and 46, CISG). In practice damages are highly prioritised	Hazard prevention and cure are pursued. Priority is given to regulatory compliance, including corrective measures
b. Product versus process	Focus is on product (see goods substitution). Process failures might be relevant only if they translate into product nonconformity	Focus on the process in relation to both quality and safety. Integration of environmental and labor standards into the contract and its monitoring through auditing and certification
c. Single transaction versus supply chain dimension	Unit of analysis: individual bilateral transaction. Corrective remedies by default focus on the breaching party's conduct; they might broaden the scope by making reference to third parties along the chain	Unit of analysis: segments of the supply chain. Regulatory and certification schemes call for cooperation among multiple actors along the chain while complying with standards and implementing corrective measures

6 Different remedial systems in action: exploring functional complementarities

The analysis above shows significant differences in the role and functioning of remedies against breach as provided by either contract law or regulatory and certification schemes. Indeed, (1) contractual law remedies aim at redressing the victim of the breach inducing deterrence through a re-active approach, primarily aimed at compensating the aggrieved party for damages determined by the breach; whereas regulatory and certification regimes pro-actively try to restore compliance with regulatory process in order to pursue regulatory objectives related to food safety, environmental protection and consistency with good agricultural practices. (2) The former class of remedies focuses mainly on products, the latter on process. (3) The former concentrates on individual transactions while the latter focuses on the interdependence of contractual relationships along the chain.

As broadly analysed above, these two regimes are intended to coexist and such coexistence may generate, at least in principle, complementarities as well as possible tensions. The two logics are the consequences of different objectives often coexisting within the same chain. Clearly they have to be reconciled within an integrated scheme of supply chain's contractual governance. We recommend that organizations drafting transnational commercial contracts, model laws and guidelines take duly into account the evolution of the supply chain and the relevance of regulatory provisions in its governance.

The previous analysis suggests that cooperation to address the consequences of violations of regulatory provisions included in contracts does not only occur before but also after the breach, when appropriate remedies have to be selected and implemented. While in previous analysis the breach has often represented a breaking point in the contractual relationship, we claim that in the context of supply

chain governance breaches may not have such a disruptive effect; hence the distinction before/after the breach and the consequences for parties' conduct, though meaningful, may not represent the end of cooperation between contracting parties and even more importantly between them and the other participants in the supply chain. This modification is driven by the combination between conventional contractual remedies and remedies that become available when integrating the certification regime(s) into the contractual architecture. This combination as illustrated can occur by direct incorporation into the contract or by linking the supply contract with the certification contract even without direct incorporation.

What is the role of parties' autonomy in respect of these changes? Contract law remedies are provided by (domestic or international) law as also based, though not exclusively, on default rules.¹⁰⁶ This means that, within limits that may vary from one legal system to another, parties are often able to depart from these rules or adapt and specify them in order to tailor remedies against breach in accordance with their own specific needs. Parties can expand or reduce the number and scope of available remedies; they can prioritise remedies and establish forms of hierarchies within them; they can correlate remedies with the type and effects of the breach especially considering the impact on the supply chain. In particular parties are normally free to escalate contractual remedies reducing the space for termination, leaving more room for corrective measures, cure and specific performance. We have shown that the architecture of contractual remedies may be modified and expanded by using techniques with different governance implications, among which are direct incorporation of regulatory standards and separate but linked contracts.

Framed in this way, one could conclude that the examined aspects of contract law rules (as more re-active than pro-active, more oriented to product than to process assessment, more focused on the bilateral relation than on supply chains) do not represent an obstacle as such, as parties may depart from this approach by the means of private autonomy.

Moving from this perspective the reference to practice may provide useful insights. This article has shown indeed that, in some contexts, businesses engage in contractual design with the purpose of enriching the set of remedies provided by contract law. More particularly, they adopt quality assurance schemes, identify control points and provide contractual parties or third parties with the power to monitor the adequacy of performance, assess the results achieved, award excellence, detect errors and instruct correction.¹⁰⁷ Of course, the expansion of contractual scope related to the use of certification schemes does not come without costs. The more specific these rules are with respect to contractual relationship, the more costly it is for parties to engage into comprehensive contractual design. In long and complex supply chain contracts tend to be very simple and managed by procurement

¹⁰⁶ See CISG, art. 6; CESL Proposal, art. 1, Annex; UCC, Art. 2, § 2–719. An issue regarding the mandatory nature of rules concerning remedies may be particularly raised concerning consumer contracts (see, for example, CESL Proposal, artt. 108 and 177, Annex; UCC, Art. 2, § 2–719, last part). Of course the acknowledgment of an area of private autonomy with respect to remedies does not disregard possible legal limitations to such autonomy, e.g. with reference to late payment clauses (see CESL Proposal, art. 171).

¹⁰⁷ See par. 5.1 above.

agents which refer to the general terms and conditions. In these settings transaction specific issues may be left out of the initial contract. This is another side of the known trade-off examined by law and economics literature between the *ex ante* costs of contracting and the litigation costs faced *ex post* by parties when relying on courts' decisions based on open ended rules provided by law (Scott and Triantis 2006).

Does third party certification offer a more viable option for parties not willing or able to engage in customised design of contractual remedies? Indeed, not only private regulation provides for standards as substantive rules defining processes and outcomes of economic activities. It also “standardises” complementary remedial systems mainly operating through a market of assurance and certification services.¹⁰⁸ In other words certification schemes could be seen as complementary enforcement mechanisms due to be incorporated into the contract at lower costs than those incurred in customised drafting of contract rules on monitoring over compliance and delivery of due performance.

Is the market of certification services more accessible than the market for legal services needed for a “tailor-made” contractual design¹⁰⁹? Does it provide more effective solutions in terms of quality of contractually expected performance? The possible answers do not only depend on the features of this market, as this is more or less concentrated, and as service providers are more or less reliable in terms of independence and skills (Blair et al. 2008). They also depend on the type of contractual relationship, whose performance needs to be certified, and the type of supply chain in which such relation is embedded. The use of certification systems and remedies is primarily aimed at improving effectiveness of contracts as instruments for regulatory implementation of transnational standards, shifting monitoring costs from the buyer to the seller or to the entire supply chain (Cafaggi 2013b). Whether the higher level of complexity is justified by real improvements is an empirical question which needs further investigation.

The list of open issues stemming from the previous analysis is in fact longer than this. Having acknowledged the space for the private design of complementary remedies, possibly by means of contractual reference and incorporation of the certification scheme, one should consider the implications deriving from the combination between contractual remedies and certification measures. Three dimensions of contract law may be influenced by this combination:

- (i) contract drafting, since parties should be encouraged to coordinate different remedial systems when addressing the consequences of the breach;
- (ii) contract law interpretation, since courts should take into account the role of certification schemes when assessing the scope and preconditions of contractual remedies (e.g. when defining the concept of breach or the conditions for specific performance);
- (iii) contract law making, since legislators and other standard setting institutions could enhance complementarity and reduce tensions between the two sets of

¹⁰⁸ On the role of private regulation in establishing enforcement mechanisms for private standards and legislation, see Cafaggi (2012b).

¹⁰⁹ See Hadfield (2012) and the analysis developed above in par. 5.1.

remedies by means of coordination and escalation between them, e.g. prioritizing in some circumstances the use of certification-type remedies over traditional contract law remedies.

(i) More particularly, with respect to contract drafting, greater awareness of the coexistence of the two (or more) sets of remedies should lead the parties to address their link, which does not appear in current agricultural production standard contract forms and in the general terms and conditions related to suppliers issued by MNCs': for example, does a warning issued by the certifier suspend the buyer's right to ask for remedies that preclude the achievement of a cooperative solution (e.g. reduction of price or termination)? What are the effects of certification suspension on the supplier's performance? How does decertification affect the selection of remedies by the buyer in particular between performance and termination? When does decertification amount to a fundamental breach and when does it enable cure by the supplier, if ever? To what extent can a buyer claim a price reduction or replacement in the case of decertified products? In fact, most often standard contract forms fail to address these issues, therefore increasing the costs of litigation; neither legal interpretation provides univocal answers in this respect. We recommend that a clear coordination between contractual and regulatory remedies is carefully designed in order to anticipate interpretive disputes over the links between the two regimes.

Improvements in contractual design may be achieved by more careful coordination between suppliers guidelines produced by transnational corporations and certification scheme owners, especially when chain of custody regimes apply. Nevertheless, the need for an integrated approach should characterise international principles of commercial contracts, and the work of institutions drafting standard contracts. There is no clear indication that these institutions have become fully aware of the interplay between transnational commercial contracts and the regulatory standards and the new functions of contracts. In the near future this situation could change and NGOs and other types of multi-stakeholder organizations could play an important role in drafting model clauses due to be used in B2B contracts within food supply chains.

(ii) From the perspective of legal interpretation the combination between different remedial systems may lead to rethink the scope and functioning of contractual enforcement rules. For example, the incorporation of certification remedies, including correction of non defective processes, could be interpreted as an express preference for specific performance when this agreement is recognised by law.

In other cases the interpreter should emphasise the different logics between the two systems rather than reconcile them. For example, we have assumed that the same violation gives rise to two breaches but this is not necessarily the case. The definition of a breach or the performance standards may differ in the certification regimes and in the supply contracts. If that is accidental, then clearly better coordination is needed to ensure correlation. But correlation does not necessarily imply coincidence. There might be good reasons to have instances where a breach of the certification contract does not result into a breach of the supply contract. A more nuanced approach in certification may be justified by the dominance of

cooperative enforcement. Even if we have claimed that the breach in contract law should not have disruptive effects, clearly it represents a major change in the relationship which in certification regimes is much more gradual. When there is discrepancy between the two systems coordination is even more important than those instances where the definition of breach coincides.

(iii) The combination between regulatory and contractual remedies should also be taken into account by lawmakers and standard setting institutions when drafting principles and rules on the functioning of B2B relations in food supply chains. For example, addressing the different mechanisms to enforce contractual duties concerning the compliance with safety or sustainable standards, these institutions could propose an escalating principle due to prioritize corrective measures over contract termination or other disruptive remedies. In case of incorporation of certification schemes, resort to certification remedies could be prioritised over other contractual remedies. More than cross-sectors, this evolution could be fostered in the food sector specifically thanks to the activism of international institutions operating as standard setters or “think tanks” at the European or, mostly, global level. One very important opportunity might be provided by the project recently started by Unidroit and Fao for the formation of a Legal Guide on contract farming.¹¹⁰ Without any aim to introduce a form of legislation at international level, one could envisage that this contribution could draw the attention of policy makers and courts on the impact of standards and certification on the rules of the contract along and across the food supply chains: a promising path definitively worth future analysis.

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References

- Blair, M. M., O’Hara O’Connor, E., & Kirchoefer, G. (2011). Outsourcing, modularity, and the theory of the firm. *Brigham Young University Law Review*, 2011, 263–314.
- Blair, M. M., Williams, C. A., & Lin, L. W. (2008). The Roles of Standardization, Certification and Assurance Services in Global Commerce. *Journal of Corporation Law*, 33(2), 325–360.
- Cafaggi, F. (2008). Contractual networks and the small business act: Towards European principles? *European Review of Contract Law*, 4, 493–539.
- Cafaggi, F. (2009a). *Creditor’s fault: In search of a comparative frame*. EUI law working papers, 2009/15.
- Cafaggi, F. (2009b). Product safety, private standard-setting and information networks. In F. Cafaggi & H. M. Watt (Eds.), *The regulatory function of european private law* (pp. 207–242). Northampton, MA: Elgar.

¹¹⁰ For a first introduction, see the note and documents published by Unidroit and made public at <http://www.unidroit.org/english/studies/study80a/main.htm> (last access: June 19, 2013).

- Cafaggi, F. (2012a). Transnational governance by contracts: private regulation and contractual network in food safety. In A. Marx, M. Maertens, J. Swinnen, & I. Wouters (Eds.), *Private standards and global governance: legal and economic perspectives* (pp. 195–234). Cheltenham, UK: Edward Elgar.
- Cafaggi, F. (2012b). Enforcing transnational private regulation: Models and patterns. In F. Cafaggi (Ed.), *Enforcement of transnational regulation: Ensuring compliance in a global world* (pp. 75–130). Cheltenham: Elgar.
- Cafaggi, F. (2013a). From a status to a transaction based approach. *Common Market Law Review*, 50(1/2), 311–330.
- Cafaggi, F. (2013b). The regulatory functions of transnational commercial contracts. New architectures. *Fordham Journal of international law*, 36, 1557–1618.
- Cafaggi, F., & Iamiceli, P. (Eds.) (2010). Inter-firm Networks in the European Wine Industry. EUI Working Paper, 2010/19. <http://cadmus.eui.eu/handle/1814/15654>. Accessed 30 September 2013.
- Cafaggi, F., & Iamiceli, P. (2012). Private regulation and industrial organisation: The network approach. EUI working paper, 2012/21. <http://cadmus.eui.eu/handle/1814/23264> and at www.ssrn.com. Accessed 30 September 2013.
- Choi, S. (1998). Market lessons for gatekeepers. *Northwestern University Law Review*, 92, 916–966.
- Choi, T. W., & Wu, Z. (2009). Triads in supply networks: theorizing buyer–supplier–supplier relationships. *Journal of Supply Chain Management*, 45, 8–25.
- Coglianese, C., & Lazer, D. (2003). Management-based regulation: Prescribing private management to achieve public goals. *Law & Society Review*, 37(4), 691–730.
- Coglianese, C., et al. (2009). *Import safety*. Philadelphia: University of Pennsylvania Press.
- Collins, H. (1997, reprint 2003). Quality assurance in subcontracting. In S. Deakin & J. Michie (Eds.), *Contract, co-operation and competition* (pp. 285–306). Oxford: Oxford University Press.
- Cotula, L. (2012). ‘Land grabbing’ in the shadow of the law? The trouble with legal frameworks regulating agricultural investment in Africa. In R. Rayfuse & N. Weisfelt (Eds.), *The challenge of food security: international policy and regulatory frameworks*. Elgar: Northampton, MA.
- Cotula, L. (2013). Commercial pressures and legal rights: the trouble with the law regulating agricultural investment in Africa. *QA Rivista dell'Associazione Rossi-Doria*, 2, 163–194.
- Cuffaro, N., Giovannetti, G. & Monni, S. (2013). Foreign acquisitions of land in developing countries. risks, opportunities and new actors. *QA Rivista dell'Associazione Rossi-Doria*, 2, 9–36.
- de Vincelles, C. A. (2011). Linked contracts under French law. In F. Cafaggi (Ed.), *Contractual networks, inter-firm cooperation, and economic growth* (pp. 163–178). Northampton, MA: Elgar.
- Deakin, S., Lane, C., & Wilkinson, F. (1997, reprint 2003). Contract law, trust relations, and incentives for cooperation: A comparative study. In S. Deakin & J. Michie (Eds.), *Contract, co-operation and competition* (pp. 105–138). Oxford: Oxford University Press.
- Ferrari, M. (2009). *Risk perception, culture, and legal change*. Farnham: Ashgate Publication.
- Ferrari, M. (2010). The liability of private certification bodies for pure economic loss: Comparing English and Italian law. *Journal of European Tort Law*, 3, 266–305.
- Fuchs, D., Kalfagianni, A., & Havinga, T. (2011). Actors in private food governance: the legitimacy of retail standards and multi-stakeholder initiatives with civil society participation. *Agriculture and Human Values*, 28(3), 353–367.
- Geis, G. S. (2009). The space between markets and hierarchies. *Virginia Law Review*, 95, 99–153.
- Geis, G. S. (2012). Broadcast contracting. *Northwestern University Law Review*, 106, 1153–1200.
- Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy*, 12(1), 78–104.
- Gereffi, G., & Lee, J. (2009). *A global value chain approach to Food Safety and Quality Standards*. Global Health Diplomacy for Chronic Disease Prevention Working Paper Series.
- Gilson, R., Sabel, C., & Scott, R. (2009). Contracting for innovation: Vertical disintegration and interfirm collaboration. *Columbia Law Review*, 109, 431–502.
- Gimenez, C., & Tachizawa, E. M. (2012). Extending sustainability to suppliers: A systematic literature review. *Supply Chain Management: An International Journal*, 17(5), 531–543.
- Goetz, C. J., & Scott, R. E. (1981). Principles of relational contracts. *Virginia Law Review*, 6, 1089–1150.
- Grandori, A., & Soda, G. (1995). Inter-firm networks: Antecedents, mechanisms and forms. *Organization Studies*, 16(2), 183–215.
- Grundmann, S. (2010). On the unity of private law from a formal to a substance-based concept of private law. *European Review of Private Law*, 18(6), 1055–1078.

- Grundmann, S. (2011). Contractual networks in German private law. In F. Cafaggi (Ed.), *Contractual networks, inter-firm cooperation, and economic growth* (pp. 111–162). Northampton, MA: Elgar.
- Hadfield, G. K. (2012). Legal Infrastructure and the new economy. *Journal of Law & Policy for the Information Society*, 1–59.
- Hatanaka, M., Bain, C., & Busch, L. (2005). Third-party certification in the global agrifood system. *Food Policy*, 30, 354.
- Havinga, T. (2006). Private regulation of food safety by supermarkets. *Law and Policy*, 28(4), 515–533.
- Helper, S., MacDuffie, J. P., & Sabel, C. F. (2000). Pragmatic collaborations: Advancing knowledge while controlling opportunism. *Industrial and Corporate Change*, 9(3), 443–488.
- Henson, S., & Humphrey, J. (2009). *The impact of private food safety standards on the food chain and on public setting processes*. www.fao.org.
- Hermalin, B. E., Katz, A. W., & Craswell, R. (2007). Law and economics of contracts. In A. M. Polinsky & S. Shavell (Eds.), *Handbook of law and economics* (Vol. I, pp. 3–137). Amsterdam: Elsevier.
- Humphrey, J. (2012). *Food safety, private standards, schemes and trade: The implications of the FDA Food Safety Modernization Act*. IDS working paper, p. 403.
- Humphrey, J., & Schmitz, H. (2008). Inter-firm relationship in global value chains: trends in chain governance and their policy implications. *International Journal of Technological Learning, Innovation and Development*, 1(3), 258–282.
- ITC. (2011a). *The impacts of private standards on global value chains. Literature review series on the impacts of private standards*. Geneva: ITC.
- ITC. (2011b). *The coffee exporter's guide* (3rd ed.). Geneva: ITC.
- Jennejohn, M. C. (2008). Collaboration, innovation, and contract design. *Stanford Journal of Law, Business & Finance*, 14, 83–150.
- Macaulay, S. (1985). An empirical view of contract. *Wisconsin Law Review*, 45, 55–69.
- Marx, A. (2012). Global governance and the certification revolution: types, trends and challenges. In D. Levi-Faur (Ed.), *Handbook on the politics of regulation* (pp. 590–603). Northampton, MA: Elgar.
- nFAO. (2012). *Guiding principles for responsible contract farming operations*. <http://www.fao.org/docrep/016/i2858e/i2858e.pdf>. Accessed: 19 June 2013.
- Pilbeam, C., Alvarez, G., & Wilson, H. (2012). The governance of supply networks: A review literature. *Supply chain management*, 17(4), 358–376.
- Ponte, S. (2009). Governing through quality: conventions and supply relations in the value chain for South African wine. *Sociologica Ruralis*, 49(3), 236–257.
- Porat, A. (2009). Comparative fault defense in contract law. *Michigan Law Review*, 107, 1397–1412.
- Posner, R. (2007). *Economic analysis of law* (7th ed.). New York, NY: Aspen.
- Pultrone, C. (2012). *An overview of contract farming: Legal issues and challenges* (pp. 263–289). XVII: Uniform Law Review.
- Raynolds, L. T. (2009). Mainstreaming fair trade coffee: From partnership to traceability. *World Development*, 37(6), 1083–1093.
- Reimann, M., & Zimmermann, R. (2006). *Handbook on comparative law*. Oxford: Oxford University Press.
- Sacchetti, S., & Sugden, R. (2003). The governance of networks and economic power: The nature and impact of subcontracting relations. *Journal of economic surveys*, 17, 669–691.
- Schneider, E. C. (1989). The seller's right to cure under the uniform commercial code and the united nations convention on contracts for the international sale of goods. *Arizona Journal of International and Comparative Law*, 7(1), 69–103.
- Schwartz, A., & Scott, R. (2003). Contract theory and the limits of contract law. *Yale Law Journal*, 113, 541–619.
- Scott, R. E. (2003). A theory of self-enforcing indefinite agreements. *Columbia Law Review*, 103(7), 1641–1699.
- Scott, R. E., & Triantis, G. G. (2000). The case for formalism in relational contract. *Northwestern University Law Review*, 94(3), 847–875.
- Scott, R. E., & Triantis, G. G. (2006). Anticipating litigation in contract design. *Yale Law Journal*, 115, 814–879.
- Stevenson, S., & Pirog, R. (2008). Value based supply chains: strategies for agrifood enterprise of the middle. In T. A. Lyson, G. W. Stevenson, & R. Welsh (Eds.), *Food and the mid level farm. Reviewing an agriculture of the middle* (pp. 119–143). Cambridge: The MIT Press.

- The World Bank. (2012). *Agricultural innovation systems, an investment sourcebook*. Washington, DC. <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTARD/0,,contentMDK:23129039~pagePK:148956~piPK:216618~theSitePK:336682,00.html>. Accessed 30 September 2013.
- Torsello, M. (2006). Remedies for breach of contract. In J. M. Smits (Ed.), *Elgar encyclopedia of comparative law* (pp. 610–628). Northampton, MA: Elgar.
- Treitel, G. H. (1976). Remedies for breach of contract (courses of action open to a party aggrieved). In K. Zweigert & U. Drobnig (Eds.), *International encyclopedia of comparative law, VII* (p. 16). The Hague: Nijhoff.
- Triantis, G. G. (2009). *The evolution of contract remedies (and why do contracts professors teach remedies first?)*. Harvard Public Law working paper no. 09–69. <http://ssrn.com/abstract=1512636> or <http://dx.doi.org/10.2139/ssrn.1512636>. Accessed 30 September 2013.
- UNCITRAL. (2012). *Digest of case law on the united nations convention on the international sale of goods*. New York: United Nations.
- Van Erp, J. (2008). Reputational sanctions in private and public regulation. *Erasmus Law Review*, 1(5), 145–162.
- Wagner, G. (2013). Termination and cure under the common european sales law: Consumer protection misunderstood. *Common Market Law Review*, 50(1/2), 147–167.
- Whittaker, S. (2011). Contract networks, freedom of contract and the restructuring of privity of contract. In F. Cafaggi (Ed.), *Contractual networks, inter-firm cooperation, and Economic Growth* (pp. 179–197). Northampton, MA: Elgar.
- Williamson, O. E. (1979). Transaction cost economics: The governance of contractual relations. *Journal of Law and Economics*, 22(2), 233–261.
- Williamson, O.E. (2009). Transaction cost economics: The natural progression. nobel prize lecture. http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2009/williamson_lecture.pdf. Accessed 30 September 2013.
- Yovel, J. (2005). The seller's right to cure a failure to perform in international sales. *Nordic Journal of Commercial Law*, 1–19. SSRN: <http://ssrn.com/abstract=906604>. Accessed 30 September 2013.

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