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## PRIVATE REGULATION, SUPPLY CHAIN AND CONTRACTUAL NETWORKS: THE CASE OF FOOD SAFETY

Fabrizio Cafaggi

**EUROPEAN UNIVERSITY INSTITUTE, FLORENCE**

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# *Private Regulation, Supply Chain and Contractual Networks: The Case of Food Safety*

**FABRIZIO CAFAGGI**

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For further information

Prof. Fabrizio Cafaggi
European Universtiy Institute
Via Boccaccio 121, 50133 Firenze – Italy

Phone: +39.055.4685.516 / 241
Email: Fabrizio.Cafaggi@eui.eu
Email: Federica.Casarosa@eui.eu

## Abstract

Within agriculture industry chains, important changes have taken place. Both vertical integration and vertical disintegration are occurring. These transformations may have effects on the adoption of private standards, but more importantly, may also affect the functions that private standards may play within the chain. I develop a coordinated approach that integrates the value supply chain perspective with regulatory theory to show that co-evolutionary patterns explain the changes in the supply chain and the increasing use of transnational private regulation. I then focus on different coordination mechanisms that are, or can be, used in food chains, and propose a wider deployment of contractual networks to improve effectiveness of food safety regulation. I distinguish between contractual networks directed at information production and transfer and contractual networks concerning risk assessment and risk management. I conclude with some policy recommendations.

## Keywords

Private regulation, food safety, contractual networks, risk assessment, risk management

## Introduction[1]

This essay addresses the appropriate place of transnational private regulation (TPR) in food safety. It examines the role of standard-setting, particularly the difference between self and co-regulation, in enforcement regimes and the modes of contractual governance of the supply chain. In the first part, I develop a coordinated approach that integrates the value chain perspective with regulatory theory, to show that co-evolutionary patterns contribute to explain the changes in the supply chain and the increasing use of transnational private regulation. The second part develops the theoretical insights by focusing on the role of transnational contracting, specifically network contracts, for the regulation and monitoring of safety in supply food chains. It shows how private regulation, for example associated to traceability, affects the form and the function of a supply chain and requires specific contractual arrangements among suppliers and between them and retailers to implement the safety standards and to monitor their compliance. Contractual networks in this framework can be used to design safety control systems along the supply chain and to detect risks and allow for prompt reaction before they spread by conveying information and by triggering remedial strategies. For example, in the case of a product recall made by producers in collaboration with retailers or public authority, well-designed network contracts may provide effective risk management. The essay concludes by suggesting that policy design and implementation concerning food safety can be improved by implementing contractual governance at a global level, if supported by an adequate institutional framework and legislative reforms at the national level.

Private regulation, in particular standard-setting, in the area of product safety is an old phenomenon[2]. Food safety represents an historical example of self-regulation by foodstuff producers, often combined with some degree of public regulation[3].

Recently, private regulation in food safety has grown and played an important role in shaping market surveillance policies concerning risk assessment and risk management at the transnational level[4]. Changes have affected not only the combination between private and public at domestic and transnational level but also redistribution of tasks and responsibility within the private sphere.
These new regulatory regimes differ from the past: on the one hand, the co-regulatory dimension has grown both domestically and transnationally via an increased role of public regulation, and on the other hand, regulation has moved towards a 'chain approach', heavily involving the whole supply chain, but especially retailers, in the process of risk assessment and risk management.

1) This is due in part to internal transformation of regulatory regimes within nation States, in part to the occurrence of world wide food crises associated with the growing volume of foodstuffs traded between countries. International trade concerning food components, such as animal and vegetable proteins, raw material to produce processed food, and final products, has greatly increased[5]. Imported

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1 This paper was first presented at Tsing-Hua University,China, in May 2009 at a conference jointly organised by NYU Law School and Tsing-hua University. This paper is part of a broader research project on Private Transnational Regulation: Constitutional Foundations and Governance Design supported by Hiil and coordinated by the author at RSCAS\EUI. Thanks to K. Davis, C. Scott, D. Stewart and M. Trebilcock for useful comments. Thanks to Gary Gereffi for stimulating conversations on the topics and to Federica Casarosa for research assistance.

2 OECD, *Final Report on private standards and the shaping of agro-food systems*, Paris, Working Party on agricultural Policies and Markets, 2006, (hereinafter OECD on private standards).

3 Food safety regulation is a primary example of involvement of private actors during the Middle Ages as well as the Renaissance.

4 See F. Cafaggi, *Product safety, private standard-setting and information networks*, in F. Cafaggi and H. Muir Watt, *The regulatory function of European private law*, EE, 2009, p. 215 ff. See

5 Examples of high profile health and safety crises range from the mad cow disease, dioxin in poultry meat, lethal bacterial in US spinach and, more recently, melanine in Chinese powdered milk. See Ansell e Vogel, *What's the Beef? - The*

food consumption in developed economies has increased in the last 20 years. The US has been the leading system, but consumption of imported food is increasing in the EU as well[6].

As a consequence of many food crises, new legislation in the area of food safety, especially in Europe, has emphasized the primary responsibility of food producers as well as those of the whole food chain, including distributors and retailers[7]. This approach has been endorsed by EU[8]. In this context new proposals integrating quality, price and safety into a contractual regime that would re-balance the contractual power of retailers has been proposed by the European Commission[9].

This shift has not only potentially increased the role of civil liability for failure to comply with safety standards, but it has also promoted profound transformation of supply chain governance in order to ensure effective monitoring and adequate risk management, thereby enhancing the role of governance by contracts[10]. The role of public regulation for crisis management however remains highly relevant. Many controversies have arisen between China, the US and the EU in relation to contaminated food and the development of coordinated strategies to address crises has generated a memorandum of understanding (MoU) among competent regional authorities[11].

2) The second change concerns the relationship between public and private at the transnational level. Private regulation complements public regulation at the transnational level in relation to standard setting, monitoring and enforcement. It includes specific new enforcement mechanisms based on contracts and codes of conduct, unavailable for public standards, and poses specific problems concerning legitimacy, effectiveness, and enforceability.

The relationship between public and private regulation takes different forms at national and transnational levels. Thus the frameworks used in the context of nation States cannot be fully employed when examining the transnational and the global dimension[12].

*(Contd.)*

*Contested Governance of European Food Safety*, Cambridge, MIT Press, 2006; T. Knowles, et al., *European Food Scares and Their Impact on EU Food Policy*, 109 British Food J., 2007, 43-67.

6 See that European import level increased of 9,2% from 2006 to 2008, in comparison to an increse in export level of only 5,2%. (Source CIAA annual report 2008).

7 See J. Vapnek, *Legislative implementation of the food chain approach,* (2007)**,** 40 Vanderbilt Journal of transnational law, 987 at 995, who describes the food chain approach as: holistic, preventive, risk-based, and promoting shared responsibility.

8 See Regulation 178/2002/EC of the European Parliament and of the Council of 28 January 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, OJ L 31, 1.2.2002, p. 1–24

9 See Communication from the Commission, *A better functioning food supply chain in Europe,* COM (2009) 591, Brussels 28-10-2009, "*In order to promote sustainable and market-based relationships between stakeholders of teh food supplì chain, the Commission:*

*1. considers that action is needed to eliminate unfair contractual practices between business actors all along the food supply chain…*

*1.2. at the Community level …the Commission will work together with the food supply chain stakeholders to prepare set of standard contracts, whose use would be voluntary, taking into account the diversity of the food supply chain*".

10 See Freeman and Minow, *Government by Contract* - Outsourcing and American Democracy, Harvard University Press, 2009; M. Vandenbergh, *The New Wal-Mart Effect: The Role of Private Contracting in Global Governance*, 54 UCLA Law Rev., 2007, 913-970; C. Bozarth and R. Handfield, *Introduction to Operations and Supply Chain Management*, Upper Saddle River, NJ: Pearson Education, 2006.

11 See the latest and revised version of the Memorandum of Understanding strengthening bilateral co-operation between the EU and China to enforce product safety standards and strengthen cooperation and exchange of information on food safety, signed on 17th November 2008, available at http://ec.europa.eu/consumers/safety/int_coop/docs/memorandum_china_annexes.pdf.

12 See B. Kingsbury, N., Krisch & R. Stewart, *The emergence of global administrative law*, 65 Law and contemporary problems 15 [2005], and focusing on the private dimension K. Abbott and D. Snidal, *Strengthening international*

Modes of complementarity at transnational level operate differently from the domestic level for two important reasons: (1) because of the different institutional frameworks, in particular the lack of the strong 'general' public institutions at the global level, compensated by sector specific organisations, whose legitimacy and accountability is highly contested and (2) because of the different private actors and communities playing at the transnational level[13]. In relation to market players, global enterprises often reveal a high self-regulatory capacity and design regulatory regimes influencing the whole chain beyond the States' legislation. However, the consumer and environmental organisations also operate differently at the transnational and global level from the State level. These differences suggest that the interaction between intergovernmental and private organisations is often more cooperative than competitive, sometimes posing the opposite problem of collusion and capture of the regulator by the regulated firms.

In the food safety domain, there is some still rather controversial evidence that private standards are stricter than those defined by intergovernmental organisations like the Codex Alimentarius Commission[14]. Large retailers need to be market responsive to western consumers who have become ever more demanding and self-conscious since the recent food crises. The role of consumer organisations, and more broadly of NGOs, has grown at the global level in relation to private regulation: they have been directly involved in negotiating agreements and they have increased their monitoring ability on regulatory compliance[15]. As a result, together with media pressure, private standardisation at the global level has increased food quality and safety.

3) The third dimension is related to 'internal' transformation of the private sphere and the changes of regulatory strategies. Private regulation concerns both technical and normative standards. Within transnational private regulation, private technical standards, for both food processes and products, play an important role in promoting harmonization. The focus has recently shifted from products to processes in order to detect hazards at the optimal point of the food chain. Furthermore, the change is also meant to address environmental externalities in food processing[16]. Their emergence is the outcome of, among other things, preferences expressed by big multi-national retail chains, defining standards to be implemented by producers of agricultural products hoping to meet western consumers' concerns, often voiced by NGOs. The instruments to regulate and the content of the standards depend also upon the allocation of market power along the supply chain. Retailers have gained market power and promoted new regulatory strategies through new contracting practices. Various contracting practices emerge out of chains with different power allocations[17]. The outcome is often influenced by the imbalance between retailers, mainly located in developed countries, and producers, located in both developing and developed countries. The growth of private regulation has brought about increasing wealth transfers, shifting the value downstream while placing the costs of safety regulation further upstream on the supply chain.

*(Contd.)*

*regulation through transnational new governance: overcoming the orchestration deficit*, 42 Vanderbilt Journal of transnational law, 503, [2009].

13 See F. Cafaggi, *The new foundations of transnational private regulation*, Journal of law and society, 2011, forthcoming

14 See S. Henson and J. Humphrey, *The impact of private food safety standards on the food chain and on public standard setting processes*, paper prepared for FAO/WHO, may 2009, available at www.fao.org (last visited. ** 2010). (Hereinafter The impact of private food safety standards).

15 See D. Vogel, *Private global business regulation*, Annual Review of Political science 2008, vol. 11, p. 261 at 266 f.; J. Ruggie, *Reconstituting the global public domain-issues, actors and practices*, European journal of international relations, 2004, vol. 10 p. 499; Id., *Global markets and global governance – the prospects for convergence*, in *Global liberalism and political order: Towards a new grand compromise*, S. Bernstein, L. Pauly, (eds,) NY State University press, 2007, p. 23-50

16 This occurs with carbon foot print labelling. See R. Stewart, B. Kingsbury, and B. Rudyk, , *Climate finance - Regulatory and funding strategies for climate change and global development*, New York University Press, 2009.

17 See Cafaggi and Gereffi, *Private governance and supply chain: an essay in perspective*, to be presented at EUI workshop on Food Safety and Quality private regimes, 12th March 2010, on file by the Author.

The link between private regulation, private standards and competition is relevant to assess the strengths and limits of private regulation. Private standards, including those concerning food safety, may be an instrument for product differentiation, thereby enhancing competition, or for product standardization, thereby hindering competition. They may constitute a barrier to trade by promoting processes of consolidation and aggregation, driving smaller producers away from the market.[18] Agreements between trade associations in the agri-food industry, especially producers and distributors, have been promoted in different European countries to balance the contractual power of distributors. Competition law at the State level provides guidelines for standardization, including food products, in order to keep it within boundaries compliant with general principles defined also through codes of practice and eventually enforced through ombusdman.[19] Similarly, guidelines have been provided at the EU level. More difficult challenges concern competition law control over standard-setting at the global level.[20]

In the body of the paper, I first examine the relationship between private regulation and the evolution of the supply chain. Next, I focus on the role of food safety private regulation in the transnational domain addressing changes concerning contracts, rethinking contracting practices, and proposing the network form as an effective governance method for providing information and assessing and managing risk.

## 1. Private Regulation and supply chain: when regulatory theory and industrial organization meet

Agri-food industry chains have experienced important changes. Both vertical integration and vertical disintegration are occurring.[21] These transformations may have effects on the adoption of private standards, but more importantly, may also effect functions of private standards in use in the chain and their influence on contracting practices.

When vertical integration is in place, in particular when retailers integrate upstream, buying suppliers, private standards become an internal affair of the retailer' company and their compliance is managed through organizational law internal committees, particularly corporate law. The main device is hierarchical control, representing an example of private command and control regulation.

When vertical disintegration occurs, private regulation is implemented primarily through contract and, to a limited extent, tort law. There are at least two different examples of retailers' regulatory activity: private label limitations and branded product regulations, implemented through international contract law. In relation to privately labelled products, the role of food safety standards goes well beyond a purely regulatory function, operating as one of the main devices to coordinate different nodes within the chain.[22]

Regulation, in particular private regulation, influences the structure of the chain and the modes of coordination. But the causal correlation is reciprocal since the choice of regulatory process affects the choice of instrument to coordinate compliance and the shape of the chain. Coordination within the supply chain depends partly on the nature of the adopted standard. Quality management standards are

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18 See S. Henson and J. Humphrey, *The impact of private food safety standards*, cit., p. 3

19 See in the UK Competition Commission report, *The supply of grocery in the UK market investigation*, 30 april 2008, available at http://www.competition-commission.gov.uk/rep_pub/reports/2008/fulltext/538.pdf.

20 Alison Firth, D.M. Raybould, E. Susan Singleton, '*Commission Notice 2001/C3/02 on Guidelines on the Applicability of Article 81 of the EC Treaty to Horizontal Cooperation Agreements*' (2009), pp. B94/33–B94/56, in *Comparative Law of Monopolies*;

21 See G. Gereffi, J. Lee and M. Christian, *US-Based Food and Agricultural Value Chains and Their Relevance to Healthy Diets*, Journal of Hunger & Environmental Nutrition, 2009, 357 – 374.

22 See Cafaggi and Iamiceli, *Comparative analysis of the European wine sector*, on file by the Author.

often implemented to increase retailers' control over suppliers. Performance and output standards presuppose a higher level of delegation to the suppliers. Which 'technical' standards require a stricter hierarchy and whether quality management or performance standards require more collaboration in the supply chain in the design or implementation stage remain open questions.

A second set of cases of "de-verticalization" concerns big producers outsourcing part of the production processes to smaller suppliers, often located in developing countries[23]. These activities are usually subject to strong private regulatory standards in order to preserve the reputation of the big producers.

A supply chain approach to private regulation, mainly focusing on vertically disintegrated chains, should yield many positive benefits, and food safety standards could be a device to strengthen coordination and control over the supply chain. This perspective sheds light on the co-evolution of value distribution along the supply chain and regulatory strategies within the private domain, as well as in hybrid transnational regulation[24]. There seems to be a link between the development of transnational private regulation and the current structures of supply chain in the agrifood industry[25].

There is a mutual interplay between private regulation and the structure of the supply chain. Private regulation influences the structure of the market and the value created in the supply chain. Reciprocally, the supply chain contributes to the definition of the regulatory strategy[26]. More specifically, private standard setting has had an effect on market concentration and competition between big and small firms in developing countries. Additionally, the supply chain has influenced the regulatory strategy to move toward a market-based approach and private certification.

The supply chain approach in industrial organization has important consequences for the definition of a risk based approach to food safety regulation. It requires different risk assessment methodologies and different risk management instruments from the ones applied to individual vertically integrated firms. There is a limited symmetry between comparisons of markets and hierarchies in industrial organization and integration and fragmentation in risk analysis. The emergence of hybrids suggests that risk-sharing may be designed to help avoid shirking and maximize collaboration along the chain, especially when emergencies arise as those which have characterized the food crises.

## 2. The transformation of transnational regulation in the food safety

A combination of public and private has emerged in State regulation of food safety[27]. Recently public regulation at the State level has been increasingly replaced by co-regulatory arrangements, requiring all enterprises along the chain, to implement their own food safety systems and to assume higher

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[23] S. Willems, E. Roth, and J. van Roekel, *Food Safety and Agricultural Health Standards: Challenges and Opportunities for Developing Country Exports*, Agriculture and Rural Development Discussion Paper, Washington DC: World Bank, available at http://siteresources.worldbank.org/INTRANETTRADE/Resources/Topics/Standards/standards_challenges_synthesisreport.pdf

[24] See G. Gereffi, J. Humphrey, T. Sturgeon, *The governance of global value chain*, Review of International Political Economy, 2005, 78–104; and G. Gereffi, J. Lee and M. Christian, *US-Based Food and Agricultural Value Chains and Their Relevance to Healthy Diets*, cit.

[25] A more refined analysis would require breaking down different models of supply chains associated with different regulatory strategies and contracting practices. See Cafaggi, Pri*vate governance and supply chain: an essay in perspective*, cit.

[26] See Cafaggi *Private governance and supply chain: an essay in perspective*, cit.

[27] A similar development ha salso taken place at European level.

responsibility in standard setting and implementation.[28] Despite these improvements State regulation in the area of food safety increasingly shows its intrinsic weaknesses in relation to safety issues concerning globally traded foodstuffs.[29] State regulation of imported food has proven to be difficult to implement without the active involvement of the entire supply chain.[30] Public regulation controls often operate at the end of the process, i.e. at the border of the importing State, and the costs are mainly borne by the importing State. Ineffectiveness and high costs of monitoring compliance have stimulated changes in the public domain and triggered a shift to private regulation. But the globalization of food safety regulation has also been driven by trade related goals. International organizations, particularly the WTO with the TBT/SPS agreement, have promoted the adoption of international standards to prevent the creation of technical, non-tariff barriers to trade.[31]

In the public domain, higher coordination between importing and exporting countries at both the State and regional levels has been one of the main objectives of recent reforms. However, coordination of public regulatory strategies has proven to be extremely difficult, both in monitoring and setting standards, and often only partially capable of preventing risks from spreading outside the boundaries, especially when crises have emerged.[32] Without a worldwide regulator, public regimes have proven quite effective at the regional level, while coordination in different multinational regions (EU, Nafta, Mercosur) has been difficult thus far.[33]

Public and private transnational regulatory regimes have developed to respond to the weaknesses of State-based regulation and to protect food safety in integrated trade.[34] Such regimes reflect important modifications: the agri-food industry has undergone a worldwide radical transformation with increased industrial farming and processing, resulting in higher productivity and greater food safety risks.[35]

It is important to notice that the interplay between public and private is not limited to national and transnantional levels but often translates into multilevel hybrids[36]. Private transnational regulation is

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28 This is clearly the European approach implemented through Regulation 178/2002/EC of the European Parliament and of the Council of 28 January 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, OJ L 31, 1.2.2002, p. 1–24

29 See in relation to *UK and US and Canada,* M.Garcia Martinez, A. Fearne, J. Caswell, S. Henson, *Co-regulation as a possible model for food safety governance: Opportunities for public-private partnership*, Food policy, vol. 32, 2007, p. 299; A. Fearn, M. Garcia Martinez and P. Verbruggen, *The Emergence of Co-Regulation as a Regulatory Strategy: Lessons to be Learned from Food Safety?*, on file by the Author.

30 See E. Meidinger, *Private Import Safety Regulation and Transnational New Governance*, Forthcoming in Cary Coglianese, Adam Finkel and David Zaring, *Import Safety: Regulatory Governance in the Global Economy*, Philadelphia: University of Pennsylvania Press, 2009.

31 See J. Scott, *Commentary on the Sanitary and Phytosanitary Measures Agreement*, Oxford University Press, 2007.

32 See Abbott and Snidal, *Strengthening International Regulation through Transnational New Governance: Overcoming the Orchestration Deficit*, cit.; T. Epps and M. Trebilcock, *U.S. Import Food Safety Proposals and International Trade Rules*, forthcoming in C. Coglianese, A. Finkel and D. Zaring, *Import Safety: Regulatory Governance in the Global Economy*, cit.; T. Knowles, *European Food Scares and Their Impact on EU Food Policy*, cit., 43.

33 See L.Bruszt and McDermott, *Transnational integration regimes as development programs*, in L. Bruszt and R. Holzahacker (eds), *The transnationalization of States, Economies and civil societies. New modes of governance in Europe*, New York Springer, 2009.

34 See FAO and WHO, *Assuring food safety and Quality: Guidelines for strengthening national Food control systems*, (2006), available at www.who.int/foodsafety/publications/fs_management/guidelines . FAO has developed a food chain approach changing quite drastically the regulatory approach and proposing important transfer of regulatory power from public to private and from importing to exporting countries. See also FAO, *Strategy for a food chain approach to food safety and quality: A framework document for the development of future strategy direction*, available at ww. FAO.org. On this approach see J. Vapnek, *Legislative implementation of the food chain approach*, cit., at p. 995-6**,** who underlines the 4 characteristics of the approach: holistic, preventive, risk-based and grounded on the principle of shared responsibilities between private and governmental actors.

35 See FAO, *Strategy for a food chain approach to food safety and quality*, cit.

36 See. F. Cafaggi, *New foundations of transnational private regulation*, cit.

drafted at international level but frequently adopted at the State level by public legislation making reference to private standards. In other contexts transnational private standards are 'recognised' and enforced by national Courts at domestic level. This creates a multilevel hybrid because while the transnational standard-setter is private the national enforcer is public. The reverse may also be true. Public organisations at the international level, in particular International Organizations (I.O.) and Intergovernmental organizations (I.G.O), may refer to private national standard-setting bodies to specify the nature of the rules. Though it is more frequent that specifications are provided by private transnational organisations, at times the private national bodies are called to provide more detailed rules.

The evolution of food safety regulation has affected the relationship between public and private regulators at the transnational level[37]. Public regulatory regimes are designed for supply chains that have developed greater transnational characteristics in the last few decades. They often have a 'regional' dimension and interact with global organisations whose main aim is to design harmonised rules.[38]

Intergovernmental organisations, like FAO and WHO, created the Codex Alimentarius to supply technical standards based on elaborate regulatory processes, often the outcome of (unbalanced) political compromising between importing and exporting countries.[39] The Codex Alimentarius constitutes an important reference for food safety, although its legitimacy and accountability have been seriously called in question.[40] Standards defined by the Codex Alimentarius represent minimum standards for the purposes of both the WHO and WTO.[41] They define general principles to be implemented by States, through public legislation, or by private actors at the transnational level.[42] The link between the Codex Alimentarius and international trade is spelled out in the General Principles but has been reinforced by the endorsement of TBT/SPS.[43] ISO has also generated food safety

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37 See F. van Waarden, *Taste, traditions and transactions: the public and private regulation of food*, in C. Ansell and D. Vogel, What's the beef, MIT Press, Cambridge, 2006, p. 35 ff.

38 For discussion of Mercosur, Nafta and Eastern European countries, see L.Bruszt and McDermott, *Transnational integration regimes as development programs*, cit.

39 See J. Braithwaite and P. Drahos, *Global Business Regulation*, Cambridge University Press, 2000, p. 398 ff. at 400-402, M. Livermore, *Authority and legitimacy in global governance: deliberation, institutional differentiation and the codex Alimentarius*, 81 NYU L.R. 766 [2006]

40 Emphasising the weakness of the current institutional set up, see M. Jansen and L.A. Jackson, *Risk Assessment in the International Food Safety Policy Arena - Can the Multilateral Institutions Encourage Unbiased Outcomes?* (2009), WTO Staff Working Paper ERSD-2009-01, available at http://ssrn.com/abstract=1344963; S. Poli, *The European Community and the Adoption of International Food Standards within the Codex Alimentarius Commission*. European Law Journal, Vol. 10, No. 5, pp. 613-630, 2004.

41 See above text and fn.

42 See S. Henson and J. Humphrey, *The impact of private food safety standards*, cit. "*There are four key drivers for increasing control in agri-food value chains. These must be situated within wider processes of regulatory change and the restructuring of global agricultural and food markets. First, reforms of food safety regulatory systems respond real and or perceived risks in food production ,transport and processing which are the results of a series of food safety crises and increasing consumer anxiety. Second, heightened interest among consumers and businesses in food production processes changes in their conceptions of food safety and quality are reinforced by company competitive strategies around provenance, environmental and social impact etc. third, the globalisation of food supply and increased role of coordination in economies in defining competitiveness create new risks and new challenges for value chain coordination and control. Fourth responsibility for ensuring food safety has been devolved from the State towards the private sector*." (p. 8 executive summary and page 9 ff).

43 The WSPS is the Agreement on the application of Sanitary and Phytosanitary Measures . The TBT, the Agreement on Technical Barriers to Trade.Article 3.1. of SPS, specifically mentions the goal of harmonization: " *to harmonize sanitary and phytosanitary measures on as wide a basis as possible, Members shall base their sanitary and phytosanitary measures on international standards, guidelines or recommendations when they exist*."

The Preamble of SPS makes specific reference to Codex Alimentarius.

management systems that endorse the food chain approach consistent with the standards defined in the Codex Alimentarius[44] .

These standards are often complemented by stricter private standards introduced in agreements and contracts concluded by retailers and suppliers. In certain circumstances they constitute co-regulatory regimes, while in others they tend to have a purely private self-regulatory dimension.

## 3. The emergence of transnational private regulation in food safety.

Recent regulation in food safety has witnessed three major transformations: (1) a shift from national to transnational private regulation, (2) a (limited) reallocation of regulatory power from public to private actors, and (3) within the private sphere, a transfer of regulatory power from (dispersed) suppliers to (concentrated) retailers.

(1) the shift from national to private transnational. Incentives from markets and States have helped encourage the growth of transnational private regulation in the arena of food safety. Private regulation is often stimulated by importing country regulation, which may favour global private standards, promoted by their multinational corporations; one illustration is provided by the GLOBAL GAP, another by the BRC Global standard.[45]

Regulatory changes concern both command-and-control and risk based strategies, as well as private actors (the supply chain) and public ones (States and IGO). A second important factor is the link between food safety and other policies, in particular environmental and social policies, that private regulation often establishes.[46]

The consolidation of transnational private regulation is designed to: (1) supplement or complement public regulation, (2) improve compliance by increasing control over suppliers locating in countries where enforcement is weak, (3) promote stricter control over hazards whose diffusion may seriously impair reputation, (4) expand consumers choices and information,.[47]

2) The reallocation of regulatory power from public to private. By shifting from public control at the border to private regulation implemented at on site production locations, developed countries are trying to achieve a double goal: making regulation more effective, and transferring costs from consuming to producing States. This transfer has had remarkable implications both in the relationship between developed and developing economies and in the change in size of suppliers of food products. Private regulation has shifted regulatory costs to developing economies, strongly reducing market

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Article 2.4 of the TBT states: "*Where technical regulations are required and relevant international standards exist or their completion is imminent, members shall use them, or relevant parts of them, as a basis for their technical regulation.*"

See also T. Epps, *Demanding Perfection: Private Food Standards and the SPS Agreement,* in M.Lewis & S. Frankel, (eds.), *International Economic Law and National Autonomy,* 2009, Cambridge: Cambridge University Press.

44 See ISO 22000 in ISO Food safety management systems, available at www.ISO.org

See R. Howse, *A New Device for Creating International Legal Normativity: The WTO Technical Barriers to Trade Agreement and 'International Standards,* in *Constitutionalism, Multilevel Trade Governance and Social Regulation,* C. Joerges and E. Petersmann (eds), Hart Publishing, 2006, 383-95.

45 The British Retail Global standard was adopted by the British Retail Consortium to respond to food safety legislation in the UK. It was then adopted by the Dutch associations of retailers. See T. Havinga, *Private regulation of food safety by supermarkets,* cit., at 521 ff.

46 See Henson and Humphrey, *The impact of private food safety standards,* cit . p. 00

47 J. Wouters, A. Marx, N. Hachez, *The Case of Global Food Safety Governance*, WP in Private standards, global governance and transatlantic cooperation, 2008, available at http://igov.berkeley.edu/workingpapers/WoutersMarxHachez_foodsafety.pdf.

accessibility to SMEs, given that only big suppliers, able to spread fix costs over a great number of products can afford the regulatory costs associated to retailers' private standards.[48]

The growth of transnational private regulation is also the effect of increasing market power of retailers. Retailers have often deployed regulation as a competitive device which has contributed to increase regulatoy fragmentation. More recently big MNC have tried to reach agreements to introduce uniform standards as the Global social compliance Programme shows[49].

International market competition can also trigger private transnational standards which then become a competitive factor in product competition. As it has been highlighted, however, private standards may also have the opposite effect.[50] Incentives to produce private regulation also come from consumers and environmental organisations, mainly from those located in importing countries.[51] They exercise market and reputational pressures on retailers to impose higher safety standards along the chain.

The link between private regulation and reputation is particularly interesting because it presents puzzling questions. On the one hand, private regulation contributes to preserving a collective reputation within the industry, especially in relation to food emergencies and crises. This collective dimension presupposes uniform standards of food safety easily recognizable by consumers. On the other hand, private standards concerning food quality and safety may allow product differentiation which can translate into competitive advantage. This competitive advantage can only be produced if there is sufficient differentiation of standards which however may conflict with the goal of harmonization. Thus, private regulation which enhances or protects reputation may require a difficult combination of uniformity and diversity of private standards from that occurred at the public level through Codex Alimentarius.

The competitive advantage of private regulation usually is higher and contributes to more effective compliance. States are weak enforcers of rules concerning transnational supply chains, so resorting to private regulation is an implicit delegation to industry, in particular retailers, of the task of devising compliance mechanisms to be applied in suppliers' countries.[52] Market accountability through self-enforcing contracts, by threatening contract termination or lack of renewal, may offer better incentives to comply than legal accountability before domestic courts.[53] Litigation in importing countries

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48 G. Gereffi and J.Lee, *A global value chain approach to food safety and quality standards*, available at http://www.cggc.duke.edu/pdfs/GlobalHealth/Gereffi_Lee_GVCFoodSafetyl_4Feb2009.pdf

49 The Global Social Compliance Programme is "*a business ‐ driven programme for companies who want to harmonise existing efforts in order to deliver a shared, consistent and global approach for the continuous improvement of working conditions in global supply chains*". See the programme guide available at http://www.un.org/partnerships/Docs/GSCP_Guide.pdf .

50 See S. Henson and Humphrey, *The impact of private food safety standards*, cit., where thay affirm "*to the extent that there are economies of scale in compliance and1or larger firms are better able to access finance and other resources, compliance processes are likely to induce processes of consolidation and concentration,. These issues are seen as much with government driven policies to introduce HAACP into sectors such as shrimp farming as in the case of private sector setting of process-based food safety standards*", executive summary p. 24

51 See Ansell e Vogel, *What's the Beef?*, cit., p. 97; T. Havinga, *Actors in private food regulation: Taking responsibility or passing the buck to someone else?*, Paper for the Symposium on Private Governance in the Global Agro-Food System, 23-25 April 2008, Munster Germany , available at http://sgfuchs.uni-muenster.de/data/agrifood/Paper%20Havinga.pdf; B. Hutter, *The role for non-state actors in regulation*, CARR discussion paper n. 37, available at http://wwww.lse.ac.uk/collections/CARR/pdf/DPs/Disspaper37.pdf.

52 For references to international standards in the TBT agreement. See R. Howse, *A New Device for Creating International Legal Normativity*, cit., p. 383.

53 See Cafaggi, *Enforcement of transnational private regulation*, on file with the author.

represents only a last resort mechanism; self-enforcing contracts, based on asymmetric contractual powers and market-share, often provide more effective enforcement mechanisms.[54]
Private regulation also has its downside.

Private regulation lacks accountability to consumers and other stakeholders. The current design implies a trade-off between higher effectiveness and lower accountability. This is not a necessary condition as better institutional design can reconcile effectiveness and accountability, making private regulation a useful complement of transnational public regulation.[55] Increasing accountability does not only increase democratic values but improves efficiency[56].

The transformation of private regulation through an increasing role for retailers and retail associations emphasizes the potential conflict between competition and harmonization. Theoretically, one the principal functions of transnational private regulation is to reach a higher level of harmonization, often undermined by the differences existing in States' regulation. However the proliferation of private standard-setters, often competing over standards supply, changes the regulatory landscape by substituting national public differentiation with private transnational fragmentation.[57] Suppliers in developing economies have to meet different standards to be able to access distribution in multiple regional areas and often large retailers develop their own systems to exercise competitive pressure over rivals. This fragmentation is particularly problematic in relation to food safety because it makes risk management extremely hard, especially when crises occur and common principles must be complied with in order to prevent outbreaks and pandemics. In such cases, it is necessary to opt for an institutional design that harmonizes, even within the private domain, rules that may increase costs of risk management, while a plurality of standards may constitute a useful competitive mechanism in other food safety areas. Two non mutually exclusive options are available: reducing the level of fragmentation, creating governance responses that can minimize the costs of regulatory fragmentation. The following part of the essay addresses the second response

## 4. Trade associations, NGOs and international contract law

Within the private sphere, different regulatory activities develop depending on the main promoter and the scope of private regulation.

1) A first distinction is between firms and NGOs. The former are mainly involved in standard setting, the latter in compliance/monitoring? and enforcement.

2) A second distinction is the difference between individual and collective private rule-making. Individual firms' regulations are often tailored to the supply chain. When collective organizations, in particular trade associations, operate, they design regulatory regimes applicable to different supply chains, thereby characterised by a higher level of generality[58]. Trade associations design rules whose implementation is left to individual supply chain that may have different forms. Thus the rules tend to

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54 See Cafaggi, *Enforcement of transnational private regulation*, cit.

55 See F. Cafaggi, *Legitimacy of private regulators : recombining voice, exit and loyalty*, paper presented at The Hague Conference, October 8th -9th 2009, forthcoming.

56 On the relationship between accountability and efficiency in transnational private regulation see F. Cafaggi, *The new foundations of transnational private regulation*, Journal of law and society, forthcoming 2011

57 See Henson and Humphrey, *The impact of private food safety standards*, cit.

58 At the transnational level, retailers' associations have played an increasingly relevant role in the last 20 years, enacting codes nationally and internationally aimed at regulating the relationships with suppliers for the benefit of consumers' health and safety. This transformation has also had domestic effects as retailers have emerged as strong regulatory players in the global scene. See T. Havinga, *Private regulation of food safety by supermarkets*, cit., L. Fulponi, *Private voluntary standards in the food system: The perspective of major food retailers in OECD countries*, Food Policy, 2005, 1-13.

be more open-ended to encompass different implementation models. In this category fall the codes enacted by retailers associations, such as the aforementioned BRC Food Technical Standard. In 1998, the British Retail Consortium (BRC), responding to industry needs, developed and introduced the standard to be used to evaluate manufacturers of retailers own brand food products.[59] In a short space of time, this standard became a tool for other organisations across the sector, evolving into a Global Standard used not just to assess retailer suppliers, but as a framework upon which many companies have based their supplier assessment programmes and manufacture of some branded products.

When Multinational corporations (MNCs) design their own rules via codes of conduct or principles, they anticipate how their implementation will work within their supply chain and which adjustments are needed. There is also an intermediate form: when several market players design common rules. This is the example of EureGAP, now Global GAP.[60]

3) A third distinction within individual firms, is different models of supply chains. The structure of a supply chain influences the design of food safety regulation.[61] In this category are included, for example, the Carrefour's "Filièrè Qualitè" in which bi- or multilateral contracts are negotiated between Carrefour and producers of traditional products or specialised producers in countries all over the world. In that contract are defined the rules that all the sectors in the supply chain should be followed in order to have the food distributed under this label within the Carrefour's supermarkets. The rules cover the selection of the areas of production, the selection of the producers, the modes of growth, selection and collection of products; the sale and presentation rules in retail stores and the control to be provided during all the process.[62] Another example is Tesco Nature's choice, which is a standard imposed by the supermarket chain on all their fresh produce growers, at global level. The standard was developed to combine the safety requirements with environmental responsibilities, i.e. with minimal environmental impact. It is applied world wide and it covers all aspects of farming, promoting best practices available in agriculture. The standard is defined by a technical advisory committee in order to keep it independent and updated. The members of this committee come from Tesco technical team, but include also growers, independent technical experts and members of the scheme registrar (which also manage the grower registration and certification process).[63]

Retailers' food safety codes are directed at both domestic and foreign suppliers. Their multiplicity often increases costs of compliance because they sometimes generate diverging standards. Attempts to

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59 In particular, the standard is designed to be used as a pillar to help retailers and brand owners with their 'due diligence' defence, should they be subject to a prosecution by the enforcement authorities.

60 D. Bell and M. Shelman, *GLOBALGAP: Food Safety and Private Standards*, Harvard Business School Case study, 2009, Boston: Harvard Business Publishers; H. Campbell, *The Rise and Rise of EurepGAP: European (Re)Invention of Colonial Food Relations?*, 2006, 13 International J. of Sociology of Food & Agriculture, p. 1-19.

61 See Cafaggi, *Private governance*, cit.

62 A slightly different case is the "Filière Auchan". This standard requires a third party certifier to control the all process of production. Concretely, the suppliers, in order to work with Auchan, must obtain a quality visa, in particular after an audit on the sanitary conditions of manufacturing and on the quality of the production. The supplier must also sign an agreement for food safety, which provides for commitments about traceability of products, labelling, quick communication in case of crisis.

63 See that growers are audited to the standard annually. The scheme registrar company has a register of independent third party auditors, from approved international certification bodies, who are able to carry out audits in order to verify that growers meet the scheme's high standard. The standard is consistent for growers all over the world, and it is set out in such a way to encourage continuous improvement. Growers are encouraged to improve and develop, moving from bronze standard, through to join our group of worldwide elite 'Gold Standard' growers. The standard includes five main sections concerning rational use of crop inputs such as fertilisers and plant protection products, pollution prevention, wildlife and landscape conservation, recycling, re-use and energy conservation, and protection of human health.

reach some level of uniformity with the intermediation of technical 'independent' bodies like the ISO have taken place.[64]

Retailers' associations operate as regulators when drafting codes of conduct and are subject to the limits of domestic and foreign competition law. Codes cannot (directly) address matters concerning price, but certainly affect the costs and price of products (indirectly) when defining regulatory standards and the division of labor along the chain concerning implementing safety standards.

The legitimacy of private regulation in food safety has been repeatedly questioned, and proposals concerning better accountability have been made to encourage participation and legal accountability of different stakeholders. Unlike other areas, private regulation in the food safety is often unilateral and lacks broad participation in the drafting process, although higher accountability exists in some public regimes like the Codex Alimentarius under the pressure of WTO code. Private regulators rarely face liability in practice, but legal systems recognise, at least in principle, the possibility of scrutinizing this activity via tort law.[65]

## 5. Food safety chain: governance by contract. A new international contract law.

Private regulation in food safety operates today through a set complementary tools: Codes of conduct enacted by trade associations at national and global levels, supply chain agreements, and framework contracts.

The role of international contract law as an instrument of regulation is evolving and broadening. In the past, it has mainly been associated with *lex mercatoria* and the regulation of exchanges between merchants across different national legal systems and directed more at market design than market regulation. Contracts for exchanges within the food supply chain (and in particular terms concerning quality and safety) are meant to complement State and international public regulation, but also to ensure enforceability of international soft law.[66]

Transnational regulatory contracting is characterized by the presence of informal mechanisms and strong non-legal enforcement systems whose effectiveness is largely associated with the institutional and social framework, more than the legal systems, in which they operate[67]. In order to have private standards in value chains, often encompassing enterprises located in different legal systems and with

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64 See the Global Food Safety Initiative which was a project launched by the business forum CIES in 2000 to harmonise international food safety Standards and reduce the need for multiple supplier audits. The CIES members include the worlds leading retailer organisations and food manufacturers. Rather than create another Standard the GFSI Technical Committee identified the key components necessary for good food safety Standards and the operating protocols for the delivery of certification and created a benchmarking document. Standard owners such as the BRC were invited to submit their Standards for benchmarking. Now only 4 Standards are recognised as meeting the GFSI requirements: BRC Global Standard for Food Safety Issue 5; International Food Standard issue 5; Dutch HACCP Standard; SQF 2000 Level 2.

Benchmarking to GFSI ensures the core of these Standards are equivalent and has allowed many of the worlds biggest retail groups e.g. Wal-Mart, Carrefour, Tesco and Metro to accept audits against any of these Standards. It is important to recognise that the bench marking process was not designed to create a single super Standard but to allow innovation and competitive development between Standard owners whilst meeting a core set of requirements.

65 See for a comparative account, F. Cafaggi, *Responsabilité et gouvernance des régulateurs privés*, RIDE, 2005. See case law cited in R.G. Wellington and W.G. Camisa, *The trade association and product safety standards : of good samaritans and liability*, 35 Wayne Law Review, 1988,37-65

66 For more on the use of contract law as a device to 'harden' international soft law see F. Cafaggi, *New foundations of transnational private regulation*, forthcoming in Journal of law and society, 2011.

67 See in relation to US R. Gilson, C, Sabel e R. Scott, Contracting for innovation: vertical disintegration and interfirm collaboration, Columbia L. R. vol. 109, 2009, p. 431, and R. Gilson, C. Sabel and R. Scott, *Braiding: The Interaction of Formal and Informal Contracting in Theory, Practice and Doctrine*, 2010, available at http://ssrn.com/abstract=1535575; B. McLeod, *Reputations, relationships and the enforcement of incomplete contracts*, Journal of Economic Literature 2007, 45, 595-628.

different contract laws, international agreements must define a framework to be implemented by single contracts among individual parties belonging to the chain.

These contracts often involve more than two parties, but even when they are formally a set of bilateral linked contracts, their asset's interdependence is relatively high and each contract along the supply chain replicates most of the regulatory clauses in order to regulate second and third tier suppliers consistently[68]. Subscription to the same regulatory standards often implies a certain level of investment specificity, making it harder for suppliers to behave opportunistically.. They often include governance mechanisms directed at ensuring compliance, either by the contract participants or third party certifiers, and non-judicial enforcement devices including, but not limited, to arbitration.

Several contractual models have been used to regulate food safety along the supply chain. In some cases there is a general framework contract, designed by the retailer and applied to relationships within the supply chain.[69] This scheme includes framework and executory contracts[70]. Another path is using bilateral contracts with principles and rules clauses which reference codes of conduct, reproduced in each contract with common monitoring and enforcement mechanisms. This model is extremely weak and, despite the asymmetric contracting power along the supply chain, often only retailers are able to impose clauses on first-tier suppliers while second or third tier must delegate both contracting and compliance control to first tier suppliers. For these reasons, contractual networks are more effective.[71] These contracts are generally self-enforcing, with disputes solved through private dispute resolution rather than court.[72]

Contractual relationships differ depending on features of the supply chain, the nature of the product but also on the position occupied along the chain itself[73]. Different models of contractual governance are used depending on the type of linkages among parties within the supply chain: modular, where parties can switch at low costs; relational, where parties engage in strategic partnerships and exit costs increase; or, captive, where suppliers are economically dependent upon retailers and termination is

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68 See F. Cafaggi, *Contractual networks and the small business act: towards European principles?*, European review of contract law, 2008. v. 4, 4, p. 493-539, M. Amstutz and G. Teubner (eds), *Networks - Legal Issues of Multilateral Co-operation*, Hart, 2009.

69 See the Italian case of supply chain coordination between the UNAPROA (National association of fruit and vegetables producers) and Auchan and SMA (large distribution chain) which signed in 2003 a framework contract concerning their mutual obligations in the distribution of apples. The contracting parties also drafted a template for supply contract which should be used in the following negotiations among the local distributors and the individual supplier. In particular it includes the provision of specific safety requirements to be evaluated in the product supply. See art. 3.4. of the template contract: "*Il fornitore guarantisce che il Prodotto fornito avrà le carattestiche previste dal Reg. CE n. 85/2004 ed è conforme , per qunto riguarda I Prodotti a 'marca privata' al capitolato tecnico di acquisto emesso in data … dal servizio qualità del gruppo Auchan/SMA, mentre per i Prodotti '1° prezzo' e 'convenzionale' alle relative schede tecniche da definirsi di comune accordo tra le parti*".

70 See also the case of Barilla which, as final producer of wheat products, in order to achieve a high quality level of raw products supplied negotiate a wide number of supply contracts (contratti di coltivazione) with individual or organised farmers which strictly defined not only the final product to be provided but also its qualitative and technological characteristics. Each contract, moreover, includes the *'Disciplinare Barilla di coltivazione e conservazione del grano duro*" where the safety requirements are clearly defined for each phase.

71 See in Italy the case of SIGRAD, where a multilateral framework contract has been negotiated among institutional and agricultural actors, including both big final producers and cooperative of wheat-growers. In this case the framework contract, negotiated under the auspices of the d.lgs. 102/2004 concerning the 'intese di filiera', the parties define a commercial agreements, pre-competitive investment (e.g. R&D), improvement of agricultural production (with a coordinated and shared 'disciplinare di coltivazione'), monitoring of storage enterprises, quality and safety controls all over the supply chain.

72 See F. Cafaggi, *Enforcement of transnational private regulation*, cit.

73 The importance to distinguish the different supply chain according to the nature of the product has been emphasized in the empirical work, see See G. Gereffi, J. Humphrey, T. Sturgeon , *The governance of global value chain: an analytic framework*, Review of international political economy, 2005, vol. 12 p. 78 ff.

often unilaterally defined.[74] Technical standardization makes modularity easier, facilitating the use of contractual networks to govern the chain.[75] The strategy and forms of contracting, including those concerning food safety standards and quality management, depend strongly on the modes of coordination of the supply chain.[76] The regulatory dimension of these transnational contracts cuts across these different relationships along the chain and often represents an element of homogeneity, unlike other contractual terms which vary depending on the level of collaborative commitments.

Food safety provisions can be found in a number of contracts, from supply agreements to mergers and acquisitions agreements, to credit and insurance agreements. Private standards incorporated into contracts are aimed at stabilising and even codifying arrangements for information transmission and risk management related to food quality and safety.[77] They concern both products and processes and often cover food quality, food safety, and environmental concerns[78]. They define rules concerning production processes to ensure product safety but they also proscribe rules controlling risks and risk management procedures[79].

New private contractual regulation, where retailers play a significant role, is influenced by market structure. Different levels of concentration in the downstream part of the market may affect incentives to comply with regulations and increase the effectiveness of monitoring food safety. In modern large distribution, where the level of concentration is high, retailers have stronger incentives to monitor and define strong penalties for non-compliance. Where market concentration is lower, like catering and food services, effectiveness of monitoring decreases.[80]

Two important dimensions of using contracts as instruments of regulatory governance must be considered with regard to the accountability of transnational regulatory regimes: the specificity of

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74 See G. Gereffi, J. Humphrey, T. Sturgeon, *The governance of global value chain: an analytic framework*, Review of international political economy, cit.

75 On the role of the global value chain in inter-firm relationships see J. Humphrey and H. Schmitz, *Inter-firm relationships in global value chains: trends in chain governance and their policy implications*, International J. Technological learning, innovation and development, 1, 2008, p. 258 ff.. It has been claimed that modularity and technical standardisation can be devices to achieve modularity and reduce the danger of opportunism created by asset specificity. Thus it can expand the range of choices and allow moving away from vertical integration. See M. Blair and E. O'Hara, *Outsourcing, modularity and the theory of the firm*, 2009, Industry studies association, Annual association conference, may 2009 available at www.industrystudies.org. "*For modularization to work it helps if physical characteristics of products and components as well as information such as weights, measures, protocols and programming languages are standardised" On the relationship between modularity and forms of governance they make the following claim:" The more modular different steps of production are, the less interdependent, and the easier it should be to govern the relationships among parties at connected steps by contracts rather than by within firms hierarchical arrangements. While enterprise-specific investments tend to reduce modularity, the use of standardised equipment, parts and metrics, and processes tend to increase modularity.*" They continue "*Firms may be mechanisms for organising production that is not readily decomposable into productive modules, whereas production that is decomposable can more readily be organised through markets and contracts*".

76 See G. Gereffi et al., *The governance of global value chain: an analytic framework*, cit., at p. 00

77 See T. Havinga, *Private regulation of food safety by supermarkets*, cit.

78 See the cited Barilla case where the contract include both food quality and safety provision, which are tightly intertwined in the production phase , in particular technological requirements focus on the proteins contents of wheat, its colour and the gluten quality. The latter two are mainly related to the genetics of the wheat cultivated, while the former descends from the agricultural practices adopted. Thus, the contracts are negotiated with suppliers of specific types of wheat and impose strict control over the use of phytosanitary.

79 See the Guidelines of Federalimentare, Italian national food association, on the recall system, *Linee Guida di federalimentare per la gestione delle non-conformità*, 26 ottobre 2004, available at http://www.federalimentare.it/Documenti/LineeGuida/Gestione_non_conformita_26ott04.pdf .

80 See M.Garcia Martinez, et al., *Co*-regulation *as a possible model for food safety governance*, cit., p. 302 ff. referring to Uk Food standards agency analysis.

monitoring performances and sanctioning violations, and the institutional framework within which these contracts operate.

## 6. Monitoring, enforcement and contractual governance

The institutional framework of contracting at the international level differs from that of domestic States. These contracts and master agreements are concluded between suppliers located at different tiers and between suppliers and the retailers.[81] The retailer generally provides these contracts. They include monitoring and enforcement mechanisms to make suppliers' compliance observable and verifiable. They often incorporate the HAACCP approach (Hazard analysis critical control point). Contract design faces the alternative between ex ante contracting and ex post enforcement costs concerning safety standards[82]. Unlike the traditional domestic contracts however monitoring here is complemented by third parties'intervention. Their drafting and implementation often attract the attention of NGOs and media which contribute significantly to monitoring and exposing violations. But monitoring contractual performances may imply different strategies. Monitoring devices may differ for safety and human or labor rights violations. Unlike domestic contracting in the supply chain, civil society and other market actors play a significant role in ensuring proper monitoring primarily via non-judicial enforcement.[83] Reputational mechanisms exist; often entire web sites are dedicated to monitoring the conduct of either individual or groups of retailers and their compliance with contractual commitments or codes of conduct.[84] These are also reflected in the private monitoring system adopted by the chain, often including third party monitoring, particularly by certifiers, and a sanctioning system, directed at deterrence, blaming and shaming violators more than compensating losses suffered by consumers. In particular, monitoring compliance with food safety standards is often done through third-party certification, rarely by first-party certification.[85]

Consumer protection conventional devices in particular adjudication, however, remain in place. National instruments provided by administrative regulation, criminal liability, product liability and sales law for unsafe products are thus combined, not always consistently, with this "governance by contract" system of private standards at transnational level. This complementarity of regulatory systems affect the form of contracts along the chain and eventually influence the shape of the chain itself.

In Europe, administrative regulation concerning food safety has partially endorsed the food chain approach, placing responsibility concerning compliance with food safety standards on private

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81 Food safety provisions may be found in framework or master agreements and/or in an SLA (Service level agreement) which details standards of performance that suppliers have to comply with.

82 See R. Scott, Indefinite agreeement, 103 Columbia LAW Review 2003, p. 00

83 See the case of the Ethical trading initiative (ETI), which was developed in 1998 after the campaigns by trade unions and NGOs, which turned the spotlight on bad working conditions in corporate supply chains, mainly targeted to big supermarket chains and large textile companies. The participation of Trade Unions and NGOs is then included in the monitoring and verification group in order to push and enhance the application of the code of conduct. See deeper analysis in S. Schaller, *The democratic legitimacy of private governance – An analysis of the Ethical Trading initiative*, INEF Report 91/2007, available at http://inef.uni-due.de/page/documents/Report91.pdf

84 See again the ETI in which the code of conduct, drafted by the all members of the association, provides that, in case of breaches, retailers and suppliers should agree on a realistic time frame in which measures for improvement have to be implemented. Only if a supplier refuses to cooperate and all other measures have failed should commercial relationships be terminated. See the ETI code annex on Violations guidelines, available at http://www.ethicaltrade.org/sites/default/files/resources/Alleged%20Code%20Violations%20Guidelines%202009_0.pdf

85 See the case of CMI plc. a certification body providing accredited for certification in the food and agricultural sectors. CMI certification is accredited by the United Kingdom Accreditation Service (UKAS) to EN4511 for EUREPGAP certification, and it is also the main certification body for the Tesco Nature's choice standard.

enterprises along the chain.[86] Administrative regulation is often combined with criminal sanctions[87]. Private standards play a role in enforcement of civil liability regimes, but compliance alone is insufficient to immunize from liability even when these standards are higher than those designed by national legislation.[88]

The approach taken by product liability law in Europe, still primarily centred around the manufacturer, seems at odds with the development of the regulatory regime which is moving towards a brand-oriented regulatory regime that places responsibility on the most influential actors along the supply chain.[89] This approach is complemented by sales law, placing primary responsibility on the retailer through warranty in the sale contract.

Food safety is the outcome of administrative regulation, civil liability and contract law in the US as well. Regulation is mainly carried out by the FDA and USDA with different strategies. While the former relies heavily on cooperation of food companies, the USDA adopts a more traditional command and control approach.

In relation to civil liability, a more flexible approach was taken in the Restatement (Second) of Torts § 402A and confirmed by the Restatement (Third) of Torts § 402A, where sellers and retailers can be generally held liable for design defect. This rule had been applied to sellers of food for human consumption even before § 402 A was approved.[90] Courts deploy a functional criterion to identify the player within distribution chain which can most efficiently monitor the supplier.[91] Depending on the structure of the distribution chain, this could be the distributor contractually closest to the supplier or

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86 See E. Vos and F. Wendler, *Food safety regulation at EU level*, in E. Vos and F. Wendler, (eds.) *Food safety regulation in Europe- A comparative institutional analysis*, Intersentia, Antwerpen Oxford, 2006 p. 70

87 See for example C. Scott , *Continuity and change in British food law*, Modern Law Review, 1990, p. 785 ff part. p. 792 ff., C. For a broader examination concerning European law, see C. Hodges, *Safety and risk*, 2005, p. 241. For a comparative perspective concerning England and France see S. Whittaker, *Liability for Products: English Law, French Law and European Harmonisation*, OUP, 2005 part. p.00,

88 See F. Cafaggi, *Product safety, private standard-setting and information networks*, cit. p. 215.

89 With the amendment in 1999 the product liability EC directive 374/1985 is applied also to agricultural products. But see also art. 21 EC Regulation 178/2002.

90 See Kratz v. American Stores Co 59 A.2d 138 Verificare il pri ncipio generale della responsabilità del seller of food for human consumption in tort

91 For examples of non-food product cases stating the policy that liability should be placed on the most efficient accident avoider along the distribution chain see Daly v. general Motors corp. 572 P.2d 1162 , Leary ex rel Debold v. Syracuse Model Neighborhood corp 799 N.Y.SS. 2d 867 "*In the context of strict product liability theory of liability, distributors, retailers may be held strictly liable to injured parties, even though they may be innocent conduits in the sale of product because liability rests not upon traditional consideration of fault and active negligence, but rather upon policy considerations which dictate that those in the best position to exert pressure for the improved safety of products bear the risk of loss from resulting from the use of the products…In the context of a strict product liability theory of liability where a retailer undertakes the obligation to perform the delivery, final assembly, and installation of the product, the retailer has the duty of insuring that the product is reasonably safefor those who encounter in the stream of commerce.*"

Promaulayko 562 A.2d at 206 " …*the effect of requiring the party closest to the original producer to indemnify parties farther down the chain is to shift the risk of loss to the most efficient accident avoider.*" Peterson v. Lou Bachrodt Chevrolet Co 329 N.E.2d 785 "*Imposition of liability upon wholesalers and retailers for defective product is justified on ground that their position in marketing process enables them to exert pressure on manufacturer to enhance safety of product*".

In addition see Godoy v. Abamaster 302 A.D.2d 754 defining policy rationales to distribute liability along the distribution chain in relation to a defective meat grinder: "*The rule imposing strict liability upon retailers and distributors advances the policy of encouraging improved product safety because by reason of their continuing relationships with manufacturers, sellers and distributors are in a position to exert pressure on them to produce safe products. Of those in the chain of distribution, the distributor or the importer closest to the manufacturer (at the top of the chain of distribution) is in the best position to further the public policy considerations underlying the doctrine of strict products liability*". For a detailed analysis of retailer liability under §402 Restatement third of contract see M. Geistfeld, *Principles of product liability*, Foundation, 2006, p 244 , p. 00

the party with the greatest contractual power, even if located further down the chain. A complementary rationale, closer to the evolution of the supply chain, is to place strict liability on the retailer if the product is defectively designed because the standards contractually imposed on the suppliers are inadequate. In these cases, retailer's liability not only requires identifying the best monitor but also the 'real' manufacturer: the party that designs the product, or at least that which defines the technical standards the product has to meet[92]. In the US over the last 25 years, however, individual States have introduced statutes to limit or to exclude retailers' liability and to distinguish between passive and active retailers.[93] This distinction is often unclear and does not provide a useful device to address the regulatory power of retailers in product safety, or more specifically, to food safety. These statutes immunize retailers from liability, often contradicting the power allocation in the chain and placing the burden of liability on smaller suppliers. The use of private regulation by retailers, incorporated in contracts along the chain, suggests that a flexible approach, not centred around the manufacturer, can best promote compliance. The shift of private regulatory power along the chain should be reflected in the product liability regime by increasing the liability of the retailer or, more effectively, by endorsing a chain liability regime instead of fragmenting liability among different players, thereby increasing the costs of litigation. A network approach would achieve this.

But the implications of the new regulatory regimes go to the core of the product liability. If retailers, either within their association or acting individually, are those which define private safety standards for suppliers, which legal devices can the final consumer access? Would the consumer be able to hold retailers liable if the standards provided were defective? Can standards supply contribute to the existence of a 'design' defect? Is compliance by the suppliers with contractually negotiated/imposed standards sufficient to immunize them from liability? It is beyond the scope of this paper to provide answers to these questions, but they should be kept in mind when operationalizing the following proposal concerning the use of a contractual network as a regulatory device to assess and control food-safety related risks.

## 7. Governance by contractual networks and the influence of global 'public' regulation on different network models

Private regulation and the evolution of the supply chain with increasing outsourcing and vertical disintegration each require a contractual governance model that reduces transaction costs and increases cooperation to produce and transfer information concerning products' hazards.

Private regulation highlights the weaknesses of sequential bilateral contracting and emphasizes the need for a network approach to contractual governance. The use of networks can reduce monitoring costs allocating tasks among different participants and utilize information technology as a 'bonding' device among enterprises along the chain. Common technology platforms may reinforce cooperative links along the chain.

The use of contractual networks is certainly not a panacea though it can ensure incremental advantages over other organizational models to ensure compliance with safety standards along the

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92 For example an assembler which provides first or second tier suppliers' specifications concerning the product and is held liable to the final consumer. In

93 See M. Geistfeld, *Principles of product liability*, cit. See Smith v. Alza Corp 948 A.2d 686 N.J. Super App. 2008 "*The purpose of the product seller immunity provisions in the Products liability Act is to rfeduce litigation costs borne by innocent retailers and whoòlesailers in product liability actions*", West v.KKL, LLC 2008 WL 4664232 "*The middleman" provisions of the Kentucky Product Liability Act (KPLA) were designed to protect only those distributors, wholesalers, or retailers, who have no independent responsibility for the design or manufacture of a product*" Yrak v. Dan's Supermarket Inc 188 P.3d 487 "*When one party in an action under the Product liability Act is merely a passive retailer, the strict liability fault, lies, if any with the manufacturer not with the passive retailer*"

supply chain. Its comparative advantage over other models is dependent upon several factors including the market concentrations both up and downstream[94].

There are many components to these networks which sometimes result in conflicting goals and interests within the network contract governing the supply chain. On one hand, there is the private dimension represented by the food safety and quality supply management dimension mainly related to the governance of the filiere. On the other hand, there are State and regional (European) liability and regulatory systems requiring the formation of networks to provide organisational responses to 'public' regulatory needs.

The first dimension has been illustrated in the previous section, the second dimension will be illustrated in the next section by looking at two examples of contractual networks driven by liability and regulatory regimes in the area of information, and remedies for violation of food safety regulatory regimes.

## 8. Global contractual networks and private regulation: improving governance design.

Contractual networks can operate both as risk assessment and risk management devices. Recent changes in the regulatory domain evidence a preference for an ex ante preventative approach over a regime of ex post detection of violations.[95] The main objective of this change has been to minimize risks and to improve effectiveness and efficiency of control at the source of the hazard.[96] To promptly identify this source, traceability systems have developed under the pressure of States and markets.[97] Transparency linked to traceability increases consumer confidence, ensures competition by differentiating products, decreases costs when product recalls are necessary, and improves risk management[98]. Thus it has become the foundation of risk-based regulation in food safety and beyond.[99] In turn, traceability has made possible a new generation of private and public regulatory regimes affecting contractual governance design.

Two examples will be analyzed: food safety risk information for products on-the-market, and product recalls, a voluntary measure that enterprises are 'invited' to adopt when the risks for human health are serious. In extreme cases, when there is inaction by private parties, product recalls are

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94 On the relationship between market concentration and competition and standards see G. Gereffi and J.Lee, *A global value chain approach to food safety and quality standards*, cit.

95 See FAO, *Strategy for a food chain approach to food safety and quality*, cit.

96 See J. Vapnek, *Legislative implementation of the food chain approach*, cit., at p. 992-3.

97 S. A. Starbird and V. Amanor-Boadu, *Contract Selectivity, Food Safety, and Traceability*, 2007, available at SSRN: http://ssrn.com/abstract=902442; S. Zarrilli, *International Trade in GMOs and GM Products: National and Multilateral Legal Frameworks* (2005), available at SSRN: http://ssrn.com/abstract=1280032.

98 The correlation between traceability and information is clear in the European system. See art. 18 EC regulation 178/2002. See below text and footnotes.

99 See art. 18 EC regulation 178/2002 Nonetheless, traceability and, in general food safety is not to be interpreted as a way to limit freedom of establishment and to provide services, see Commission v France, [2008] EUECJ C-389/05 (17 July 2008), where at par. 98 and 99 provides that "*As regards food safety and the traceability of semen, in contrast to what the French Republic submits, Article 18 of Regulation No 178/2002 cannot be interpreted to justify the restrictions stemming from the system at issue. That article concerns the field of food safety, the requirements of which relating to traceability can be met by a system providing that the semen insemination service is carried out by qualified and properly identified persons, without the application of restrictions such as those resulting from the system at issue. Furthermore, that Member State has not in any way proved that granting exclusive rights over defined geographical areas to authorised centres and making the issue of an inseminator's licence subject to concluding an agreement with the managing director of such a centre are proportionate and necessary measures for the purposes of guaranteeing food safety and traceability. No evidence has been submitted to prove that the obligations imposed on inseminators as regards the quality and use of the semen and the checking of whether those obligations have been observed require the granting of those exclusive rights or the condition imposed for the issue of the licence*".

ordered by the public authority and implemented in a hierarchical mode, either directly or by way of judicial enforcement.

### *8. 1. Information contractual networks*

The contractual network form may plays at least two important roles: first, it increases available information and knowledge, second, it enhances the effectiveness of monitoring compliance. To improve risk detection and management it is crucial that all the links of the chain are involved in the regulatory process concerning food safety. Risk detection may become extremely difficult and costly if even a single node is excluded from the regulatory chain devised through the network contract. Contracts must include all the participants in the supply chain and distribute the responsibility to control safety of the production process and the final product, making information available throughout the chain.[100] Network contracts can contribute to codification of information concerning safety, making individual transactions along the chain less specific, thereby reducing opportunism. Once information has become available, the decision-making process may require the use of a different contractual network form from that deployed to gather information. While information concerning the cause of the hazard ( for instance adulteration) may concern production level, management of risk is often better performed at the distribution or retail level where consumers become exposed to risks. Thence decision making power may be differently allocated within the network depending on the specific function to be performed.in relation to the same hazard

The shape of these networks is also the effect of the changes in the regulatory perspective moving from a public command and control system, based on (ineffective) on site inspections, to a mainly private monitoring system, placing higher responsibility on the supply chain within a co-regulatory scheme that involves State agencies or Ministries. Often, the retailer is best equipped to detect risks and to transfer information, including selecting the appropriate procedure, managing the risks and avoiding their future occurrences. Unlike the bilateral contract model, the network model ensures greater and more effective coordination among all the sources of information and contributes to codifying information through pre-defined procedures.

A contractual network for information transmission regarding food related hazard is often centred around the retailer, who designs the rules to be implemented at both the distribution and production level[101]. As mentioned, the network often replicates the form generated by the technology of traceability[102]. Private regulation can help harmonize standards and procedures to make foodstuff traceable along supply chains. This, however, can only occur if there is a common framework that can either be provided by a standard setting organization or by an agreement among the different private organizations that define safety standards. If multiple private standards on product traceability are

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[100] See art. 18.1 EC Regulation 178/2002 on traceability. For instance, to facilitate the recall process, Unilever includes its purchase agreements with suppliers specific information duties, see at http://www.unilever.nl/Images/Inkoopvwrd%20NED_tcm164-202123.pdf.

[101] The European system includes the retailer but does not reflect the more recemt evolution of private safety regulation. See art. 19.2. of the EC Regulation 178/2002 on general food law "*A food business operator responsible for retail or distribution activities which do not affect the packaging, labeling, safety or integrity of the food shall, within the limits of its respective activities, initiate procedures to withdraw from the market products not in compliance with the food-safety requirements and shall participate in contributing to the safety of the food by passing on relevant information necessary to trace a food, cooperating in the action taken by producers, processors, manufacturers and/or the competent authorities*."

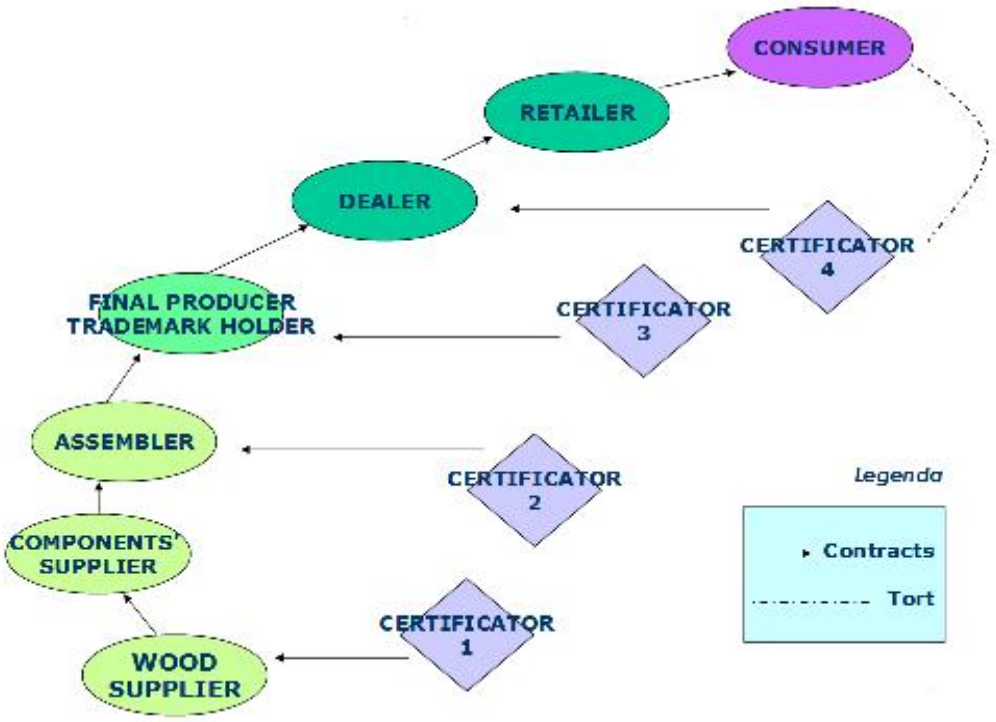
[102] Traceability plays a crucial role in implementing effective strategies where outbreaks and pandemics develop. This is a key factor for risk assessment and management and can only function if an agreed procedure is designed along the chain. For the European system see art. EC Regulation 178/2002 on general food law, art. 18.1 "*The traceability of food, feed, food-producing animals, and any other substance intended to be, or expected to be incorporated into a food or feed shall be established at all stages of production, processing and distribution*".

implemented, both consumer choices and risk control will be undermined and it might be difficult to provide an effective contractual response.

Once the procedure to trace the origins of a product is defined, there is a need for identifying the sources of hazards while monitoring compliance with regulatory standards. Contractual networks directed at information transmission should govern the different sources of safety hazards: some dependent on fraudulent and negligent conduct and some arising out of risks unknown at the time of product safety design. Clearly, the negligent or fraudulent behaviour of any link of the chain can undermine the whole process. Network design should be instrumental not only to ensure that the process is cost effective, but also that mistakes and frauds are quickly detected and corrected.

An important yet often neglected role in these networks is played by the certifiers[103]. These are generally third party paid by suppliers, but chosen by retailers, which certify compliance with food safety requirements.[104] Given their strategic monitoring function, they ideally should be part of the information network to constitute an additional and more effective source for consumer information.
There is a correlation between the liability regimes and the regulatory structure which affect the form of the network. In particular, the allocation of information duties in the different product liability regimes (strict liability or negligence) will affect the flow of information and consequently the shape of the network; i.e. whether it will be retailer or manufacturer centred and what kind of horizontal circulation of information will occur. Depending on the liability system the network can be structured differently as shown by the following illustrations.

**Table 1.a. Information contractual network with vertical information flow**




[103] See Hazlewood Grocery Ltd v Lion Foods Ltd [2007] EWHC B5 (QB), [2007] EWHC B5 (QB) where the judge acknowledged the breach of contract between a supplier and a final producer also taking into account the absence the most updated certification system.

[104] See for instance Cass. pen., 8 marzo 2001, n. 16065, Foro it. 2001, II, 506.

In the above illustration the central actor is the manufacturer of the final product because the liability and the regulatory regime are organised around that node. The information comes from harmed consumers, reaching the final producer through retailers and distributors. The producer of the final good takes responsibility for informing the other members along the supply chain up to the producers of raw materials and down the chain to the other distributors and retailers. In this particular form, the flow of information is vertical and goes from the harmed consumer up to the final producer and is then redistributed both horizontally and vertically. The final producer transmits information up the chain to suppliers of raw materials and intermediary goods and down the chain to other distributors and retailers to reach the consumers at risk.

The final producer should design the network in such a way to ensure that information concerning hazardous sources can be quickly generated[105]. In this context, traceability plays a strategic role as it codifies information and permits fast identification of products.[106]

In the contractual network model below, the flow of information is unlike the previous both vertical and horizontal. Information is conveyed to the final producers as in the previous model, but is also passed among retailers and distributors horizontally. In the latter model, the role of retailers and their liability is stronger. This model corresponds to a supply chain where the retailer has greater market power and has control over channels of communication throughout the chain. The liability regimes are often conceived with regard to the first vertical models, and then design duties to inform accordingly. That model can slow the process and prevent effective precautionary measures. In a proposal I made elsewhere, I tried to sketch a more complex approach where parties could design contractual obligations independently of the system of liability, returning to the benefit of the final consumer.[107]

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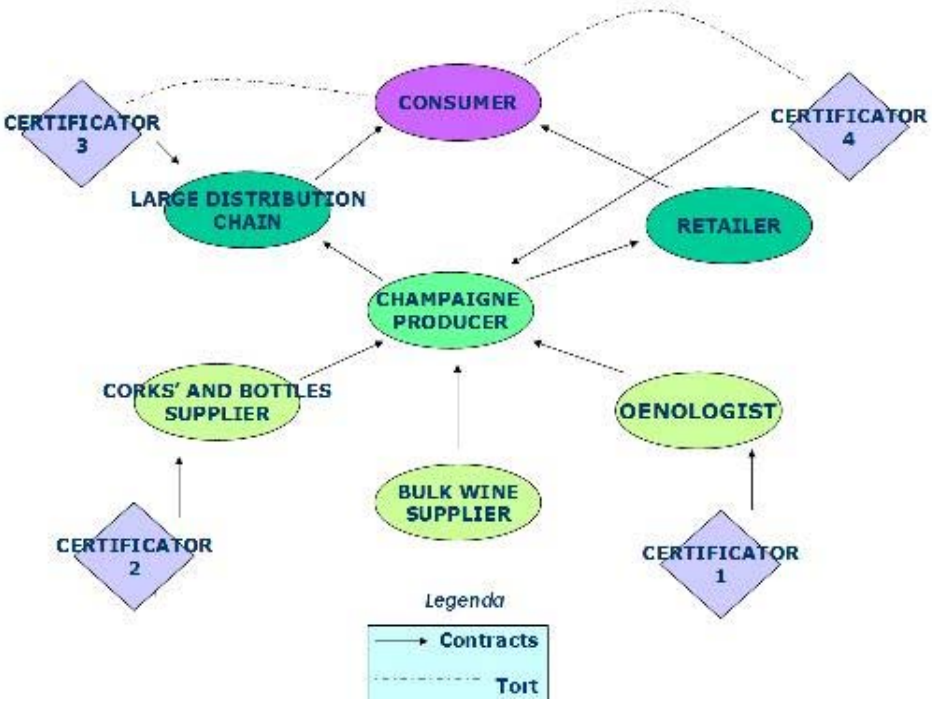
[105] Information concerning safety is generally codified and related to specific risks in order to select the most appropriate risk management procedure.

[106] Traceability performs many other functions which are connected to the use of the network form: "*Traceability can serve a number of objectives: facilitating tracking for food safety reasons, differentiating products for marketing purposes, reducing information costs for consumers desiring to know more about food product, regaining consumer confidence and product reputation after an outbreak, decreasing costs to companies faced with product recalls and generally improving the management of food supplies.*" See J. Vapnek, *Legislative implementation of the food chain approach*, p. 1003.

[107] See F. Cafaggi, *Product safety, private standard-setting and information networks*, cit. p. 215.

**Table 1.b. information contractual network**




### *8. 2. Contractual network for risk management*

A second area where private regulation has been playing an increased role is that of product recalls and withdrawals.[108] In the perspective of this essay these are conceived as risk management devices consistent with the precautionary principle[109]. Risk management implies responding to the emergence of hazards concerning the product and its consumption. Some issues can be dealt with by way of information, thus the previous schemes would apply, other risk management problems require recalls of at least one part of the circulated products. When foodstuffs are held to be dangerous for human health, products are recalled.[110]

Recalls are generally voluntary, and only as a last resort are they ordered by agencies or courts when serious health related risks arise.[111] The European regulation enables all food operators along the supply chain to initiate a recall procedure[112]. The reputational harm that may be linked to any refusal

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[108] See F. Cafaggi, *Product safety, private standard-setting and information networks,* cit. p. 215.

[109] See for the European system Recital 20 and art. 7 of EC Regulation 178/2002.

[110] See the Carrefour statement concerning their product recall system: "*Within two hours, a product can be recalled in each banner. In France, like in other countries where the Group operates, an on-call system gives suppliers and stores 24/7 contact with the Quality Department which works in close association with the supply chain. Withdrawal messages are sent to all stores within less than 2 hours. A crisis team is set up immediately for all significant withdrawals/ recalls*". Available at http://www.carrefour.com/cdc/responsible-commerce/product-safety-and-quality/

[111] See the recent case of Peanuts corporation of America which received a request by the Food and Drug Authotity in order to recall its product due to Salmonella contamination, which, after the refusal to recall by the firm, was follwed by an inspection warrant in an attempt to gain access to the company's distribution records . See the information available at http://www.fda.gov/Safety/Recalls/MajorProductRecalls/Peanut/FDA%E2%80%99sInvestigation/default.htm.

[112] See EC Regulation 178/2002 on general food law, art. 19.1 " *If a food operator considers or has reason to believe that a food which it has imported, produced, processed, manufactured or distributed is not in compliance with the food safety*

to recall a product from the market usually induces producers and distributors to 'voluntarily' recall the product, often in agreement with public authorities.

Recall requires transmitting information to retailers, final consumers who have bought the product, and enterprises engaged in the food business, such as restaurants and catering using the products. Recalls require direct involvement of producers in collaboration with downstream distributors to ensure that the product is promptly taken out of the market. The creation of a contractual network is one potential organizational response to the emergence of hazards. The shape of the network is mainly influenced by the regulatory regime, which places the main burden on the producer in a frame of coordination with the other parties.[113]

The liability regime under which voluntary recalls operate also affects the structure of the network.[114] Product liability regimes still place the highest burden on the producer for a product whose defects existed at the time the product was put in the market.[115] This implies that the producer tends to be the key player in product recall networks, ensuring coordination among retailers and along the supply chain.

In US, the Food and Drug authority include within the industry guideline that the main goal to pursue is the information of the customer, then each part of the chain is responsible to the notification of the recall to customers, while the decision about the recall depends on the point of the chain where the problem has been raised[116].

*(Contd.)*

*requirements, it shall immediately initiate procedures to withdraw the food in question from the market where the food has left immediate control of that initial fodd business operator and inform the competent authorities thereof. Where the product may have reached the consumer, the operator shall effectively and accurately inform the consumers of the reasons for its withdrawal, and if necessary, recall from consumers products already supplied to tyhem whem other measures are not sufficient to achieve a high level of health protection.*". See A. Alemanno, *Food safety and the single European market*, in C. Ansell and D. Vogel, *What's the beef*, cit., p. 35 ff.; C. Mac Maolain, *Eu Food law*, Hart 2007, A. Brack, *A disadvantageous dichotomy in product safety law*, EBLR, 2009 p. 173,

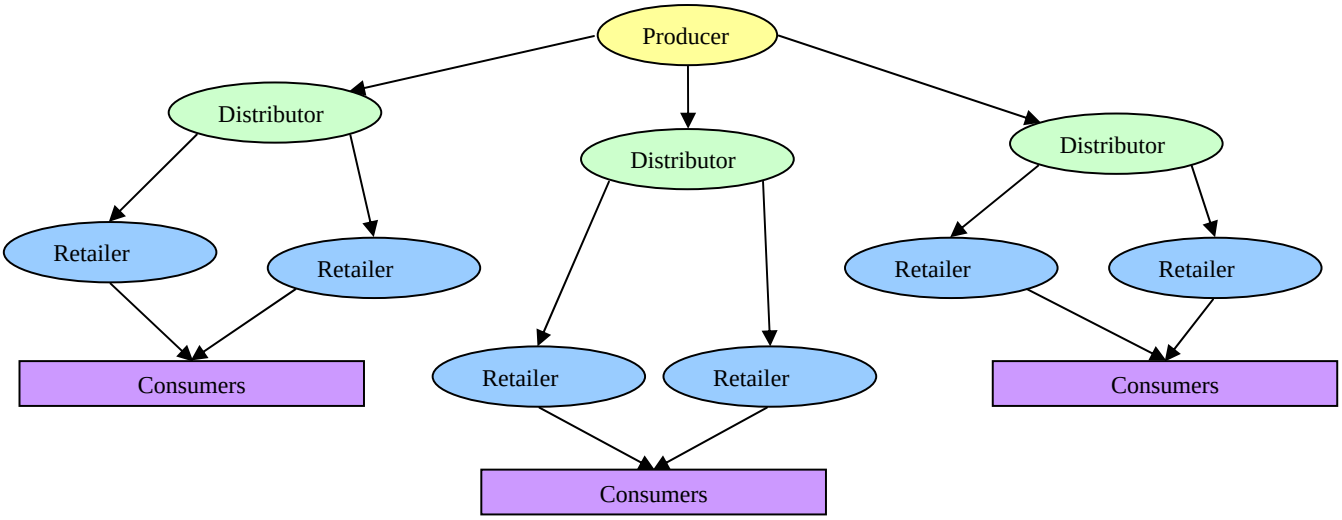
[113] Under European Regulation 178/2002, art. 17 provides that "*Food and feed business operators at all stages of production, processing and distribution within the businesses under their control shall ensure that foods or feeds satisfy the requirements of food law which are relevant to their activities and shall verify that such requirements are met*." See in the Italian caselaw, Cass. Pen., n. 7692/2007, CED Cass. Pen. 2008, 2, 713; and previously Cass. Pen., 14 maggio 1998, Cattaneo, Dir. e giur. agr., 2000, p. 498; in tema v. anche Cass. Pen., 13 novembre 1997, Perini, Dir. e giur. agr., 1998, p. 3081; Cass. Pen., 1° febbraio 1995, n. 2350, Profeta, Dir. e giur. agr., 1996, p. 2348.

[114] See in Italy Cass. Pen., 20 dicembre 2004, n. 3712, in *Dir. e giur. agr.*, 2005, p. 662.

[115] See in Italy Cassazione penale, 19 marzo 2008, n. 18767-

[116] See the product recall strategy clarified in the U.S. Food safety authority at http://www.fda.gov/Safety/Recalls/IndustryGuidance/ucm129259.htm.

**Table 2. Risk management and product recalls**




## 9. The accountability of private contractual regulatory regimes and the challenges ahead

The above analysis has shown that private regulatory regimes in food safety are growing for two main reasons: (1) the increased use of co-regulatory regimes where higher responsibility concerning food safety is placed on the enterprises while the public monitor compliance with safety internal systems and (2) the adoption of the food chain approach both in public and private regulation. These changes have broadened the use of regulatory contracts. Traditional contract models conceived for exchanges show their weaknesses and are replaced by network models which involve all main players along the supply chain. Both the design and enforceability of these models are the outcome of privately devised mechanisms since domestic contract law and international business transactions cannot provide adequate support to regulatory functions. Hence, in order to implement effective processes of information production and transfer about food safety hazards, enterprises located along the supply chain must create networks to provide incentives for risk detection and transfer information about risks

The main difficulties are the accountability of these contractual regimes to the final consumers, potential beneficiaries of these new regulatory schemes.[117] Greater scrutiny of contractual networks shows they perform well as governance devices for the food chain, but less well as regulatory regimes given the accountability deficit in contract law, mainly designed to promote exchanges. Consumers do not participate to the design of the regulatory regime and the civil liability constitutes the device through which they may voice their perspective. This is particularly relevant for those systems where consumer organizations play a relevant role in shaping aggregate litigation.

I shall briefly describe the legal instruments available to consumers to enforce these contracts and then focus on complementary accountability systems.

[117] On these questions see J. Black, *Constructing and contesting legitimacy and accountability in polycentric regulatory regimes*, Regulation and Governance, 2008, vol. 2, p. 137 ff. part. p. 00

## 10. Legal accountability and consumer rights' enforceability of contractual networks

Food safety is designed to protect consumers' health, while food safety standards, incorporated in international contracts, are aimed at governing the food chain. Thus, consumer enforceability plays a strategic role. Emphasis on the governance of the supply chain or on consumer protection varies, so consumers may be defined as direct or indirect beneficiaries of these agreements depending on the technical instruments a code of conduct, a protocol, guidelines, soft law. Neither individual consumers nor consumer associations are technically part of these contracts, which makes it difficult to enforce them if violations occur.

Legal systems define different ways in which these contracts can be directly enforced by consumers and/or their associations: (1) '*action directe*' by the consumer against the supplier, (2) require unequivocal statements that their contracts are for the benefit of third parties, (3) allow enforcement using implied terms of consumer contracts, (4) grant individual or class remedies under civil liability, (5) qualify violations as unfair commercial practices.

Contracts within the supply chain between retailers and suppliers including food safety provisions may qualify as contracts for the benefit of third parties (individual consumers and or collective organisations) and can be enforced by them[118]. Consumers may bring a claim for breach of warranty when the warranty concerns compliance with food safety requirements. The most common avenues are civil liability, in particular strict product liability and unfair competition law. The development of aggregate litigation in Europe and its consolidated function in the US may provide strong accountability devices to ex post control the regulatory activities of retailers and producers.

Clauses concerning food safety may be considered implied terms or otherwise 'integrate' the contract by reference to general clauses such as good faith.[119] Consumers can enforce the provisions against the retailer even if such a clause is not explicitly included in the sale contract.

If retailers give firm commitments to comply with codes of conduct or protocols concerning food safety, violations can be considered, in European law, unfair trade practices and the retailer can be enjoined or forced to pay damages to individual consumers or consumer organisations[120].

## 11. Governance by contracts and accountability challenges to transnational private regulation

The illustrations above show the potential tensions between networks created mainly by retailers to govern food safety along the chain by means of private technical standards and networks formed to respond to regulatory needs concerning hazard information and product recalls. The identification of the key link and the distribution of compliance and monitoring costs may vary if the network is retail or producer driven. But clearly the shape of the network is responsive to the role and positions of the final consumers. While they have little voice regarding contracting along the chain due to insufficiencies of current contract law described in the section above, civil liability provides a 'voice' in the regulatory driven network. The different shapes of the contractual networks are thus responsive to the role of liability regimes towards consumers. This tension may be solved in different ways: by imposing the primacy of a liability driven network, or by disentangling the contractual form of the

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[118] Legal systems differ significantly in relation to the extent third parties are permitted to enforce contracts. Thus, consumer protection may vary across the supply chain depending on the choice of applicable law.

[119] See Hazlewood Grocery Ltd v Lion Foods Ltd, cit., where the compliance to the most updated safety controls where included in the contract as implied terms.

[120] See Dir. 2005/29 art. 10 "*This Directive does not exclude the control, which Member States may encourage, of unfair commercial practices by code owners and recourse to such bodies by the persons or organizations referred to in Article 11 if proceedings before such bodies are in addition to the court or administrative proceedings referred to in that Article.*"

network from the liability regime. In the latter case, enterprises along the chain will be able to arrange their own internal organisational structure which will be affected by the liability regime but not necessarily entirely shaped by it.

Governance by contract is part of the menu of the so-called "new modes of governance", although is not often included in the list.[121] The emergence of contractually-based private regulatory regimes poses important challenges with respect to legitimacy and accountability towards consumers, but also constituencies in developing countries who can be penalised by asymmetric contractual powers. Not only do consumers have low level of participation in contractual design and standard-setting within the food supply chain approach, but they also have very weak enforceability powers before courts. The accountability of these regimes is mainly based on the enforcement strengths of NGOs and, to a limited extent, competitors. The strengths and capacities of NGOs may vary across industries and countries.

Thus, contractual governance requires a serious legal reform of network contracts both in terms of design and monitoring, in order to ensure consumer and environmental voices are heard both in relation to contractual design and enforcement of safety standards. Multiparty regulatory contracts be regulated to ensure enforceability by third parties when contractual provisions define new rights Such reforms must be implemented at the State or regional level (European, North American, Latin American) by enacting appropriate legislation.

## Concluding remarks

Food safety has become a global regulatory issue. Divergent forms of global regulation have recently emerged. They include public, private and many hybrids. There is the well-settled body of regulations by FAO and WHO and, in particular, the Codex Alimentarius. There are also several private initiatives that involve supply chains and trade associations. The former preserve a strong nature of private initiatives mainly designed through contracting. They are generally promoted by retailers, often multinational, and involve the whole chain. The latter are drafted by producers and retailers associations.

The private dimension of food safety has always been quite strong. However, in the past it was sector specific and predominantly driven by producers. Today retailers have gained a prominent position. Private transnational food safety regulation provide startling illustrations of regulatory changes taking place: from State to transnational, from public to private. These changes are the consequences of many factors, but reveal the necessity of recombining public and private regulation and revisiting their institutional complementarity. Rulemaking is taking place more often at the transnational level, based on international soft law and private codes and guidelines. Enforcement is in the hands of the supply chain, and importing countries, often controlling the effectiveness of private control, operated either within the supply chain or by third party certifiers.

The food safety regime is today governed by a multilevel system in which different co-regulatory modes operate.[122] Private standards are emerging both as the outcome of a change in regulatory

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[121] See J. Scott and D. Trubek, *Mind the Gap: Law and New Approaches to Governance in the European Union*, 2002, 8 European Law Journal 1; G. de Búrca and J. Scott (Eds.), *Law and New Approaches to Governance in the EU and the US*, Hart, 2006; C. Sabel and J. Zeitlin, *Learning from Difference: The New Architecture of Experimentalist Governance in the EU*, European Law Journal, 2008, p 271-327.

[122] See See J. Vapnek, Le*gislative implementation of the food chain approach*, cit., at p. 1009, 1010, M. Garcia Martinez, et al., *Co-regulation as a possible model for food safety governance*, cit., p. 312. "*Recent developments in the EU regulatory environment are providing a wider range of opportunities for closer collaboration between regulatory agencies and the private sector in the management of food safety. In the U.S., the implementation of HAACP across a number of key product sectors is shifting the responsibility for the monitoring of food safety to business operators. In*

regimes and as a response to the need of supply-chain global governance. Shifts from product to process control, including traceability of foodstuffs, have been introduced to respond to failures of content-based inspection and to burden countries of origin and the suppliers operating therein with the costs of control. These changes have shifted the costs of regulation from importing countries to exporting ones, but have also changed the nature of the regulatory regime towards a food supply chain approach.[123] This approach, meant to optimize resource allocation, has sometimes translated into shifting regulatory and monitoring costs from retailers to suppliers.

The consolidation of transnational private regulation and the increasing role of retailers call for a new conceptual framework. In the essay I have developed a coordinated approach, integrating the value supply chain perspective with regulatory theory, to show that co-evolutionary patterns explain the changes in the supply chain and the increasing deployment of transnational private regulation. I then have focused on different coordination mechanisms that are, or can be, used in food chains and proposed a larger role for contractual networks to improve effectiveness of food safety regulation. I have underlined the use of contractual governance as a response to new regulatory strategies complementing public and private regulation, distinguishing between contractual networks directed at information production and transfer, and contractual networks concerning risk assessment and risk management.

Private and public regulation in the area of food safety complement each other according to recently modified patterns, placing additional burdens upon exporting/producing countries. A shift from product to process standards related to quality management has taken place both in public and private regulation.[124] The move from on-site inspection to direct control by suppliers verified by third party certifiers is both the cause and result of a changed regulatory strategy.[125] Similar changes have occurred in the private domain, where retail-driven regulation has burdened producers, mainly located in exporting countries, with higher costs for safety monitoring procedures.[126] These transformations have not, however, deeply involved the civil liability regimes, which remain centred around the supplier or the importer.[127]

The multiplicity of regulatory instruments pose several questions for further research. First, they increase costs of compliance for producers who are often subject to multiple, not necessarily converging rules. Second, they do not send a clear signal to consumers who may suffer more than benefit from private overregulation. Third, given their rule-making procedures, they pose a general issue concerning legitimacy of processes and products. Often the codes are unilaterally drafted without the involvement of consumer and environmental associations as well as other NGOs. Participatory rights are not well defined. Notice and comment is rare and not well enforced, while judicial review is almost non-existent. Finally, enforcement is still quite diverse. For a supply chain, it is mainly performed through self-enforcing contracts, and judicial control is a last resort. For codes enacted by

*(Contd.)*

*Canada there are moves towards a risk based enforcement and monitoring as a means to enhance the efficacy of enforcement efforts at both the federal and provincial levels.*"

123 See FAO's strategy for a food chain approach to Food safety and quality: a framework document for the development of a future strategy Direction, available at http://www.fao.org .

124 S. Henson and J. Humphrey, *The impact of private food safety standards*, cit. underlining the similar evolution in public regulation with the consolidation of HAACP.

125 See M. Blair, C. Williams, Li Wen-lin, *The roles of standardization, certification and assurance services in global commerce*, CLPE Comparative research in Law and political economy, w.p. 12/2008 available at http://ssrn.com/abstract=1128143.

126 For the materials of the conference "*Private agrifood standards and a sustainable future for African agriculture*", 27-28 March 2008, London, available at http://www.agrifoodstandards.net/en/global/agrifood_standards_workshop_2008.html.

127 The FAO proposal of introducing shared liability as part of the food chain approach has not been followed by national systems, where liability is still distinguished according to the position in the chain and joint and several liability is more the exception than the rule. The network approach I have proposed distinguishes between liability towards consumers and means to allocate liability along the chain so as to maximize consumer protection and efficient allocation.

private, retail or producer associations, internal procedures are not very effective. The emergence of co-regulation at the national level improves enforcement mechanisms by bringing about a mixed system of rules made by private actors and enforced by administrative agencies with or without the contribution of courts.

**Author contacts:**

**Fabrizio Cafaggi**
Villa Schifanoia
Via Boccaccio, 121
I-50133 Firenze
Email : fabrizio.cafaggi@eui.eu