

PDF hosted at the Radboud Repository of the Radboud University Nijmegen

The following full text is an author's version which may differ from the publisher's version.

For additional information about this publication click this link.

<http://hdl.handle.net/2066/100881>

Please be advised that this information was generated on 2017-05-29 and may be subject to change.

NIJMEGEN SOCIOLOGY OF LAW WORKING PAPERS SERIES



2012/02

Tetty Havinga

Transitions in Food Governance in
Europe

The Institute for Sociology of Law is part of the Law Faculty of the Radboud University Nijmegen. It has a long tradition of empirical research in the area of law and society. Special focuses are the legal professions, food safety regulation, migration law and anti-discrimination law. The researchers at the Institute have different disciplinary backgrounds (including law, sociology, anthropology, development studies, Middle Eastern studies) and much of their research is interdisciplinary.

The Nijmegen Sociology of Law Working Paper Series provides a vehicle for staff members, PhD students and fellows to rapidly disseminate their research results.

ISSN 2212-7844

Nijmegen Sociology of Law Working Papers Series 2012/02

Faculty of Law
Radboud University Nijmegen
P.O. Box 9049
6500 KK Nijmegen
The Netherlands

Editors Dr. Tetty Havinga, t.havinga@jur.ru.nl
 Friso Kulk MA LLM
 Dr. Anita Böcker

Lay-out Hannie van de Put

Cover photo Erik van 't Hullenaar

© 2012, Tetty Havinga

url: www.ru.nl/rechten/SociologyofLawWorkingPapers

TRANSITIONS IN FOOD GOVERNANCE IN EUROPE FROM NATIONAL TOWARDS EU AND GLOBAL REGULATION AND FROM PUBLIC TOWARDS HYBRID AND PRIVATE FORMS OF GOVERNANCE

Tetty Havinga*

Abstract

In my paper I discuss two important transitions in food governance in Europe. First, the increased role of private actors in global food safety regulation and the development of retail driven private food safety regulation from the 1990s onwards. Second, the increased role of the European Union. In response to food crisis such as BSE and dioxin, the European Union strengthened its food safety legislation and established the European Food Safety Authority. At the national level, several European countries have established new regulatory agencies or reformed existing agencies to oversee the national food control activities.

Both transitions resulted in very complex regulatory arrangements with multiple partners at multiple levels. Governmental organizations have to deal with the new circumstances and new core values such as transparency and independence. How do governmental agencies react to private standard setting?

Key words

Food regulation – food law – European union – private regulation – certification – food safety – supermarkets – public regulation

Contextual conditions of transitions in food governance

Food governance has changed dramatically during the past decades. National governmental bodies used to take the lead in rule-making and enforcing compliance. This traditional command-and-control regulation by the national state was considered not satisfactory anymore. The globalization of the food chain, the growing public concern about food safety, the increased economic power of supermarkets and the perception of insufficient governmental regulation made up a fertile ground for transitions in food governance. Recent trends are the emergence of retailer-led food governance and of global coalitions for setting standards, an increased use of global business to business standards and of third party certification (Fulponi 2006, Hatanaki & Busch 2008, Havinga 2006, Marsden et al. 2000, 2010), and a move from a prescriptive towards an enforced self-regulating approach (Martinez et al. 2007).

* Paper for the workshop on Multiple partners at multiple levels: Multi level governance at the 8th Transatlantic Dialogue in Nijmegen, June 2012. t.havinga@jur.ru.nl.

Complex global food chains

Food chains became more internationalised. In response to consumer demand, improved techniques for transport and storage, and growing consumer incomes, European retailers increasingly obtain fresh products from all over the world enabling a year-round supply. The food chain encompasses places of production and trading around the globe. In my local supermarket in the Netherlands I find mangos from Mali, salmon from Scotland, avocados from South Africa, shrimps from Surinam and French beans from Kenya next to Dutch foods.

The above examples involve just plain farm or fish products. Even fresh vegetables, fruits, seafood and meat are increasingly bought ready-to-eat (washed, cut, spiced, pre-cooked, preserved, mixed). Many food products are processed foods. Less than half of the food people in the US, Spain and France eat are unprocessed basic foods such as vegetables, fruits and meat.¹ Ingredients in processed foods are not just locally obtained, but are sourced all over the world. The incident with milk contaminated with melamine from China in 2008 illustrates the consequence of global sourcing of food ingredients. Melamine was found worldwide in various food products: in sweets, cookies, chocolate, baby food, pretzels, ice-cream, coffee and soya in countries such as Singapore, Indonesia, Canada, United States, the Netherlands, United Kingdom and Poland. These products were probably produced with an ingredient that contained Chinese contaminated milk.²

Such complex global food supply chains make things difficult for governmental agencies aiming at the production and marketing of safe food. This applies particularly to national governments because their jurisdiction is locked inside their national territory. For controlling food products and ingredients from outside the borders, national governments can only rely on inspections by foreign agencies (governmental or private) and import controls.

1 *New York Times*, http://graphics8.nytimes.com/images/2010/04/04/business/04metrics_g/04metrics_g-popup-v2.jpg (last consulted May 23, 2012). People in the US consumed 787 pounds per capita packaged food in 2009 (and 602 pounds fresh food); in Spain 759 pounds packaged and 621 pounds fresh food and in France 739 pounds packaged and 462 pounds fresh food.

2 Kennisbank Voedselveiligheid VWA, *Melamine* (www.vwa.nl); David Bradley, *Melamine contaminated food list* (<http://www.sciencebase.com/science-blog/melamine-contaminated-food-list.html>) ;<http://www.niernieuws.nl/?id=1747&cat=&loc=5#>; <http://evmi.nl/voedselveiligheid-kwaliteit/melamine-duikt-op-in-pindakoek/>; <http://evmi.nl/voedselveiligheid-kwaliteit/ah-waarschuwt-voor-melamine-zoutjes/> (all documents consulted 9-5-2012).

Public concern about food

A second change during the last decades is the growing public concern about food. Food safety developed from a mainly technical and apolitical issue into a political contested issue. Food safety got heightened issue saliency after several food related scares and disputes, such as mad cow disease, hormone-treated meat, dioxin contamination, genetically modified foods and more recently EHEC. Food risks became more visible and recognised and are subject of growing public concern. Food safety issues attract media attention and are debated in political bodies. Loeber et al. (2012) show that framing incidents as 'food scare' (in contrast to framing as environmental scandal or disaster in the past) goes hand in hand with institutional changes in the regulatory system in the European Union and in several EU member states.

What is safe food?

Safe food is food a consumer can eat without negative health consequences. Safe food is not identical with fresh food, organic food or healthy food. Fresh organic lettuce may be microbial contaminated. Several risks may be connected to food: contamination with bacteria, priones or toxic material (animal pharmaceutical, herbicides, dioxin), allergens and particular nutrients (sugar, fatty acids, unhealthy eating) (Buzby 2001, Van Kreyl & Knaap 2004).

It is not obvious which foods are safe for consumption. The same food product may carry no risk at all for one consumer, and be quite dangerous for another consumer (due to allergic response, disease or eating habits). The ways food is stored and prepared can cause food disease or on the other hand kill harmful microbes. Risks of a particular production method or additives are not always known. There also might be a difference between subjective and objective risks.

In the course of time we see changes in what is considered to be the major food safety issue. Between 1970 and 1990 much attention is paid to harmful chemical substances in food. After 1990 healthy food becomes the most prominent issue. Recently the chemical safety of food receives attention once again, next to health consequences of animal diseases and microbial contamination.

Advances in scientific and technological capabilities to detect even small amounts of substances in food and the growing knowledge about diseases related to food add to the public perception of food safety risks. Public concern about food is not confined to issues of safety and health risks. Increasingly, claims are being made for responsibly produced food (sustainable food production, fair trade, animal welfare and labour rights) and healthy food (sugar, salt, fat, additives, low calorie).

Market power of supermarkets

A third change in the food sector is the increasing power of corporate retailers in the supply chain. Through mergers and take-overs a small number of large grocery retailers have gained a powerful position, both economical and politically (Marsden et al. 2010, p. 9). This concentration enables large corporate retailers to expand their grip on the global and domestic food supply chain. Supermarkets have a large majority share of the food consumers market in Western countries such as the Netherlands, the UK and the USA. In the UK since 2000 the number of stores operated by the four largest grocery retailers has more than doubled (Tesco, Asda/Walmart, Sainsbury's, Morrisons). By 2006 in the UK, 72% of all grocery sales took place in supermarkets (Marsden et al. 2010, p.10). The growing share of own branded products reinforces the strong negotiating power of the retailers (Marsden 2010, p. 134).

Perception of insufficient government regulation

Generally traditional command-and-control regulation has been criticized for being ineffective, inflexible and neglecting the responsibilities of corporations and citizens. Similar criticism has been passed on governmental food regulation. The response of the British government to the BSE crisis has often been cited as a manifest illustration of the incapability of the national government to deal with food risks.

The BSE crisis not only revealed that the British government was not capable of dealing with the crisis. It also showed that the European Union failed to act adequately. BSE spread from the UK to the continent with British veal and cows. In the aftermath of the BSE crisis evidence of mismanagement by the Commission was disclosed by the Temporary Committee of Inquiry into BSE (Vos 2000). The Commission had followed a policy of disinformation that had prevented legislative activity and member states from restricting the import of British beef. The relevant committees had been influenced by British members and were under political pressure.

In the context of these developments new forms of food governance emerged, including private food standards, corporate social responsibility initiatives, and transnational regulation. In the next sections I discuss two important transitions in food governance in Europe. First, the increased role of private actors in global food safety regulation and the development of retail driven private food safety regulation from the 1990s onwards. Second, the increased role of the European Union.

Shifts towards private governance

Due to their legal responsibility and because of fear for potential reputation damage in case of unsafe food products, food industry and retailers devel-

oped initiatives for decreasing food safety risks and increasing consumer confidence in safe food. In the 1990s several large food manufacturers and supermarket chains developed their own quality control system. In order to control the input, the companies want to make sure that the goods they purchase will meet particular standards and qualifications. The goods may be raw materials, parts of or semi-finished products for further manufacturing, or end products ready for sale. A company quality control system often included requirements for suppliers. For example, in the 1990s several British and Dutch supermarket chains contractually obliged suppliers to meet a comprehensive quality assurance standard including unexpected inspections at farms, gardens and plants (e.g. Albert Heijn in the Netherlands, Tesco and Sainsbury in the United Kingdom)(Havinga & Jettinghoff 1999, Havinga 2006). Since the 1990s private retail standards have expanded dramatically. Food retailers joined forces to harmonize supplier standards. Regulation of food safety by retailers using quasi legislation as an instrument to force trade partners to take food safety measures, evolved from regulation originated from one supermarket chain to regulation of the united supermarkets, monitored by independent certification and inspection organizations. National private certification schemes have crossed borders and became global or transnational. Currently dominant transnational retail-driven standards are BRC, IFS, SQF and GlobalGap (Fuchs et al. 2011; Van der Kloet 2011).

Retailers use their economic power to impose food safety and quality requirements on their suppliers. As Grabosky (1994: 429-432) noted in his study on environmental regulation, 'Large retailers are in a position to register their product and process preferences with suppliers, and the awesome purchasing power that large retailers command often carries considerable influence.' Retailers are increasingly powerful in the food chain. Suppliers are dependent on supermarket chains and have to comply with their requirements (Boselie et al. 2003; Grievink et al. 2002; Havinga 2006; Marsden et al. 2000, 2010).

Next to retail-driven-standards many other private food standards have emerged initiated by food industry, industrial associations, trading corporations, civil society organizations or alliances between these organisations. Their objective ranges from securing safe food to improving animal welfare, protecting the environment, labour rights or fair trade. Examples include fair trade labels (Ethical Trading Initiative, Max Havelaar), sustainability (Marine Stewardship Council, Carbon Trust), religious food standards³ (Orthodox Union, OK Kosher Certification, and Ifanca, IHI Alliance), organic food labels (Ifoam, KRAV, EKO), food safety (FS22000, Dutch HACCP, Global red meat standard,

3 In some Islamic countries the government is involved in setting and enforcing religious food laws, such as the Malaysia's Department of Islamic Development (JAKIM).

Qualität Sicherheit, TrusQ), vegetarian or biodynamic labels (Vegan, Demeter).⁴

The systematic depiction of the variety of regulatory standard-setting (RSS) in their Governance Triangle provided by Abbott and Snidal (2009a) is not restricted to food standards. They distinguish three groups of actors directly involved in standard setting: states, firms and NGOs. The seven zones in the triangle indicate the three forms of single-actor standards, three forms of dual-actor standards and one form involving direct participation of all three groups of actors. The three governance triangles illustrate the increase of standards that include firms and NGOs (see figure). In the pre-1985 period there are only a few RSS schemes, mostly in Zone 1 (state). The 1985-94 decade shows an emergence of RSS schemes particularly firm-schemes (zone 2), but also the first multi-stakeholder schemes en NGO schemes. The post-1994 period shows a continued proliferation of firm schemes and an increased number of NGO schemes and the emergence of collaborative schemes (NGOs and firms or tripartite, zone 6 and 7).

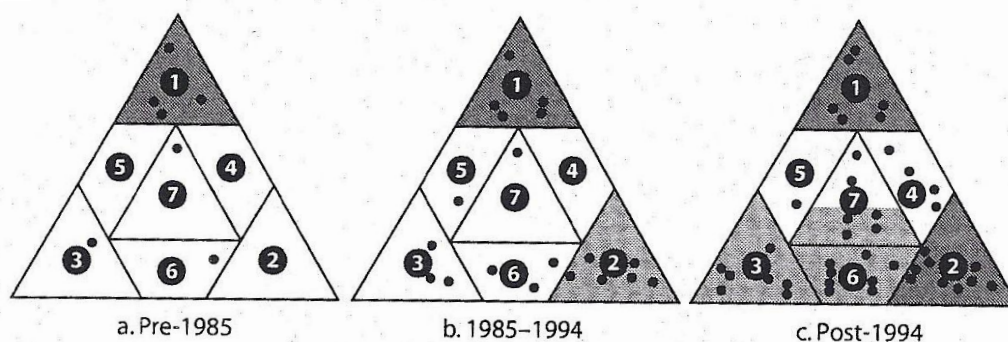


Figure 2.2. Evolution of the governance triangle

Abbott and Snidal have included only six regulatory food standards in their governance triangle.⁵ However, other food standards could easily be included.

Food regulatory schemes are (still) dominated by state regulation and by firm schemes. However, in the future civil actors might become more important in food regulation in line with the evolution described by Abbott and Snidal in

4 See Van der Meulen 2011, Havinga 2010, Van Amstel.

5 Marine Stewardship Council 1997, Max Havelaar 1988 (fair trade coffee) and International Federation of Organic Agriculture Movements 1972 (organic food), all three in zone 6 (dual-actor standards with involvement of firms & NGOs) and WHO Code of Marketing for Breast-milk Substitutes 1981 in zone 1 (state standard) (Abbott and Snidal 2009a). GlobalGap 1997 and SQF 1994 (SafeQualityFood) in zone 2 (Abbott and Snidal 2009b p 513).

the fields of environment, labour rights and corporate responsibility. Already, we can observe an increase of these actors in the food regulatory domain striving for social interests (e.g. fair trade movement), environmental interests (e.g. organic food movement) or animal welfare (e.g. animal rights movement).

In these new forms of regulation, private actors are assuming pivotal roles in terms of rule-making, monitoring compliance, and enforcement. Food industry and retail corporations, in particular, have become key players in the governance of the global food system through the creation of governance institutions such as private standards, corporate social responsibility initiatives (CSR) and public-private or private-private partnerships (PPPs).

Shifts towards EU

The BSE crisis is often mentioned as turning point in the European Union food policy. In response to food crisis such as BSE and dioxin, the European Union strengthened its food safety legislation and established the European Food Safety Authority. At the national level, several European countries have established new regulatory agencies or reformed existing agencies to oversee the national food control activities.

The BSE food scare led to the awareness that the existing risk management and risk assessment systems in the EU failed. This worked as catalyst to reform the structure of EU food safety regulation. Previously, EU food policy had developed ad hoc both as part of the Common agricultural policy and as part of the common market.

National food laws to combat adulteration, fraud and health risks constitute trade barriers. This is the reason to harmonize food regulations within the common European market. At first European directives only involved intra-Community food trade. For example, the 1964 directive on fresh meat only applied to establishments producing fresh meat to be marketed in another member state.⁶ In 1991 the directive is amended to extend its application to all slaughterhouses, cutting plants and cold stores involved in the production of fresh meat within member states.⁷ The rationale is still the common internal market. Next to this inclusion of producers producing for the domestic market, the number of issues covered by European food law has been expanded.

The Commission responded to the accusation of lack of transparency and of manipulation during the BSE crisis with proposals for radical reform. The Commission adopted an approach emphasizing food safety and consumer protection based on three general principles: separation of the responsibility for legislation and for scientific advice, separation of the responsibility for legisla-

6 Directive 64/433/EEC, OJ 121,29.7.1964, p. 2012/64.

7 Directive 91/497/EEC, OJL 268, 24.9.1991, p. 69.

tion and for inspection, and greater transparency and information during decision-making and inspection. The 2002 General Food Law lays down the general principles and covers the entire food supply chain and includes not only food safety requirements but also issues of animal health, product quality, cattle feed and sustainability. Many European directives are being replaced by regulations; regulations are a stronger legal form because regulations have direct effect (they don't need transposition by member states in national legislation to become effective).⁸

Resulting landscape of food governance in Europe: How do governmental agencies react to private standard setting?

Both transitions resulted in very complex regulatory arrangements with multiple partners at multiple levels. Governments responded with stricter food safety regulations to the alleged decline in consumer confidence and the threat to lose export markets. Producers and suppliers became expressly primarily responsible for food safety while national governments became responsible for controlling the adequacy of risk controlling mechanisms of companies in a food chain. Governmental organizations have to deal with the new circumstances and new core values such as transparency and independence. How do governmental agencies react to private standard setting.

Do governments participate in private standard setting? There are some examples of governmental actors participating in private standard setting. So are several national governments involved in the adaptation of GlobalGap to the domestic situation. But in my view, this government participation is rather limited. Governments do not participate in most private standards to my knowledge, at least in The Netherlands. Sometimes, food regulation implies a mix of both governmental and private actors. An example is a form of enforced self-regulation: to comply with legal obligations a food manufacturer or food-outlet is legally obliged to have a food safety system. To comply with that obligation the company has two options: develop and install their own system or adopt and apply the approved hygiene code of the industrial association. The (private) industrial association of butchers, retailers or bakery's drafts a hygiene code, which is then approved by the Minister (public). Only recently

8 Regulation (EC) No 178/2002 of the European Parliament and of the Council 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 (also referred to as the General Food Law). The three basic EU food hygiene regulations are: Regulation (EC) 852/2004 on the hygiene of foodstuffs, Regulation (EC) 853/2004 laying down specific hygiene rules for food of animal origin, and Regulation (EC) 854/2004 laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption.

Netherlands departments or the food authority cautiously are getting involved in private standard setting. They still have to find their way. But many private food standards have included the requirement to comply with all applicable national and international legislation. Looking it this way, governmental agencies do not have to participate in private standard setting to have governmental 'standards' included.

Another option for governmental agencies to relate to private standards, is incorporation of elements of private standards in public regulations. In fact this is what is happened to HACCP (Hazard Analysis Critical Control Point). A food safety system based on the principles of HACCP was mandatory in private food safety standards and was later incorporated in European Union legislation (respectively for meat, food stuffs and primary produce). It is a general pattern that legislation often (partly) lays down the state of the art (established practices). This mechanism results in private set norms becoming public norms.

Third, governments could choose to regulate the private standard setting process. This happens for example when international or national government require recognition of certification bodies or accreditation bodies.

Are governmental monitoring and enforcement strategies adapted? Certification agencies, private standard owners and certified firms often hope for a privileged treatment of certified firms by governmental food inspection and enforcement agencies. However, this is not reality. Dutch authorities do not rely on private certificates. Even private parties often do not recognize other private certificates. The result is that a food business has to deal with several auditors and inspectors. In the Netherlands recently the Food Safety Authority tries to reach agreement with industrial associations or large food companies. The Food authority wants access to all sampling and registration data from the private food safety system. It seems to me the governmental agencies try to engage private actors to act as deputy sheriffs.

Global food and agricultural governance is increasingly being created not only by (inter)governmental actors but also by private actors. The transformation from traditional state regulation towards less state centred forms of regulation, involved new relationships and a renewed allocation of responsibilities between government bodies on the one side and private actors on the other. These new forms are characterised by a less dominant role for the government and more responsibilities for private actors (Havinga 2006, Oosterveer 2005, Marsden et al. 2010). New forms of food regulation include not only public actors, but also private actors such as firms, NGOs and other organisations both inside and outside the production chain.

It seems that public food safety regulation is becoming less detailed and less prescriptive by focusing on the obligation to provide for an adequate food

safety system. At the same time, important forms of private regulation are rather detailed with a high degree of intervention curtailing freedom of regulated firms. Governmental regulation could never have reached the improvements in food safety measures that private food standards have.

References

- Abbott, K.W. and Snidal, D. (2009a) 'The Governance Triangle: Regulatory standards institutions in the shadow of the state', in W. Mattli and N. Woods (eds.) *The Politics of Global Regulation*, Princeton, NJ [etc.]: Princeton University Press, 44-88.
- (2009b) 'Strengthening International Regulation Through Transnational New Governance: Overcoming the orchestration deficit', *Van der Bilt Journal of Transnational Law*, 42: 501-578.
- Boselie, D., Henson, S. and Weatherspoon, D. (2003) 'Supermarket Procurement Practices in Developing Countries: Redefining the Roles of the Public and Private Sectors', *American journal of agricultural economics* 85: 1155-1161.
- Buzby, J.C. (2001) 'Effects of food safety perceptions on food demand and global trade', in: A. Regmi (ed.), *Changing structure of global food consumption and trade*, Washington: US Department of agriculture, Economic research service USDA, 55-66.
- Fuchs, D., Kalfagianni, A. and Havinga, T. (2011) 'Actors in Private Food Governance: The legitimacy of retail standards and multistakeholder initiatives with civil society participation', *Agriculture and Human Values*, 28: 353-367.
- Fulponi, L. (2006) 'Private voluntary standards in the food system: The perspective of major food retailers in OECD countries', *Food Policy*, 31: 1-13.
- Grabosky, P.N. (1994) 'Green Markets: Environmental Regulation by the Private Sector', *Law & Policy* 16:419-448.
- Grievink, J.-W., Josten, L. and C. Valk (2002) *State of the art in food. The changing face of the worldwide food industry*. [Doetinchem]: Elsevier Business Information.
- Hatanaka, M. and Busch, L. (2008) 'Third-Party Certification in the Global Agrifood System : An Objective or Socially Mediated Governance Mechanism?', *Sociologia Ruralis*, 48/1: 73-91.
- Havinga, T. (2006) 'Private regulation of food safety by Supermarkets', *Law & Policy*, 28: 515-533.
- (2008) 'Actors in private food regulation. Taking responsibility or passing the buck to someone else?' *Nijmegen Sociology of Law Working Papers Series 2008/01*, Nijmegen: Institute for Sociology of Law.
- (2010) 'Regulating halal and kosher foods. Different arrangements between state, industry and religious actors', *Erasmus Law Review*, 3: 241- 255.
- Havinga, T. and Jettinghoff, A. (1999) 'Self-regulation in business: Beyond associational self-regulation', in: F. van Loon and K. van Aeken (eds.), *60 maal recht en 1 maal wijn: Rechts-sociologie, Sociale problemen en justitieel beleid*, Liber Amicorum prof. dr. Jean Van Houtte, Leuven: Acco, 1999: 609-620.
- Henson, S. and Reardon, T. (ed) (2005) 'Private Agri-food Standards: Implications for Food Policy and Agri-food Systems', *Food Policy*, 30: 241-253.
- Hutter, B.M. (2011) *Managing Food Safety and Hygiene. Governance and Regulation as Risk Management*. Cheltenham/Northampton: Edward Elgar.
- Loeber, A., Hajer, M., Levidow, L. (2011) 'Agro-food crisis: Institutional and discursive changes in the food scares era', *Science as culture*, 20: 147-155.
- Marsden, T., Flynn, A. and Harrison, M. (2000) *Consuming Interests. The Social Provision of Foods*, London: UCL Press.
- Marsden, T., Lee, R., Flynn, A. and Thankappan, S. (2010) *The New Regulation and Governance of Food. Beyond the Food Crisis?* New York/London: Routledge.

- Martinez, M.G., Fearne, A., Caswell, J.A. and Henson, S. (2007) 'Co-regulation as a possible model for food safety governance: Opportunities for public-private partnerships', *Food Policy*, 32: 299-314.
- Mattli, W. and Woods, N. (eds.) (2009) *The Politics of Global Regulation*, Princeton, NJ [etc.]: Princeton University Press.
- Meidinger, E. (2008) 'Multi-interest self-governance through global product certification programmes', in O. Dilling, M. Herberg and G. Winter (eds) *Responsible Business. Self-governance and law in transnational economic transactions*, Oxford en Portland Oregon: Hart publishing: 259-292.
- Oosterveer, P. (2005) *Global Food Governance*, Wageningen: Wageningen University.
- Van der Kloet, J. (2011) 'Transnational Supermarket Standards in Global Supply Chains. The Emergence and Evolution of GlobalGAP', in J. Van der Kloet, B. de Hart & T. Havinga (eds) *Socio-legal Studies in a Transnational World. Special Issue Recht der Werkelijkheid*, (32) 3: 200-219.
- Van der Meulen, B. (ed.) (2011) *Private Food Law. Governing food chains through contract law, self-regulation, private standards, audits and certification schemes*. Wageningen: Wageningen Academic Publishers.
- Van Waarden, F. (2010) 'Governing global commons: Public-private-protection of fish and forests', in J. Swinnen, J. Wouters, M. Maertens and A. Marx (eds) *Private Standards and Global Governance. Legal and Economic Perspectives*, Cheltenham: Edgar Elgar.
- (2012) 'Varieties of private market regulation: problems and prospects', in D. Levi-Faur (ed.) *Handbook on the Politics of Regulation*, Cheltenham: Edward Elgar Publishers: 469-485.
- Vos, E. (2000) 'EU Food Safety regulation in the aftermath of the BSE crisis', *Journal of Consumer Policy* 23: 227-255.