



Make It *What* Way? The Impact of Multiple Standards Regimes

DANIELLE BERMAN

[Paper first received, 20 March 2012; in final form, 3 January 2013]

Abstract. Agri-food standards are often envisaged as a regulatory tool to create uniformity in production. However, as Dunn argues, ‘standards... produce unique regulatory landscapes rather than the uniform ones standardizers envisage’. To account for this variation, scholars consider contextual factors such as market institutions, cultural norms, and the structural organization of agriculture. I argue that as standards increasingly overlap, intersect, and even contradict each other, they emerge as significant contextual features in their own right. This article analyses how producers for Russia’s burgeoning fast-food industry respond to the competing demands of multiple agri-food standards. Drawing on interviews and site visits with Russian agricultural producers and food processors, I illustrate how the presence of multiple competing standards can both undermine expected standardizing effects and empower producers to adopt and incorporate standards in novel ways. I find that in their efforts to satisfy both multinational firms and domestic consumers, producers legitimize practices that may only comply partially with the various standards they claim to meet.

Introduction

As agri-food standards and the organizations behind them continue to proliferate, the implications for suppliers grow more complex. While standardized production – in all of its constituent moments from farm to fork – may be the goal, the actual homogenizing effect of standards has long been subject to debate (Hatanaka et al., 2006; Dunn, 2007; Neilson, 2007; Tallontire et al., 2009; Busch, 2010; Henson and Humphrey, 2010; Ouma, 2010; Pritchard et al., 2010). As Dunn (2003, p. 1495) argues, ‘standards become geographically variable as they are implemented in particular local contexts suggest[ing] they produce unique regulatory landscapes rather than the uniform ones standardizers envisage’. To account for this variation, Dunn (2003) encourages scholars to consider local contextual factors such as market institutions, cultural norms, political resistance and the structural organization of agriculture. Yet, as agri-food standards increasingly overlap, intersect, and even contradict each

Danielle Berman is a Social Science Research Analyst at the USDA Food and Nutrition Service, Office of Research and Analysis, Room 1014, 3101 Park Center Drive, Alexandria, VA 22302, USA; email: <danielle.berman@fns.usda.gov>. All work undertaken for this article was completed while the author was a Ph.D. candidate in Sociology at the University of Wisconsin-Madison. The opinions expressed in this article are those of the author and do not necessarily represent the views of the Food and Nutrition Service, or the US Department of Agriculture.

other, they emerge as significant contextual features in their own right. For this reason, I argue that greater attention be paid to how producers respond to the demands of multiple standards.

Agri-food standards can also be understood as technologies that codify culturally specific evaluative principles (Stark, 2010): the basis for claiming that meeting specified standards makes the product 'better'. For instance, Freidberg's (2004) analysis of green-bean supply networks suggests that cultural differences in British and French marketplaces resulted in distinct approaches to quality standards. The British firms imposed audit-oriented standards to document ethical and environmentally sound production processes, while the French importers emphasized aesthetic features of the end product. These distinctive orientations to quality standards both reflected and fostered differences in the two commodity networks. Other studies recount similarly how producers respond when firms impose standards based on 'foreign' priorities or quality concerns (Winchester et al., 2012). Yet, the question arises: what happens when numerous distinct orientations, and the standards regimes that codify them, take effect in a single market or single commodity network? To address this question, I examine the strategies of fast-food companies seeking to impose their proprietary standards in Russian agri-food supply chains and the responses of producers and processors.

The Russian fast-food industry offers a particularly instructive setting for observing how producers respond to multiple standards. Throughout most of the Soviet period, the state was the sole authority over agricultural and food systems. With perestroika and the eventual dissolution of the Soviet Union, Russian agri-food enterprises became suddenly party to the full panoply of global agri-food standards regimes. Private standards came into effect in Russia as a distinct force alongside a still powerful government authority – not in response to, or in association with, a neo-liberal hollowing out of the state. Russian producers and processors who participate in fast-food supply chains therefore provide a useful vantage point for understanding the opportunities and challenges presented by competing standards and the market channels they define. By attending to the strategies and interpretations suppliers employ in the face of multiple standards, this article calls attention to interactive effects that are frequently overlooked; responses to any given standard are often, and in substantial ways, contingent on the other standards in play.

Like Stark (2010, p. 13), who 'see[s] the mix of evaluative principles as creating uncertainty and therefore as opening opportunities for action', I observe how the imposition of multiple standards regimes highlights (at least for producers) the ambiguities inherent in each one. Drawing on interviews with representatives Russian from fast-food corporations and their suppliers, I show how producers respond to the co-presence of multiple standards as they work to implement any individual standard. As others have documented, producers are not merely passive recipients of state or corporate demands; many producers act strategically, pursuing those standards (or elements therein) that help them access desired markets (Monteiro and Caswel, 2009; Bain, 2010). This suggests that as supply chain actors confront multiple competing standards, their strategies can both undermine expected standardizing effects and empower producers to adopt and incorporate standards in novel ways.

Agri-food Standards in – and as – Context

Numerous studies attest to the significance of agri-food quality standards in terms of chain governance (Gereffi et al., 2005; Ponte and Gibbon, 2005; Busch, 2011) and

production practices (Jaffee and Masakure, 2005). Agri-food standards are increasingly important in the organization of (particularly export-oriented) markets, shaping opportunities and constraints for supplier access (Burch and Lawrence, 2005; Bain, 2010; Lee et al., 2012; Tennent and Lockie, 2012). Regardless of which entity sets the standards, or for what purpose, they achieve far more than governing production practices in the interest of product quality and safety; standards work to articulate the various market channels available to producers.

Public standards, in the form of government regulations and statutes, can privilege certain producers by requiring technologies and practices that only some have the capacity to adopt (Sterns and Reardon, 2002). Government regulations, ostensibly intended to improve product quality or ensure food safety, often give preference to large-scale, well-capitalized producers. As corporations assume an increasingly central role in establishing standards, research confirms that private standards similarly privilege certain producers over others, often to the same effect (Ghezan et al., 2002; Henson and Reardon, 2005; Henson et al., 2005; Gereffi and Lee, 2009). While some private standards initiated by non-governmental organizations have the explicit aim of improving market access for small producers by documenting and advertising their adherence to socially desirable practices (e.g. fair trade and other ethical labeling schemes; Giovannucci and Ponte, 2005; Jaffee and Howard, 2010), many do not (Stanford, 2002).

The rapid proliferation of agri-food standards (and the entities that develop, establish, and enforce them), blurs many of the typologies once used to characterize this trend. For instance, while public and private standards may be portrayed as independent from one another, they often interact in complex ways. They may be complementary or mutually reinforcing; private standards may fill in gaps left by government regulations or facilitate compliance (Smith, 2009). Private actors, such as corporations or trade lobbies, often influence public standards (Bingen and Siyengo, 2002; Mutersbaugh, 2005), and national public standards from one country can shape public or private standards elsewhere (Stanford, 2002; Lee, 2009; Schewe, 2011). Additionally, the division of labour associated with defining, implementing, and enforcing standards may be split or shared across public and private entities resulting in hybrid regimes; mandatory public standards are often implemented and monitored by private third-party agents (Schewe, 2011). Though many continue to describe private standards as voluntary – as opposed to mandatory government regulations – Henson and Humphrey (2010) make clear even this distinction is faulty; in many cases, the market dominance of corporate buyers makes private standards *de facto* mandatory and thereby on a par with public standards in terms of determining market access. Finally, despite neo-liberal efforts to toward deregulate and privatize, many agri-food value chains are governed by both private standards and public regulations (Henson and Humphrey, 2010).

Recognizing this overlap, governments, corporations, and NGOs work together in a variety of ways to facilitate adherence to multiple standards regimes. Rather than work at cross purposes, some corporations are collaborating (as European food retailers did in establishing EurepGAP, now GlobalGAP)¹ to harmonize otherwise distinct sets of standards into one overarching set of benchmarks (Campbell, 2005; Konefal et al., 2005). Governments also cooperate in establishing international standards, most notably those codified in the FAO Codex Alimentarius. Such alliances continue to reconfigure the global regulatory landscape and the balance of power between standard-setting agents. As multilateral institutions work to harmonize

standards, such as those associated with organic certification, they may supersede both independent NGO-based standards and local or national standards to establish a new, global, 'lowest common denominator' (Mutersbaugh, 2005).

Localities, producers, and even national governments may, however, actively resist efforts to harmonize standards in the name of protecting claims to their unique, or superior, product qualities. Quality and niche production associated with the post-industrial global economy fosters the use of proprietary standards to capture added value through product differentiation (Reardon and Farina, 2001; McCluskey and Winfree, 2009; Busch, 2010; Konefal and Busch, 2010). Increasingly, firms use labels and brands to indicate commitment to a wide range of product quality, safety, social, and environmental concerns (Giovannucci and Ponte, 2005; Bacon, 2010; Freiberg, 2010). These standards regimes often incorporate both product and process standards, even though they often reflect not only different methods of enforcement but also fundamentally opposed logics. Product standards refer to what a product *is* (e.g. its size, shape, color, sugar content, moisture, etc.) and can also establish acceptable residue levels for pesticides or antibiotic treatments.² Process standards refer to *how* a product is produced, covering such aspects as pest management techniques, labour conditions, and slaughtering methods.

While some process standards are necessary for meeting product standards (e.g. room temperature prevents the growth of food-borne pathogens), many govern practices that have no observable impact on the end product,³ so certifications increasingly communicate elements of quality that a product cannot (e.g. that the item was produced ethically). Mutersbaugh (2005) calls attention to the additional burdens imposed by certification standards that concern neither the production process, nor its end product, but rather the techniques employed to assure the integrity of inspections and documentation. Thus, process oriented certifications like Hazardous Analysis and Critical Control Points (HACCP),⁴ fair trade, or organic, necessitate an additional layer of standards in order to pass a verification audit (Mutersbaugh, 2002; Hatanaka and Busch, 2008; Jaffee and Howard, 2010). Many producers face onerous requirements as they become subject to multiple audit regimes, each covering not only specific production practices, but also management, record keeping, and labour relations. Meeting a number of nearly identical standards 'can imply higher transaction costs and inefficiencies for food supplying firms' (Smith, 2009, p. 34), constraining the ability of small producers to comply.

The audit orientation of these verification systems makes them especially conducive for fostering local variation on the ground by privileging record keeping over first-hand inspections or end-product testing. Third-party audits, reliant on self-monitoring and self-auditing procedures, often review records of action, rather than action itself. As Ponte (2007, p. 190) describes, 'this consists of a paperwork-and-visit ritual, where documentation systems and traceability provide the legal basis of safety management and an insurance against legal claims in case of non-conformity'. These technologies both rely on and inculcate an 'audit culture', an implicit acceptance of the validity of audit as a means for providing transparency and accountability in one's activities (Strathern, 2000). Or, as Power (1997) emphasizes, 'rituals of verification' increasingly stand in for relationships of social trust by providing standardized documentation, especially in contexts that suffer from information asymmetry. Despite their 'panoptical' aims, however, audits are said to provide 'comfort rather than proof' (Power, 1997, p. 36) generating their own opportunities for performance, omission, and even fraud. In other words, audit-based standards

regimes rely on the devolution of the implementation, monitoring, and enforcement of standards, creating a multitude of opportunities for disparate practices.

Alongside concern about corporate hegemony over supply chains and the disciplining power of standards (Busch, 2000), many accounts highlight the agency of suppliers. For instance, Bain (2010) calls attention to how Chilean producers improve their access to global markets by taking an active role as 'standard makers' within GlobalGAP's decision-making processes. Other examples describe how, despite (or thanks to) selective compliance with standards, producers maintain access to desired supply chains. For example, Dunn (2003) describes the 'informal' practices of pork producers to access unregulated or less-regulated markets. In his account of the variable application of GlobalGAP in Kenyan horticulture, Ouma (2010) describes how non-certified fresh fruit and vegetable (FFV) growers retain access to markets thanks to 'backstage arrangements'. He attributes 'the recent growth of the industry despite the often-attested exclusion of smallholder farmers from the market' to their ability 'to keep multiple evaluative principles in play' (Ouma, 2010, pp. 219–220). Freidberg (2004) also finds greater flexibility in the application of standards among green-bean producers in Burkina Faso where there are more alternative market channels (and associated standards) for producers. Thus, the presence of alternative markets, and the standards that govern them, allows producers to strategically select and implement standards to balance the burden of compliance with the highest differential rewards. Between private corporate standards, public regulations, and the full range of quality certifications governing various market channels, Mutersbaugh (2005, p. 2034) aptly suggests that producers are increasingly 'consumers of certifications'.

Despite the implicit recognition that multiple standards regimes are at play in most market contexts, very few studies consider explicitly how this fact affects producers. Of those that do, Jaffee and Masakure (2005)⁵ describe nicely how the interaction of contextual features results in diverse standards that permit opportunities for strategic responses by vegetable producers in Kenya. In another such account, Gorton et al. (2011) find that Serbian FFV producers who contract with foreign corporations did not, as some might expect, reject public standards. Instead, they were *more* likely than other growers to comply with state regulations, arguably as a means to build legitimacy in the eyes of corporate buyers. Ultimately, the authors find that the co-presence of multiple standards gives rise to the 'co-existence of two supply chains with markedly different regulatory systems' (Gorton et al., 2011, p. 151). This, they argue, emerges from the patterned responses of producers to disparate standards regimes. While this example illustrates how multiple standards can reinforce one another, it is also possible for their interaction to yield the opposite effect (i.e. adoption of one standard forces abandoning another, or achieving neither).

It is interesting to note that among the limited studies that explicitly consider the co-presence of distinct standards regimes, many are based in post-socialist transition economies. Perhaps, as some suggest (Dunn, 2004; Gorton et al., 2011), the uneven and transitional qualities of post-socialist contexts help to illustrate the variable impact of ostensibly uniform standards. Indeed, Swinnen and Vandeplass (2007) call attention to the role that demand for improved quality standards – and the difficulty producers have in meeting them – contributes to the emergence of 'hybrid organizations' that rely on a mix of contracts and vertical coordination. Rau and Van Tongeren (2010, p. 483), describe how 'special provisions' enabled small-scale Polish meat producers to retain access to domestic markets despite their difficulties in complying with EU standards. In her analysis of the same industry, Dunn (2003, p.

1503) argues that 'in food and other products regulated by standards, gray markets may be arising as a direct result of standardization'. While particularities of the post-socialist context in general, and the Russian context in particular (as detailed below), may highlight the multivalence of agri-food standards, their experience as such is unlikely to be unique to these locales.

Agri-food Supply Chains in the Post-Socialist Russian Context

While mature capitalist economies or developing countries serve as the typical backdrop for studying agri-food standards, the complex regulatory landscapes of post-socialist countries call attention to the potential for variation in market-economy institutions. Transition economies are commonly described as fraught with corruption, characterized by a high degree of legal uncertainty, and rooted in a distinctive set of business norms (Johanson, 2000; Gow and Swinnen, 2001; Kornai et al., 2004; Radaev, 2004; Hendley, 2010). Given the well-founded call to attend to the ways in which local contexts mediate the introduction and dissemination of agri-food standards (Bair, 2005), some features of the post-socialist Russian case warrant description here: the role of formal contracts, guardedness with respect to information sharing, and rampant corruption.

The importance of personal relationships and trust in Russian business transactions is well documented (Ledeneva, 1998, 2006). Indeed, Russia is commonly perceived as lacking cultural norms to underpin effective contract enforcement (Hendley, 2010). Foreign corporations acting on these perceptions are more likely to adopt strategies to build trust with suppliers or use market-based incentives (such as bonus payments) to encourage compliance than to pursue legal action for breach of contracts (Swinnen and Vandeplas, 2007). Thus, in the Russian context, corporations may grant suppliers more flexibility than is generally observed in settings where the rule of law with respect to contract enforcement is perceived to be stronger.

The increased reliance on audit-based self-governance schemes runs up against a hostility toward knowledge sharing that persists, for many, from Soviet times (Husted and Michailova, 2002). Michailova and Husted (2003) argue that information was closely guarded in the Soviet system not only as a means of coping with uncertainty, but also as a show of respect for the hierarchical structure of organizations that associated knowledge with power and rank. Others suggest that secrecy provided a hedge against state power over economic transactions. This cultural legacy introduces additional challenges for implementing standards that explicitly aim to increase transparency, provide traceability, and improve monitoring systems through paper audits.

The weak rule of law – and widespread corruption – also contributes to a recent Russian policy shift governing national food safety and quality certifications. Until February 2010, producers needed to maintain state sanctioned, or GOST-R,⁶ certifications, which were granted on the basis of product testing in government labs. Pervasive fraud in sample selection, testing procedures, and certification led the government to rescind officially its formal testing requirement and replace it with an operator-based requirement to 'document' adherence to government standards (Prime Time Russia, 2010). This change marks a dramatic, yet partial, step toward a more neo-liberal approach that relies on self-auditing and caveat emptor; while the means of enforcement have been swept away, the content of the old rules has not

changed. Given that the observations and interviews recounted below predate this shift, it is fair to assume that the practices prompting it were not uncommon.

Methods and Data

My research methods are informed by the global value chain approach;⁷ while my unit of analysis is the chain (or network) as a whole, my investigation focused on the relationships between firms within these chains (Gereffi, 1994; Dicken et al., 2001). To identify participants in the value chains of interest, I took fast-food corporations as my 'point of entry' (Kaplinsky and Morris, 2001). I began by identifying lead firms, including both foreign fast-food companies and their primary Russian competitors. Based on information they provided about their supply networks, I identified their processors, producers, and input suppliers. This strategy enabled me to map out supply networks, identify shared suppliers, and learn of those firms that, while not currently part of these networks, either had been previously or were developing capacity to become so. The resulting sample of 16 fast-food companies and 28 supply firms (processors, producers, and input suppliers) provided a mix of firm size, product, location, and nationality (Table 1).

The analysis presented here draws primarily on interviews with processors and producers, in order to shed light on supplier responses to multiple standards regimes.⁸ Many of these interviews incorporated a facility or farm tour. I conducted interviews with 19 producers, most of whom represented three different supply chains: lettuce, potatoes, and poultry. Interviews with corporate representatives from fast-food supply chain and quality assurance departments provide the buyers' perspective and inform the discussion below regarding corporate complicity in the partial adoption of standards. Many of these representatives spoke under the condition of anonymity; therefore even though I refer to McDonald's by name, I avoid identifying smaller firms as that would potentially disclose the respondent. These interviews constitute a subset of those conducted during fieldwork between October, 2006 and August, 2007 (Table 2).

Given the competitive nature of the industry, not all firms were eager to meet with me, and even those individuals who agreed to interviews did, at times, refuse to provide what might seem like fairly innocuous information (e.g. the number of restaurant outlets). Cross-cultural research involving private industry and trade information can be difficult, and I cannot be sure if (or when) respondents might have been intentionally deceptive, though a few were overtly uncooperative. The use of multiple sources, however, helped to ferret out the most egregious claims, and the consistency of answers across respondents gives me confidence that these views are widely held. Interviews with government officials (both US and Russian), representatives from NGOs and business associations, and researchers from both academic institutes and private consulting firms further served to corroborate information. I also relied on industry publications, corporate websites, and the news media to cross-check details provided by respondents. Finally, field days, trade exhibitions and industry conferences offered additional sources of verification and confirmation that my sample, while limited and non-random, expressed views similar to others in the sector. Nonetheless, it is not always possible to know if the attitudes and accounts shared accurately reflect practices and experiences.

Table 1. Sample of firms and respondents.

Type of Firm	National origin	Location (HQ)	Product
<i>Fast Food Chain</i>			
Carl's Jr (CKE Restaurants)	American	St. Petersburg	Burgers
Sbarro	American (also 2 franchisees)	Moscow	Pizza
Subway	American (also 2 franchisees)	St. Petersburg	Sandwiches
Pizza-Nord, LTD (Pizza Hut)	American - Russian Franchisee	St. Petersburg	Pizza
McDonald's	Canadian	Moscow	Burgers
Grillmaster	German - Russian Franchisee	Moscow	Burgers
Rostiks/KFC	Joint Venture	Moscow	Fried Chicken
Chainaya Lozhka	Russian	St. Petersburg	Blini
Grabli	Russian	Moscow	Russian fare
Kroshka Kartoshka	Russian	Moscow	Potatoes
McPik	Russian	Novosibirsk	Burgers
Podorozhnik	Russian	Novosibirsk	Sandwiches
Russkoe Bistro	Russian	Moscow	Pirozhki (Russian fare)
Teremok	Russian	Moscow	Blini
New York Pizza	Russian - American expat owner	Novosibirsk	Pizza
Stardogs	Russian (Danish origin)	Moscow	Hot dogs
<i>Processor</i>			
McCain	Canadian	Moscow/Lipetsk	Potatoes
Frito Lay	American	Kashira	Potatoes
Farm Frites	American	Moscow	Potatoes
Potato pogarskaya	Russian	Bryansk	Potatoes
Talosto	Russian	St. Petersburg	Meat
Michailovsky	Russian	Penza	Meat
Toushinskaya	Russian	Moscow Oblast	Meat
Belaya Dacha	Russian	Moscow Oblast	Vegetables
Green Terra	Russian	Moscow Oblast	Vegetables
Unibake	German	Moscow	Baked Goods
Ehrmann	German	Moscow Oblast	Dairy
<i>Producer/Processor</i>			
Belaya Ptitsa	Russian	Belgorod	Poultry
Chelni Broiler	Russian	Tatarstan	Poultry
Elinar	Joint venture (US/Russia)	Moscow Oblast	Poultry
Petelinka	Russian	Moscow Oblast	Poultry
Praxis, Roskar	Russian	Leningrad Oblast	Poultry
Prioskole	Russian	Belgorod	Poultry
Produktie Pitanye	Russian	Moscow	Poultry
Rostiks/KFC's Chicken Factory	Joint venture (US/Russia)	Moscow	Poultry
Russkoe Visotskaya	Russian	Leningrad Oblast	Poultry
Name withheld	Russian	Moscow Oblast	Poultry

Table 1. cont.

Type of Firm	National Origin	Location (HQ)	Product
<i>Producer</i>			
Independent grower	Russian	Lipetsk	Potatoes
Zeros	Russian	Lipetsk	Potatoes
Dmitrovski Ovoshi	Russian	Moscow Oblast	Vegetables
Moscovski Agrokombinat	Russian	Moscow Oblast	Vegetables
Russian Farms	Russian	Moscow Oblast	Vegetables
<i>Input Supplier</i>			
Doka Gene	Russian (with UN assistance)	Moscow Oblast	Potatoes
Reyk Zvaan	Netherlands	Moscow	Vegetables

Table 2. Respondents by position and firm type.

Type of firm	Position / Title	# of Respondents
<i>Restaurant</i>		
	General Management	8
	Marketing	8
	Franchise Director / Franchisee	7
	Supply Chain	12
	Quality Assurance	6
<i>Processor</i>		
	Manager / Executive	12
	Technical Assistance	2
<i>Agricultural Producer</i>		
	Owner-operator	16
	Manager	3
<i>Input Supplier</i>		
		2
<i>Distributor</i>		
		2
<i>Other</i>		
	Government agency	8
	NGO	5
	Consulting firm / Researcher	4
Total		95

Table 3. Leading fast-food (QSR) chains in Russia.

Brand Name	Opened	Market Value Share – Fast Food				# of Outlets	
		2006	2007	2008	2009	2007	2010
McDonald's	1990	41.4	42.6	40.8	43.0	189	270
Sbarro	1997	4.3	5.1	4.8	4.1	110	158
Rostik's KFC	1993/2005	2.3	6.0	5.7	5.7	135	155
Chaynaya Lozhka	2001	1.4	1.5	1.4	1.4	54	69
Kroshka-Kartoshka	1991	1.2	1.4	1.5	1.7	205	326
Baskin Robbins	1992	1.1	0.9	0.9	0.8	125	145
Teremok	1998	1.0	1.3	1.5	1.6	127	181
Subway	1994	0.4	0.6	0.7	1.0	39	127

Source: USDA, 2011a, pp. 12–13.

The Russian Fast-food Sector

McDonald's opened its first restaurant in (Soviet) Russia even prior to the introduction of a market economy. The Pushkin square location opened to historic fanfare on 31 January 1990 and remains the busiest of its more than 33 000 outlets worldwide.⁹ From the start, McDonald's presence extended far beyond its restaurant doors; in 1989, McDonald's Canada invested \$45 million US to construct McComplex in Solntsevo, a suburb of Moscow. The processing lines at this 100 000 square foot facility provided most of the component parts – buns, cheese, burger patties, and more – for McDonald's restaurants not only in Russia, but also in 18 other European countries. The demand for inputs also promoted follow-sourcing (Reardon et al., 2007): attracting multinational agri-food processing firms, especially those with longstanding ties to the industry (e.g. Heinz, McCain). Over time, McDonald's outsourced these lines to processing firms that have built or taken over factories in Russia.¹⁰ McDonald's was the first Western firm to require HACCP compliance for its Russian suppliers.

McDonald's is just one, albeit large, player in Russia's rapidly expanding fast-food sector (see Table 3). In fact, fast food is the fastest growing segment in Russia's food-service industry (Wenberg, 2007). The industry experienced rapid growth between 2006 and 2008, as the food-service market share of 'organized food chains' rose from 15.6% in 2007 to 21.2% in 2008 (Euromonitor International, 2009). In the years since this fieldwork was completed the industry has grown substantially, franchising is increasingly common (which brings new challenges for standards enforcement), and the Russian regulatory presence has been reduced. Thus, follow-up research is needed to observe whether variation in responses to multiple standards persists and if these practices enable suppliers to retain negotiating power and market access in the context of an increasingly globalized and corporate controlled marketplace.

The fast-food industry provides an especially useful case for examining producer responses to multiple standards regimes.¹¹ As companies expand beyond the thriving urban centres of Moscow and St. Petersburg, they also increase reliance on domestic supply to compensate for poor transportation infrastructure. McDonald's leads the way in domestically sourced inputs, claiming over 80% of its inputs are produced in Russia. To ensure product consistency, most firms have extremely detailed and rigorous quality standards that exceed concerns for basic food safety. Yet fast-food companies loathe exclusive arrangements with their suppliers – in either direction – as Russia's supply chain is notoriously uncertain (author interviews). The standardized-menu business model requires that firms guard against supply shortages; KFC/Rostik's cannot run out of chicken, just as McDonald's cannot run out of ground beef.¹² Thus, unless their business partner is another foreign MNC, they always establish multiple suppliers. At the same time, domestic suppliers are encouraged to maintain other clients to minimize supplier dependence and ensure that rejecting their products will not threaten their long-term survival. For many suppliers, participation in this industry, therefore, requires compliance with multiple proprietary standards regimes in addition to mandatory state regulations.

Multiple Standards at Work

Producer Evaluations of Competing Standards

Producer responses to competing standards illustrate the complex relationship between cultural preferences, practical considerations, and market pressures. They

also reflect how divergent evaluative principles undermine claims that any particular standards are better able to ensure products of ‘higher’ quality. For example, many producers claimed that Russian national standards – especially for food-borne pathogens, pesticide residue, and GMOs – exceeded those of the US and Europe. Others noted that corporate fast-food buyers had stricter sanitary norms, more regular and detailed audits, and exacting cosmetic standards associated. Many respondents were ambivalent, both lauding the strictness of GOST standards and describing McDonald’s standards as superior – the gold standard of the industry.¹³

GOST standards specify very low allowable limits for many contaminants and zero tolerance for certain bacteria like salmonella (author interviews). As one lettuce grower noted, ‘the Russian rules for lettuce at least are stricter than they are in Europe in terms of the amount of time they consider something to be fresh [shorter shelf life] and their quality standards’. A representative from a large fresh produce supply firm (a former pickle supplier to McDonald’s) claimed that more pesticides are permissible in Europe and US than in Russia. Even so, many considered these requirements impractical and viewed Russia’s enforcement mechanisms as deeply flawed.

Respondents also spoke frankly about managing the incompatibility of Russia’s strict standards and the demands of modern production practices. For example, rather than comply with pesticide regulations, growers timed applications to avoid detectable residue levels upon testing. As one producer revealed, ‘it’s true because they test the lettuce and they find pesticides and they won’t take them. And they do test the lettuce. But there’s no way to raise lettuce without using any’. This strategy is pursued despite costly penalties for failure to comply: the state may require lettuce growers to leave an entire field fallow for three months if any pesticide residues are detected in product samples. Producers’ ambivalence in evaluating these standards reflects the reality that the cost of compliance often equals the cost of (discovered) non-compliance: nothing to sell.

The authority of Russia’s stringent product standards can be undermined when coupled with the means to verify compliance. Verification protocols shape how producers perceive the rigor of Russian product standards given the relationship between testing methods and the likelihood of detecting pathogens. A quality assurance manager in a poultry facility described the salmonella testing process of Russian government-approved labs:

‘you do a deep muscle [test] but knowing anything about the interior of a muscle, it’s basically sterile... So of course you sanitize the outer surface, which is where you would have salmonella. You sterilize your knife. You make your cut. You collect your insides. And it’s all done in a basically an aseptic technique. It should be negative.’

Even though this manager was familiar with other, more effective, methods for salmonella testing (US standard procedures),¹⁴ and would have preferred implementing them to monitor the bacterial load in his facility, the zero-tolerance standard made it too risky. Situations like this reveal how consequential verification systems can be for gauging the effective weight of underlying standards.

The aesthetic orientation of many product-oriented corporate standards that concern physical product specifications (often purely cosmetic in nature) are not always seen as yielding superior products (especially when meeting them requires flouting process standards imposed by the same private firm). Indeed, respondents were

quick to note that strict fast-food standards might promote 'quality' products, but not necessarily 'healthy' ones. As a poultry processing firm manager said, 'fast food is worse than chicken legs, there's nothing healthy in it'. Similarly, a representative from a beef supplier first detailed the rigorous nature of McDonald's quality control systems and then went on to say, 'they attend very seriously to quality... But for my own weight concerns I pass it up... I don't go there, and I won't. But it's tasty, very tasty'.¹⁵ That is, while respondents described corporate standards as rigorous, strict, and demanding, they often viewed the results they produced as subpar. Additionally, product specifications often run counter to cultural (domestic market) preferences, traditional markers of healthfulness and taste, and basic rules of economics. For instance, fast-food companies prefer large, mealy potato varieties, unpopular among Russian consumers. In the case of poultry, fast-food firms tend to specify smaller birds than are normally deemed economically efficient.

With respect to food safety standards, however, many respondents perceived the complex audit-oriented systems of process standards as less strict than product standards. End-of-the-line product testing (i.e. GOST) provided greater certainty of a product's safety than they felt process standards such as HACCP could provide. Many quality assurance managers, uninterested in HACCP, replied curtly to any suggestion that GOST's product-based standards might be inadequate. They also implied that HACCP was ineffective and easily falsified (though few would claim otherwise for GOST's testing programme). The reliance on paperwork audits in lieu of product testing or regular site inspections was viewed as so naïve it was laughable. The fact that Russian guidelines for HACCP are far simpler than those used in the US¹⁶ further bolstered this perspective. Thus, despite their comprehensiveness, the perception that they are largely unenforceable, often impossible to meet, and generally irrelevant contributed to pervasive dismissal of process standards as *effectively* strict.

Despite these debates, there remained general consensus that McDonald's was the gold standard for agri-food quality, with respect to both product testing and process requirements. For example, a poultry and egg processor described how, 'the laboratory does [a test] there for any of these bacteria or something. According to HACCP there should be 100 bacteria [per square centimeter], here in particular for the state there [could be] 10 for example, and for McDonald's it should be one'. Most producers echoed this assessment that McDonald's standards for both product and process were more rigorous, and at least to some degree, more likely to be enforced. With respect to process-based standards, a lettuce producer noted that:

'McDonald's of course has their own survey for producers from which they develop a rating system. They ask all kinds of questions including things about hand-washing practices and where they get their water that is used for cleaning. They also come and look to be sure the answers were honest because it's easy enough to answer one thing but to have something else be true.'

Thus, the shared sentiment that McDonald's commitment to quality was exemplary reflected assessments of both the content of their standards, and their involvement in ensuring they were enforced. Even so, suppliers made few claims to being in complete compliance.

Producers are constantly comparing and evaluating the various standards regimes with which they might comply. The presence of – and simultaneous engage-

ment with – *multiple* standards regimes promotes these comparisons, highlights the ambiguities that exist within any single regime and fosters skepticism of them all. But producers are not simply victims, struggling under layers of public and private regulation (Ouma, 2010). Indeed, ambiguities and uncertainties can be empowering, as they elicit independent judgments of the relative stringency, effectiveness, and force of competing regimes. Determinations about which standards to adopt and the degree to which they were fully implemented were shaped by the comparisons made across different standards regimes.

'Shopping' for Standards: Strategic Adoption

As suppliers choose which standards to pursue, they are not simply identifying the strictest, or alternatively, the easiest, standard. As found elsewhere (Jaffee and Masakure, 2005; Bain, 2010), producers reported choosing standards based on the belief doing so improves their market access. For this reason, many producers and processors choose internationally sanctioned process standards (e.g. ISO, HACCP) and pursue third-party certification regardless of what their current buyers demand.

Rather than expressing a sense that they are reacting to private (corporate) or public (government) demands, many respondents described their choice of standards and protocols as proactive. Producers viewed meeting Western standards regimes as an effective way to signal their modern Western sensibilities and demonstrate their departure from the 'old Soviet system' or the 'Russian mentality'. For example, a producer in the early stages of HACCP certification reported, 'it is a very long and difficult process to achieve global standards. We have only taken steps in that direction... to depart from [the] old Soviet level to more worldly standards'.

A supplier's aspirations in the global marketplace were key to determining how to approach to standards regimes. For example, a beef processing company representative said, 'from the beginning, our president had a goal to meet European standards. He looked at firms worldwide. He understood from the beginning that the future of business would be at the high level of quality'. Like early adopters of any technology, some well-capitalized firms considered adoption of global standards critical for business development despite the high investment costs. Others expressed optimism about Russia's future standing with respect to international trade organizations, and feared being left behind. These producers consider the choice of standards regimes in the context of their long-term plans to participate in the world market. In light of this view, producers who aim for global competitiveness may work to meet McDonald's standards as a symbol that they have met or exceeded all other standards to which they may be subject.

The reputational gains associated with ties to key foreign MNCs were, for some, even more highly valued than official certifications. One poultry and egg processor described his decision to pursue HACCP as follows: 'we understood that for Western companies... it's necessary for production to be high quality; that is, with the quality guaranty of the HACCP system... For them our internal Russian system is not enough. Therefore we saw that it was extremely necessary for us, and they also helped us.'

Perhaps surprisingly, he described the changes required by HACCP as relatively minor, requiring the addition of hand-washing stations, UV lamps, and other small details. He even described the HACCP audit as far less onerous than the one performed by McDonald's and therefore chose to internalize McDonald's standards

into their own independent audits. The fact that his firm sold a mere 5% of its production to McDonald's underscores how the adoption of these standards did not result directly from this supply relationship. Rather, the prestige associated with supplying major Western firms makes the changes worth the effort. In fact, many suppliers felt that becoming an established supplier of McDonald's was just as effective a signal (if not more) to other potential buyers as formal third-party certifications. That said, McDonald's promotes (and in other contexts, requires) HACCP certification of their suppliers.

Importantly, few producers select a single standards regime to pursue; most worked to implement multiple different regimes at the same time. Strategies varied widely, depending, in part, on the mix of standards and a supplier's available resources. Some produce for one firm one day and another on the next in order to abide by the associated standards for each. Others operate distinct production lines for different buyers, and still others work to integrate multiple standards regimes into their own internal quality assurance and audit systems. The few slaughterhouses that supply McDonald's with beef and pork reported using an entirely separate set of procedures and equipment when producing for them (e.g. a stunning device used for pork, or separate knives for each cut). These modifications require not only physical and mechanical changes to facilities, but also intensive training and management oversight.

Finally, some respondents attributed their interest in adopting new standards to perceived changes in consumer tastes rather than government or corporate pressure. For example, one supplier asserted, 'people are looking at leaf quality not just price when they are picking things up at the store in deciding whether or not to buy them'. Rationales like this are often behind producer decisions to label their products 'ecologically clean' even though this label does not reflect any formal standards and carries no legal weight. The growing importance of brand reputation further drives the development of proprietary standards and associated quality claims. However, as the next section describes, the enthusiasm with which firms claim adherence to new quality standards is not always matched by efforts to implement them.

'Performing' Standards: Selective Adherence and Partial Implementation

Both interviews and observations confirmed that the decision to adopt a particular standard does not imply that all associated requirements are fully implemented. In fact, when choosing which standards to adopt, producers not only factor in the costs associated with implementation, but the degree to which partial compliance is sufficient to access desired market channels. The ambiguities in evaluating their relative stringency, the questionable legitimacy of private standards in the Russian context, and the absence of effective enforcement all contribute to piecemeal and partial adoption of multiple standards under the guise of full adherence.

Even if transgressions against GOST standards are not so severe as to constitute fraud, many producers admit (and many buyers acknowledge) that standards are not always met. The unsettled ambiguities about the relative stringency of standards, and the competing emphases on product versus process requirements can contribute to partial compliance. A poultry processing facility representative provided this example, 'the Russian standard for room temperature where meat's being processed [is] 10 degrees or less. We're nowhere close. So, even some of the Russian standards we're not meeting'. He went on to justify this by reference to the fact that,

at the end of the line, the temperature of the processed poultry consistently met product standards.

Given that suppliers who work with one MNC often work with many, they also experience multiple audits throughout the year as each company inspects the facilities and/or their records. Most inspections come with advance notice, and only some include a walk-through of the facility. Increasingly, as corporations turn to audit-based process standards like HACCP, they conduct 'paper audits', inspections of records rather than actual practices. For some, this emphasis led to paperwork becoming an end in itself, while failing to serve the purpose of alerting managers to potentially hazardous conditions so that corrective actions can be taken. This kind of behaviour might be expected (recall that Michailova and Husted (2003) suggest that Russia's corporate culture does not foster open lines of communication, especially up the hierarchical chain of management). Managers at processing plants also noted that upon reviewing records, they would be alarmed at levels recorded (in temperature, for example) that should have, but did not, prompt corrective action on the processing line. In fact, because staff did not analyse logs or consider the duly recorded measurement with reference to trend lines, they often overlooked the fact that measurements exceeded specified norms.

Though corporate and third-party audits are common ways of ensuring adherence to process standards, it remains impossible to verify compliance in day-to-day operations. For example, while visiting a poultry processing facility, I witnessed delivery trucks studiously avoid the disinfectant pools put in place across the driveway leading to the loading dock. Rather than slow down to drive through the dip in the road, most drivers maintained their speed and skirted the obstacle. One manager said I was asking the wrong questions when inquiring about HACCP certification, telling me I needed to ask if, and to what extent, anyone actually followed the plan.

'Implemented means are you documenting – to me – I don't feel I've lied to you yet and if you say, "is it implemented?" Yeah. I can pull it out right here and show you where our CCPs are at, I can show you what my corrective actions are. [But] I'm not following what my plan says. So, if you're a good auditor you're going to keep asking those right questions and get me to the point where I have to answer no.'

Others noted the difficulty in transplanting 'foreign' models to Russian lines. 'They had a HACCP plan here. It was taken right from a textbook. It sounded great. But you take it to the line; we weren't anywhere near meeting our CCPs. We were incapable.' Non-compliance can happen on an individual day-to-day level or at the level of supervisory decision-making. For instance, a new requirement to track and analyse trends in bait boxes met with this response, 'I'll take the hit. I mean, I'm not going to spend the time or money to track 1,000 bait boxes... I guarantee: Fall, we see an increase. Spring, we see an increase'. At both levels, line workers and supervisors express a 'right' to make 'reasonable' decisions with respect to the desired results. In the process, they retain a degree of autonomy through partial compliance and, to some degree, do so with the approval (often implicit) of their corporate buyers.

Corporate Complicity: The Journey to a Standard Destination

Far from being a covert practice, it is widely acknowledged by corporate buyers, producers, and third-party auditors alike that standards regimes are only partially or

performatively adopted. Both the legal institutional context and the limited population of sufficiently 'modernized' suppliers contribute to the characterization of partial compliance not as corruption or fraud, but rather as steps on the way toward full implementation. In fact, most suppliers who have the requisite technology and skills gained them over the course of long relationships with other firms in the supply chain; the trust engendered over time may, in the long run, prove to be more valuable to corporate buyers than immediate and total standards compliance (Ledeneva, 2006). Even the most demanding buyers readily admit that standards adoption is a process, or as one corporate representative put it, 'a journey'. To accommodate this, fast-food firms rely on their MNC intermediaries to provide suppliers with technical assistance to support ongoing incremental improvements. This allows corporate buyers to both acknowledge the gradual process on-the-ground and claim that the supplies they receive comply with their rigorous standards.

Firms also recognize the operative distinctions between the relative authority of corporate and government standards. Most respondents, even corporate representatives, refer to only GOST standards as truly required, even if contracts require adherence to international or corporate standards.

'If it is legislation, yes, so they must comply with the legislation, that's for sure – but, for our general standards, no, we don't say you must comply with it 100%, no. What we want each farm to show their small, small improvement every year. So, show me few things you did in this area to improve, and we say, OK, let's agree on the few points. Let's agree on the ten points, and we will be happy.'

Despite rampant corruption within the inspection and certification system, there has long been a clear line of authority in terms of the state as the sole institution vested with the power to establish and enforce standards. Thus, faced with proliferating standards regimes and standards setters, Russian producers question the legitimacy of non-governmental agents in making such demands, and many remain unconvinced that they are truly obligated to meet them. Rather than challenge this orientation, buyers express willingness to compromise.

Corporate buyers recognize that this cacophony of standards contributes to non-compliance and, in response, have sought to harmonize private standards. To this end, McDonald's has negotiated with MNC supermarket chains to harmonize food safety standards imposed in the Russian marketplace. In this way, buyers can seek to make *their* standard *the* standard, eliminating alternative market channels facilitated by other buyers. This would both reduce the uncertainty and variability that producers face and bring unified pressure, through coordinated audits, to bear on suppliers with the aim of increasing compliance.

Discussion

The negotiation of contradictory evaluative principles by actors in Russia's fast-food supply networks highlights important points of disjuncture between the still pervasive post-Soviet context and the emerging governance mechanisms and cultural assumptions imposed by multinational agri-food corporations. Russia's market regulatory institutions, which continue to suffer from a high degree of uncertainty (Stark, 2010), contribute to the variation observed across the suppliers with whom I spoke. Foreign buyers recognize that even when formal enforcement methods work,

pursuing them would likely sour critical personal relationships and limit the available options to compel full compliance. In response to these conditions, corporations are moving toward vertical integration and standards harmonization. As such, this case illustrates the challenges confronting corporations as they introduce neo-liberal regulatory schemes into institutional and cultural contexts where enforcement mechanisms are weak. Moreover, many Russian firms question the legitimacy of corporate authority, arguing that it is the responsibility of the state to establish and enforce agri-food standards. In this way, producers justify their failure to comply with corporate demands. In effect, producers chose the state as their enforcer, even as they positioned themselves to gain access to corporate supply chains.

More generally, this case illustrates how producers struggle to appraise and respond to multiple standards regimes simultaneously, and how they attempt to resolve conflicts in the letter of a requirement by adhering to its spirit – as they interpret it. Insofar as standards codify the evaluative principles of different market channels, producers must continually assess the degree to which implementing changes to meet one set of standards might impinge on their ability to comply with another. Thus, it can fall to suppliers to determine the precise mix of practices to employ in order to appease corporate buyers, while also retaining quality characteristics that are desired by alternative (often traditional domestic) markets. The resulting shift in the balance of power allows producers to choose partial implementation and signal their ‘modernity’ without having to fully modernize their facilities and production processes. Corporate representatives reinforce this when they modify requirements in order to reduce conflicts between government regulations, corporate standards, and local norms. This finding concurs with those who suggest that the degree to which large buyers effectively control their suppliers may be overstated (e.g. Dunn, 2003; Freidberg, 2004; Jaffee and Masakure, 2005).

It is not, however, the simple presence of alternative market channels, domestic or otherwise, that creates room for agency among producers. The delineation of these market channels by disparate quality standards provides the regulatory and rhetorical space for producers to negotiate partial or hybrid implementation of ostensibly required standards. This relativizing process can empower suppliers vis-à-vis standard setters and create opportunities for supplier-driven recombination of standards, or to borrow from Stark’s (Stark and Bruzst, 1998) earlier work, *bricolage*. In this way, they promote variation through the emergence of novel hybrid practices. Thus, I argue that standards must be considered as contextual features in their own right; the interaction of multiple standards regimes contributes to observed variation in important ways. In order to understand supplier responses to any particular regime, it is necessary to consider how suppliers perceive its coexistence with other standards and can leverage these overlapping, and often contradictory, demands to their advantage.

Notes

1. According the organization’s website, ‘GlobalGAP is a private sector body that sets voluntary standards for the certification of agricultural products around the globe’ <http://www.globalgap.org/cms/front_content.php?idcat=2>. This organization emerged from EurepGAP (where GAP=Good Agricultural Practices) in 2007 to reflect its membership’s presence beyond Europe. See Campbell (2005) for a good description of EuropGAP’s emergence and mission.

2. Some might refer to these characteristics as search and experience attributes (Ponte and Gibbon, 2005, p. 2). For a more detailed and systematic description of types of standards (not limited to the agri-food sector) see (Nadvi and Waltring, 2004).
3. These are also referred to as credence characteristics (Humphrey and Schmitz, 2002).
4. HACCP is a management system developed to ensure food safety by analysing production systems for potential hazards and identifying 'critical control points' in the production process where limits and tolerances (e.g. for heat or bacteria level) can be established and monitored such that corrective action can be taken if conditions fall outside these predetermined ranges. For a detailed description, see the resources provided by the US Food and Drug Administration <<http://www.fda.gov/Food/FoodSafety/default.htm#haccp>>.
5. For example, see the graphic they provide on p. 353.
6. GOST (technically, GOST-R), a Russian acronym for 'state standard' (*gosudarstvennyy standart*), refers to the technical standard and official certifications required for agri-food firms (as well as other industries).
7. While I use the terminology 'global value chain' here, I make no substantive distinction between this terminology and those preferred by others in the broader literature such as, 'global commodity chains' or 'global production networks'. To my mind, the referent is the same even if the theoretical emphasis of those using the various terms differs.
8. Formal interviews were supplemented by numerous informal conversations and visits with additional producers.
9. As reported in the *New York Times* (Arvedlund, 2005). Or, more recently, here: <http://www.isitpacked.com/2010/11/01/where-is-the-busiest-mcdonalds-in-the-world/>
10. Tulip (2010) reported on an interview with McDonald's Russia president, Khasbulatov, quoting 'from day one, it was our aim to outsource as much as possible locally, and thus build an independent supply chain'. The article goes on to report that 'McDonald's has approximately 130 local suppliers, and the aim is to localize the remaining 20% of supply within the next 3–5 years'.
11. While much of the research on corporate agri-food standards addresses food retail (Reardon and Farina, 2001; Henson and Reardon, 2005), Russia's food retail sector has been slow to consolidate (Euromonitor International, 2008) and relies less on domestically sourced products than the fast-food industry (Dries and Reardon, 2005).
12. I was at a McDonald's in Moscow on a summer's day when they ran out of ice cream. It was not a pretty sight.
13. This ambivalence is echoed by conflicting findings about consumer preferences for domestic products as opposed to foreign imports (Caldwell, 2002, 2004; Zavisca, 2003)
14. Whole birds are placed in a bag with a rinse solution and shaken (or rocked) for one minute. A sample of the solution is then tested for salmonella (USDA, 2011b).
15. This claim gains in significance given that it followed on the heels of his disparagement of the healthfulness of chicken legs (especially the 'Bush's legs' that swamped the Russian marketplace thanks to US food aid in the early 1990s).
16. As one respondent noted, the books alone differ on the magnitude of hundreds of pages (in the handbook I encountered the first 578 pages cover US HACCP standards, and the remaining 23 pages address the Russian standards). While the general approach of HACCP can be understood as universalized, the requirements for its implementation continue to vary nationally.

References

- ARVEDLUND, E.E. (2005) McDonald's commands a real estate empire in Russia, *New York Times*, 17 March, Published online <<http://www.nytimes.com/2005/03/17/business/worldbusiness/17mcdonalds.html>>.
- BACON, C. (2010) Who decides what is fair in fair trade? The agri-environmental governance of standards, access, and price, *Journal of Peasant Studies*, 37(1), pp. 111–147.
- BAIN, C. (2010) Governing the global value chain: GLOBALGAP and the Chilean fresh fruit industry, *International Journal of Sociology of Agriculture and Food*, 17(1), pp. 1–23.
- BAIR, J. (2005) Global capitalism and commodity chains: looking back, going forward, *Competition and Change*, 9(2), pp. 153–180.
- BINGEN, J. and SIYENGO, A. (2002) Standards and corporate reconstruction in the Michigan dry bean industry, *Agriculture and Human Values*, 19, pp. 311–323.
- BURCH, D. and LAWRENCE, G. (2005) Supermarket own brands, supply chains and the transformation of the agri-food system, *International Journal of Sociology of Agriculture and Food*, 13(1), pp. 1–18.
- BUSCH, L. (2000) The moral economy of grades and standards, *Journal of Rural Studies*, 16, pp. 273–283.
- BUSCH, L. (2010) Standards, law, and governance, *Journal of Rural Social Sciences*, 25, pp. 56–77.

- BUSCH, L. (2011) Food standards: the cacophony of governance, *Journal of Experimental Botany*, 62(10), pp. 3247–3250.
- CALDWELL, M. (2002) The taste of nationalism: food politics in postsocialist Moscow, *Ethnos*, 67(3), pp. 295–319.
- CALDWELL, M. (2004) Domesticating the French fry: McDonald's and consumerism in Moscow, *Journal of Consumer Culture*, 4(1), pp. 5–26.
- CAMPBELL, H. (2005) The rise and rise of EurepGAP: European (re)invention of colonial food relations?, *International Journal of Sociology of Agriculture and Food*, 13(2), pp. 1–19.
- DICKEN, P., KELLY, P., OLDS, K. and YEUNG, H.W. (2001) Chains and networks, territories and scales: towards a relational framework for analyzing the global economy, *Global Networks*, 1(2), pp. 89–112.
- DRIES, L. and REARDON, T. (2005) *Central and Eastern Europe: Impact of Food Retail Investments on the Food Chain*, Report no. 7. Rome: FAO Investment Centre/EBRD Cooperation Programme.
- DUNN, E. (2003) Trojan pig: paradoxes of food safety regulation, *Environment and Planning A*, 35(8), pp. 1493–1511.
- DUNN, E. (2004) *Privatizing Poland: Baby Food, Big Business, and the Remaking of Labor*. Ithaca, NY: Cornell University Press.
- DUNN, E. (2007) Escherichia coli, corporate discipline, and the failure of the sewer state, *Space and Polity*, 11(1), pp. 35–53.
- EUROMONITOR INTERNATIONAL (2008) *Retailing – Russia*. London: Euromonitor International.
- EUROMONITOR INTERNATIONAL (2009) *Consumer Foodservice – Russia*. London: Euromonitor International.
- FREIDBERG, S. (2004) *French Beans and Food Scares: Culture and Commerce in an Anxious Age*. Oxford: Oxford University Press.
- FREIDBERG, S. (2010) Perspective and power in the ethical foodscape, *Environment and Planning A*, 42(8), pp. 1868–1874.
- GEREFFI, G. (1994) The organization of buyer-driven global commodity chains: how U.S. retailers shape overseas production networks, in: G. GEREFFI and M. KORZEINOWICZ (eds) *Commodity Chains and Global Capitalism*. Westport, CT: Praeger, pp. 95–122.
- GEREFFI, G. and LEE, J. (2009) *A Global Value Chain Approach to Food Safety and Quality Standards*, Final Report, Global Health Diplomacy for Chronic Disease Prevention Working Paper Series. Durham, NC: Duke University.
- GEREFFI, G., HUMPHREY, J. and STURGEON, T. (2005) The governance of global value chains, *Review of International Political Economy*, 12(1), pp. 78–104.
- GHEZAN, G., MATEOS, M. and VITERI, L. (2002) Impact of supermarkets and fast-food chains on horticulture supply chains in Argentina, *Development Policy Review*, 20(4), pp. 389–408.
- GIOVANNUCCI, D. and PONTE, S. (2005) Standards as a new form of social contract? Sustainability initiatives in the coffee industry, *Food Policy*, 30, pp. 284–301.
- GORTON, M., ZARIĆ, V., LOWE, P. and QUARRIE, S. (2011) Public and private agri-environmental regulation in post-socialist economies: evidence from the Serbian fresh fruit and vegetable sector, *Journal of Rural Studies*, 27(2), pp. 144–152.
- GOW, H. and SWINNEN, J. (2001) Private enforcement capital and contract enforcement in transition economies, *American Journal of Agricultural Economics*, 83(3), pp. 686–690.
- 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), pp. 73–91.
- HATANAKA, M., BAIN, C. and BUSCH, L. (2006) Differentiated standardization, standardized differentiation: the complexity of the global agrifood system, in: T. MARSDEN and J. MURDOCH (eds) *Between the Local and the Global*. Emerald Group Publishing, pp. 39–68.
- HENDLEY, K. (2010) Coping with uncertainty: the role of contracts in Russian industry during the transition to the market, *Northwestern Journal of International Law and Business*, 30(2), pp. 417–460.
- HENSON, S. and HUMPHREY, J. (2010) Understanding the complexities of private standards in global agri-food chains as they impact developing countries, *Journal of Development Studies*, 46(9), pp. 1628–1646.
- HENSON, S. and REARDON, T. (2005) Private agri-food standards: implications for food policy and the agri-food system, *Food Policy*, 30, pp. 241–253.
- HENSON, S., MASAKURE, O. and BOSELIE, D. (2005) Private food safety and quality standards for fresh produce exporters: the case of Hortico Agrisystems, Zimbabwe, *Food Policy*, 30(4), pp. 371–384.
- HUMPHREY, J. and SCHMITZ, H. (2002) How does insertion in global value chains affect upgrading in industrial clusters?, *Regional Studies*, 36(9), pp. 1017–1027.
- HUSTED, K. and MICHAILOVA, S. (2002) Knowledge sharing in Russian companies with Western participation, *Management International*, 6(2), pp. 17–28.
- JAFFEE, D. and HOWARD, P.H. (2010) Corporate cooptation of organic and fair trade standards, *Agriculture and Human Values*, 27(4), pp. 387–399.

- JAFFEE, S. and MASAKURE, O. (2005) Strategic use of private standards to enhance international competitiveness: vegetable exports from Kenya and elsewhere, *Food Policy*, 30, pp. 316–333.
- JOHANSON, M. (2000) Buyer-seller relationships in transition: the changing business environment in Russia, *Journal of East-West Business*, 6(1), pp. 35–56.
- KAPLINSKY, R. and MORRIS, M. (2001) *A Handbook for Value Chain Research*. Published online <http://asian.drivers.open.ac.uk/documents/Value_chain_Handbook_RKMM_Nov_2001.pdf>.
- KONEFAL, J. and BUSCH, L. (2010) Markets of multitudes: how biotechnologies are standardising and differentiating corn and soybeans, *Sociologia Ruralis*, 50(4), pp. 409–427.
- KONEFAL, J., MASCARENHAS, M. and HATANAKA, M. (2005) Governance in the global agro-food system: back-lighting the role of transnational supermarket chains, *Agriculture and Human Values*, 22(3), pp. 291–302.
- KORNAL, J., ROTHSTEIN, B. and ROSE-ACKERMAN, S. (2004) *Creating Social Trust in Post-Socialist Transition*. Basingstoke: Palgrave Macmillan.
- LEDENEVA, A. (1998) *Russia's Economy of Favours: Blat, Networking and Informal Exchange*. Cambridge: Cambridge University Press.
- LEDENEVA, A. (2006) *How Russia Really Works: The Informal Practices That Shaped Post-Soviet Politics and Business*. Ithaca, NY: Cornell University Press.
- LEE, R. (2009) Agri-food governance and expertise: the production of international food standards, *Sociologia Ruralis*, 49(4), pp. 415–431.
- LEE, J., GEREFFI, G. and BEAUVAIS, J. (2012) Global value chains and agrifood standards: challenges and possibilities for smallholders in developing countries, *Proceedings of the National Academy of Sciences of the United States of America*, 109(31), pp. 12326–12331.
- MCCCLUSKEY, J. and WINFREE, J. (2009) Pre-empting public regulation with private food quality standards, *European Review of Agricultural Economics*, 36(4), pp. 525–539.
- MICHAILOVA, S. and HUSTED, K. (2003) Knowledge-sharing hostility in Russian firms, *California Management Review*, 45(3), pp. 59–78.
- MONTEIRO, D. and CASWEL, J. (2009) Traceability adoption at the farm level: an empirical analysis of the Portuguese pear industry, *Food Policy*, 34(1), pp. 94–101.
- MUTERSBAUGH, T. (2002) The number is the beast: a political economy of organic-coffee certification and producer unionism, *Environment and Planning A*, 34(7), pp. 1165–1184.
- MUTERSBAUGH, T. (2005) Fighting standards with standards: harmonization, rents, and social accountability in certified agrofood networks, *Environment and Planning A*, 37(11), pp. 2033–2051.
- NADVI, K. and WALTERING, F. (2004) Making sense of global standards, in: H. SCHMITZ (ed.) *Local Enterprises and the Global Economy*. Cheltenham: Edgar Elgar Publishing, pp. 53–94.
- NEILSON, J. (2007) Institutions, the governance of quality and on-farm value retention for Indonesian specialty coffee, *Singapore Journal of Tropical Geography*, 28(2), pp. 188–204.
- OUMA, S. (2010) Global standards, local realities: private agrifood governance and the restructuring of the Kenyan horticulture industry, *Economic Geography*, 86(2), pp. 197–222.
- PONTE, S. (2007) Bans, tests, and alchemy: food safety regulation and the Uganda fish export industry, *Agriculture and Human Values*, 24(2), pp. 179–193.
- PONTE, S. and GIBBON, P. (2005) Quality standards, conventions and the governance of global value chains, *Economy and Society*, 34(1), pp. 1–31.
- POWER, M. (1997) *Audit Society: Rituals of Verification*. Oxford: Oxford University Press.
- PRIME TIME RUSSIA (2010) *Consumers Concerned over Simplified Food Safety Certification*. Published online <<http://rt.com/prime-time/2010-03-01/consumers-concerned-food-certification.html/print>>, accessed 5 March 2010.
- PRITCHARD, B., GRACY, C. and GODWIN, M. (2010) The impacts of supermarket procurement on farming communities in India: evidence from rural Karnataka, *Development Policy Review*, 28(4), pp. 435–456.
- RADAEV, V. (2004) How trust is established in economic relationships when institutions and individuals are not trustworthy: the case of Russia, in: J. KORNAL, B. ROTHSTEIN and S. ROSE-ACKERMAN (eds) *Creating Social Trust in Post-Socialist Transition*. New York, NY: Palgrave Macmillan, pp. 91–110.
- RAU, M. and TONGEREN, F. VAN (2010) Heterogeneous firms and homogenising standards in agri-food trade: the Polish meat case, *European Review of Agricultural Economics*, 36(4), pp. 479–505.
- REARDON, T. and FARINA, E. (2001) The rise of private food quality and safety standards: illustrations from Brazil, *International Food and Agribusiness Management Review*, 4(4), pp. 413–421.
- REARDON, T., HENSON, S. and BERDEGUE, J. (2007) 'Proactive fast-tracking' diffusion of supermarkets in developing countries: implications for market institutions and trade, *Journal of Economic Geography*, 7(4), pp. 399–431.
- SCHEWE, R. (2011) Two wrongs don't make a right: state and private organic certification in New Zealand dairy, *Environment and Planning A*, 43(1), pp. 1421–1438.
- SMITH, G. (2009) *Interaction of Public and Private Standards in the Food Chain*, OECD Food, Agriculture and Fisheries Working Papers no. 15. Paris: OECD Publishing.

- STANFORD, L. (2002) Constructing 'quality': the political economy of standards in Mexico, *Agriculture and Human Values*, 19, pp. 293–310.
- STARK, D. (2010) *The Sense of Dissonance*. Princeton, NJ: Princeton University Press.
- STARK, D. and BRUZST, L. (1998) *Postsocialist Pathways: Transforming Politics and Property in East Central Europe*. Cambridge: Cambridge University Press.
- STERNIS, P. and REARDON, T. (2002) Determinants and effects of institutional change: a case study of dry bean grades and standards, *Journal of Economic Issues*, 36(1), pp. 1–16.
- STRATHERN, M. (2000) Introduction: new accountabilities, in: M. STRATHERN (ed.) *Audit Cultures: Anthropological Studies in Accountability, Ethics and the Academy*. London: Routledge, pp. 1–18.
- SWINNEN, J. and VANDEPLAS, A. (2007) *From Public to Private Governance of Agri-food Supply Chains in Transition Countries: Some Theoretical and Empirical Lessons*. Presented at the Joint IAAE- 104th EAAE Seminar, Budapest, 6–8 September.
- TALLONTIRE, A., OPONDO, M., NELSON, V. and MARTIN, A. (2009) Beyond the vertical? Using value chains and governance as a framework to analyse private standards initiatives in agri-food chains, *Agriculture and Human Values*, 28(3), pp. 427–441.
- TENNENT, R. and LOCKIE, S. (2012) Production relations under GLOBALG.A.P: the relative influence of standards and retail market structure, *Sociologia Ruralis*, 52(1), pp. 31–47.
- TULIP, S. (2010) Feeding the People, *Supply Chain Europe*, January/February, pp. 26–27, published online <<http://scemagazine.com>>.
- USDA (UNITED STATES AGRICULTURAL DEPARTMENT) (2011a) *Russian Federation Food Service: Hotel Restaurant Institutional*, USDA Foreign Agricultural Service, GAIN RSATO1102. Published online <<http://static.globaltrade.net/files/pdf/20110318133654311.pdf>> , accessed 20 September 2011.
- USDA (UNITED STATES DEPARTMENT OF AGRICULTURE) (2011b) *Isolation and Identification of Salmonella from Meat, Poultry, Pasteurized Egg and Catfish Products*, Report MLG 4.05. Athens, GA: USDA/FSIS.
- WENBERG, E. (2007) *Russian Federation HRI Food Service Sector: Opportunities for US Foods Sales in the Russian Market*, Report no. RS7316. Moscow: GAIN.
- WINCHESTER, N., RAU, M., GOETZ, C., LARUE, B., OTSUKI, T., SHUTES, K., WIECK, C., BURNQUIST, H., PINTO DE SOUZA, M. and NUNES DE FARIA, R. (2012) The impact of regulatory heterogeneity on agri-food trade, *World Economy*, 35(8), pp. 973–993.
- ZAVISCA, J. (2003) Contesting capitalism at the post-Soviet dacha: the meaning of food, *Slavic Review*, 62(4), pp. 786–810.