Global Food Trade Beyond the 'Standards' Debate

Conventions, Institutions and Uncertainties in Organic Food Imports to Germany and Australia

Inaugural-Dissertation

zur

Erlangung des Doktorgrades
der Mathematisch-Naturwissenschaftlichen Fakultät
der Universität zu Köln

vorgelegt von

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Köln 2014

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Tag der mündlichen Prüfung: 28.10.2013

Wissenschaft ist organisiertes Wissen. Weisheit ist organisiertes Leben.

(Science is organized knowledge. Wisdom is organized life.)

– Immanuel Kant (German philosopher, 1724-1804)

Acknowledgements

Health is wealth. Peace of mind is happiness.

– Anonymous

First of all, I would like to thank the German Research Foundation (DFG) for its financial support. The empirical data collected for this dissertation was funded through the DFG-project *ImPOrt*, without which this endeavour would not have been possible.

The Principal Investigator (PI) of this project was Prof. Boris Braun. Not only during this project and as my principal PhD supervisor, but also during my time employed at the Institutes of Geography at the Universities of Bamberg and Cologne, I was grateful for his creative ideas, encouragement and constructive feedback. I would also very much like to thank my other two reviewers, Prof. Elmar Kulke (Berlin) and Dr. Paul Kristiansen (Armidale).

Crucial to my work was the time invested by the firms, organisations and individuals who were willing to give interviews on organic imports or related industry-specific issues. I would like to thank them all very much for their time and support, their interest and encouragement.

Words of thanks also go to all my dear geography colleagues who spiced up my daily routine in Bamberg and Cologne, as well as during field work and conferences. Needless to say, Australia once again became a second home to me during the many stays there in the course of the project, and I am sure to return. On a more personal note, I am extremely grateful to my friends that have followed and guided me through this whole process.

Finally, I would like to thank my partner Thomas Lauterbach, who has been amazingly patient, understanding and supportive especially in the final stages of this work. I dedicate this work to my family, who has always supported me and helped me to see more clearly: Maria, Ludger, Magdalena and Annemarie Bernzen. I know they are, or surely would have been, very proud.

N. B.:

(i) For easier reading, this work will consistently employ only the masculine form where gender divisions would be necessary (this applies in particular to the article in German language). The feminine form is explicitly included in these formulations.

(ii) The reference type, style and formatting in the included articles are in line with the requirements (authors guidelines) of the respective journal in which the articles are (or possibly will be) published and were left unchanged in this dissertation. Referencing formats for the other chapters of this work vary slightly from those in the articles, but are in themselves consistent. Figures and tables are consecutively numbered throughout the dissertation.

(iii) The PhD candidate submitting this dissertation has been publishing under a slightly different name (Amel**ie** Bernzen) than the one she carries in official documents (Amel**y** Bernzen).

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List of Abbreviations and Acronyms

ACO	Australian Certified Organic
AFN	agri-food network
AQIS	Australian Quarantine and Inspection Service
AS 6000	Australian Standard for Organic and Biodynamic Products – AS 6000-2009
CER	Closer Economic Relations
CSR	Corporate Social Responsibility
CT	Convention Theory
EC	Économie des conventions / Economics of Convention
e.g.	for example (exempli gratia)
E.U.	European Union
E.U. Standard	Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products
i.e.	that is (id est)
IFOAM	International Federation of Organic Agriculture Movements
GCC	Global Commodity Chain
GPN	Global Production Network
GVC	Global Value Chain
JAS	Japanese Agricultural Standard
NAFTA	North American Free Trade Agreement
NASAA	National Association for Sustainable Agriculture, Australia
NGOs	Non Governmental Organisations
NIE	New Institutional Economics
RM	Relationship Marketing
OA	organic agriculture
TPC	third-party certification
USA	United States of America
USDA NOP Standard	United States Department of Agriculture of America, National Organic Programme
WTO	World Trade Organization

1 Introduction and Research Questions

1.1 Uncertainty and Global Value Chain Analyses in Economic Geography

Uncertainty is the very condition to impel man to unfold his powers.

– Erich Fromm

Apricots from Turkey, tomatoes from Spain, apples from Argentina, sunflower seeds from China. More and more food products found on supermarket shelves in western consumer markets today are imported. While the reasons are manifold, a crucial question for actors in the countries of consumption is whether the product and its supplier abroad are able to meet one's expectations and requirements. The issue becomes even more urgent as highly specific quality designations come into play. While these questions are by no means limited to the food sector, the societal relevance of food with its highly sensitive quality characteristics make it a compelling example to illustrate these problems. This dissertation thus aims to address these issues by looking at the variety of approaches taken by importers of organic food to mitigate uncertainties in cross-border trade coordination.

As such, it contributes to the broad array of literature in the field of Economic Geography that have made an attempt to untangle and make sense of the consequences that relate to the increased levels of international division of labour taking place in the context of globalisation processes (e.g. Braun 2005; Daviron & Gibbon 2002; Dannenberg & Nduru 2013; Fold & Pritchard 2005; Hess & Coe 2006; Kulke 2007; Smith & Barrientos 2005). Many of these studies revolve around the understanding of production being organised along a commodity, production or value chain that follows the path of a product from sourcing raw materials (and components) to final distribution to the consumer. In this work, the term (global/international) value chain is used as a general term to describe relationships and activities of economic exchange between actors at different stages of the production process which have been conceptualised by different authors. This includes the Global Commodity Chain (GCC) and Global Value Chain (GVC) frameworks as elaborated in this Chapter below. The value chain, with a linear character, can be seen as an integral part of a production *network* which additionally includes the institutional environment(s) of the firms as well as external actors, e.g. service providers and other stakehold-

ers, which influence the value chain but are not directly responsible for carrying out steps of the production process. This will be elaborated further in Chapter 1.2.1 for the Global Production Network (GPN) approach. While the organisation of these different steps of value creation becomes more and more complex due to the integration of new, independent firms across borders and different nation states, uncertainty rises especially among downstream actors of the chain as creating traceability and monitoring back to the source become more tedious.

The probability of any future occurrence of *risks* can be objectively measured, but *uncertain* future outcomes can only be estimated from a subjective perspective (Glückler 2005; Knight 1921). Sayer (2000) remarks that actors have different individual goals which are based on strategic decisions and behaviour of others. This means that economic and social interaction is generally uncertain because there is always more than one possible outcome. Uncertainties are frequently related to product and process quality (Dannenberg 2012; Dietsche 2011). The types and levels of qualities have become not only more differentiated in western countries thanks to changing consumer demands, but also more and more specified (or codified). Actors driving these processes are government authorities who implement legal regulations aimed at consumer protection. But also private initiatives, corporate businesses and Non Governmental Organisations (NGOs) have increasingly contributed to this development, also through Corporate Social Responsibility (CSR) measures. As a result, over the past years, a multitude of various public and private standards have emerged on different geographic scales that prescribe quality characteristics and parameters, many of which apply to global trade (e.g. Nadvi 2008, Neumayer & Perkins 2004, see Chapter 1.3.2). While this has been observable in the manufacturing sector (e.g. machinery, technical equipment) for many decades, it has now also become a prominent feature of other commodities like clothing (e.g. Fair Trade cotton), or food, which is a highly sensitive product and has seen intense media coverage on repeated scandals ranging from mislabelling to toxic contamination. In this context, new producers, especially those in the Global South wishing to grasp opportunities on globalised markets, often struggle to meet these increased product and process quality demands posed by players from both public and private sectors in the Global North. It is thus importing firms in countries of final consumption who are particularly vulnerable (e.g. by facing negative press or sanctions) if the products they bring to market do not comply with requirements (Chapter 1.3.1), and it is consequently in their strongest interest to ensure that suppliers understand what they need.

Analyses of value chain governance and coordination have been at the centre of various theoretical concepts and frameworks that have gained prominence since the 1990s (for an overview see Dietsche 2011).Two approaches that have received much attention in Economic Geography are the GCC by Gereffi (1994) and the GVC in a later adaptation by Gereffi et al. (2005). The GCC approach is strongly related to the World Systems Theory (Wallerstein 1974) and focused on the question of the level of inclusion or dependency of suppliers in developing countries. It

differentiates between two distinct types of commodity chains; producer-driven and buyer-driven chains and thus looks at the position of the so-called lead firm that has the power to determine or govern the production process along the complete chain (Gereffi 1994; Gereffi & Korzeniewicz 1994). GCC has and continues to be employed in case studies on various commodities (e.g. automobile industry: Kaplinsky & Morris 1999; garments and textiles: Bair & Dussel Peters 2006; Gereffi 1994; food and agriculture: Gibbon 2001; Patel-Campillo 2011; Ponte 2002*b*; Ransom 2011; and most recently even for the sports sector: Klein 2012). However, various authors have repeatedly criticised that the 'buyer driven / producer driven' dichotomy is too simple. It neither captures a realistic picture of actual developments, nor – and more importantly – does it conceptually allow developments and upgrading processes. A further point of criticism that has been raised is that external determinants such as institutions have been largely neglected in empirical applications – despite the fact that institutions make up the fourth analytical dimension of the GCC framework (e.g. Clancy 1998; Henderson et al. 2002; Ponte 2007).

Based on this critique, Gereffi et al. (2005) developed the GCC concept further to arrive at the more differentiated GVC concept. Rather than looking at the complete chain, GVC emphasises the link between lead firms and first tier suppliers (Gereffi et al. 2005; see also Bair 2005). In this approach, governance is seen as but one form of five possible types of coordination that range between purely market-based relationships and hierarchy (complete vertical integration in one enterprise): Market, modular, relational, captive and hierarchy. Gereffi et al. (2005) identify three variables which determine the type of coordination a lead firm adopts towards its 1st tier suppliers: first, the complexity of transactions, second, the capabilities (incl. know-how) of firms to meet the required standards, and third, the codifiability of products (or services) that are to be supplied. The aspect of risk and uncertainty is captured within the first variable (complexity of transactions) in the sense that they increase transaction costs. Codifiability e.g. in the shape of standards has received due attention in GVC literature and shows that the implementation of these can enable a more market-oriented type of coordination (Gereffi & Lee 2012). But are standards enough to overcome uncertainties, even where codifiability seems possible (see Chapter 1.3.2)?

Other authors have argued by means of GVC that lead firms can help producers and suppliers in the Global South in upgrading on product, process and functional levels (Humphrey & Schmitz 2000), and environmental outcomes (see e.g. Dietsche 2011 for the leather and food sectors; Reps & Braun 2012 for a case in the Indian automobile industry). The specific (additional) know-how is often - but not only - then provided by lead firms as other types of training are either not available or too costly.

While the GVC concept is considered to have certain advantages over the GCC approach, there are some problems due to the different use of certain terms like governance and coordination

(e.g. Gibbon et al. 2008; Stamm 2004). Also, 'uncertainty' received no differentiated attention in these approaches. Furthermore, some authors have argued that empirical work using GVC has given too much attention to lead firms and "large, often transnational corporations as producers or buyers driving commodity chains and providing 'functional leadership'" (Crang et al. 2013, 16, see also Ponte & Gibbon 2005). In line with these scholars, I argue that, while importers are not always in powerful positions as lead firms (Dietsche 2011) and have been much less in academic focus than lead firms or producers, they yet deserve due attention because of their vulnerable position in the global chain. For instance, they can be made liable in case imported product does not meet local legal requirements, and can face sanctions as a consequence. Last, but certainly not least, several authors criticise that the analysis of the institutional environment as well as external actors are largely excluded in GVC case studies (e.g. Dörry 2008; Gibbon et al. 2008).

This apparent lacuna of analyses of institutions in international trade coordination is the starting point of the present dissertation. Its broader aim is to analyse the questions (to be further specified in Chapter 1.4):

What is the impact of institutions in value chain coordination in cross-border trade relations? More explicitly: How are they employed to overcome uncertainties at the interface of importers and exporters?

As indicated, there are various understandings of the terms 'coordination' and 'governance' which have been discussed and applied in global value chain literature (e.g. Henderson et al. 2002; Gereffi 1994; Gereffi et al. 2005; Stamm 2004). Here, I follow Ponte & Gibbon (2005) who see coordination as the activities taking place between two adjacent segments of the chain (as opposed to governance which affects and applies to the whole chain, as in Gereffi 1995). However, rather than using the five types of coordination as developed by Gereffi et al. (2005), I adopt the term as it has been developed by authors of the convention school. They see coordination as a test or assessment which is based on different types of (collective) evaluative systems – or conventions (see Chapter 1.2.2).

1.2 Theoretical framework and conceptual starting points

The following sections will elaborate on the concrete theoretical concepts and frameworks applied in this dissertation. First, I will briefly outline how institutions have been conceptualised, employed and evaluated in economic geography frameworks (Chapter 1.2.1). I then turn to laying out how Convention Theory (CT) can serve as a fruitful complementary means of shedding

light on the coordination of economic action through institutional influences in global trade to existing conceptual frameworks (Chapter 1.2.2).

1.2.1 Institutions in International Value Chain Approaches

Various researchers have emphasised that institutional factors might be more influential on management practices than purely economic factors or simple economic rationality (e.g. Braun 2005; Delmas 2002; DiMaggio & Powell 1983; Jörges-Süß & Süß 2004; Myloni et al. 2004; Neilson & Pritchard 2009; Scott 1995; Whitley 1999). Furthermore, institutions have historically evolved and thus lead to different regional institutional settings that influence economic actors that are embedded within them. The question how strong this influence is has been brought into focus among geographers with the institutional turn, at the latest (Martin 2000).

There has been no general agreement on how to define the term 'institution', as various disciplines have used the term in different ways. Depending on the underlying theoretical assumptions, they are called e.g. institutions, institutional framework, institutional environment, institutional capacity or institutional arrangements (Neilson & Pritchard 2009, 48). A definition that has frequently been used in relational economic geography is that of North (1990), who sees them as 'rules of the game' that guide individual action in a given society. Similarly, Hodgson (2006, 2) calls them "systems of established and prevalent social rules that structure social interactions." Hodgson (2006, 3) broadly defines rules as

> *a socially transmitted and customary normative injunction or immanently normative disposition, that in circumstances X do Y.[...] Rules include norms of behavior and social conventions as well as legal rules. Such rules are potentially codifiable. Members of the relevant community share tacit or explicit knowledge of these rules. [...] [M]ultiple options can typically be imagined for the form of a rule. One culture may uphold in circumstances X do Y; another may require in circumstances X do Z. Nevertheless, the laws of nature constrain the set of possible rules that may be formulated.*

I here follow North's differentiation between formal and informal institutions (see e.g. Hodgson 2006). More specifically, for the present work, 'formal' is understood in the sense of legal and sector-specific laws and regulations and 'informal' in the sense of non-legal and inexplicit rules and norms. For instance, the above indicated public and private standards can be understood as formal institutions. Informal institutions in shape of trust, common norms and values, communication, language or, in a broader sense 'culture' as an influential factor on economic activity have found their way into literature in economic and geographic publications over the past years in different contexts (e.g. Bernzen 2008; Crang 1997; Castree 2004; Lash & Urry 1994; Sayer 1997; Scheffer 2007; Zukin & DiMaggio 1990). Often seen in the light of globalisation, the inclusion of these factors can be related to the fact that cross-border, intercultural trade is the link of the

chain where most culturally induced problems are likely to arise. Reasons of geographic location, historically grown trade relationships or integration into political or economic unions (e.g the European Union (E.U.), North American Free Trade Agreement (NAFTA), Closer Economic Relations (CER), British Commonwealth) have led to certain preferences of trading partners in specific countries.

Schamp (2003) has argued that an institutional perspective offers much potential and challenges for research in economic geography. More specifically, this academic field should give special attention to so-called institutional arrangements that define which 'rules of the game' apply at which place at which time (Schamp 2003; see also Martin 2000; Ménard 1995). One aspect is the increasing need of institutional arrangements in the course of globalisation e.g. in trade and communication. Not only regional, but also national and supranational institutions play an important role in this context. An example here would be the increasing number of product and process standards as indicated above. With regard to uncertainties, New Institutional Economics (NIE), for instance, posits that they can be reduced through (the introduction of) institutions, as rules provide support in situations of individual rationality (Dörry 2008; Erlei et al. 1999).

Global value chain literature has also acknowledged the institutional framework of firms. Already in his first GCC concept, Gereffi (1995, 113) included it as one of four analytical dimensions, stating that it "identifies how local, national, and international conditions and policies shape the globalization process at each stage in the chain." As indicated above, however, the actual analysis of institutions in empirical studies was largely disregarded over the following years in favour of a governance focus. Many scholars see this point as one of the major flaws of the GCC and GVC approaches, arguing that it is a constitutive part of the chain. They demand it to be incorporated more explicitly in value chain analyses (e.g. Bair 2005; Bair & Dussel Peters 2006; Dicken et al. 2001; Kulke 2007). Neilson & Pritchard (2009, 9) even call for putting institutions at the core of value chain analyses, as

> *Institutions are not just framing devices external to product/commodity systems ('out there'), but exist also as the rules, norms and behavioural vehicles that shape the very essence of how product/commodity systems are organized ('in here').*

To address (amongst others) the lacuna of missing institutional considerations in GCC research, the so-called 'Manchester school' of economic geographers developed the GPN framework (Henderson et al. 2002; Hess & Yeung 2006; Coe et al. 2004). Coe et al. (2008, 4) note that

> *[A] production network is, at its core, the nexus of interconnected functions, operations and transactions through which a specific product or service is produced, distributed and consumed. A global production network is one whose interconnected nodes and links extend spatially across*

> *national boundaries and, in so doing, integrates parts of disparate national and subnational territories.*

Rather than concentrating above all on linear relations between actors involved in the production process, it includes *all* types of connections, also horizontal ones. Furthermore, it focuses not only on firms, it features four conceptual dimensions: firms, networks, sectors, and institutions. In this context, they postulate that, in order to fully understand concrete company strategies and specific value chain formations, future research should more seriously consider the fact that international value chains not only connect companies from different locations with each other, but also their respective social and institutional contexts underlying the respective macro structures of a given capitalist market system (Coe et al. 2008, 2-3; Hess 2004; Franz & Hassler 2008 for GPN in an organic case study).

Within the GPN framework, "institutions [include] – particularly government agencies, but also in some cases trade unions, employer associations and NGOs – that influence firm strategy in the particular locations absorbed into the production chain" (Henderson et al. 2002, 447). As such, they grasp institutions through actors and organisations rather than adopting the broader understanding of 'rules of the game'. Institutional impact within GPNs is captured within one of the three conceptual categories – *power*. *Institutional power* looks at how nation states, international inter-state agencies and other organisations influence actions and decisions of GPN firms. *Collective power* acknowledges the role of trade unions, employers associations or NGOs; *Corporate power* refers to the degree that a lead firm has the capacity to influence other actors in the GPN. While this approach pays due attention to most types of 'formal' institutions and highlights the role of the nation state and regulatory systems, such as standards (Coe et al. 2008; Hudson 2004), 'informal' institutions are less explicitly conceptualised within the GPN framework, even though many authors point out that GPNs are shaped also by cultural and social circumstances (e.g. Bathelt 2006; Coe et al. 2008, 4; Hess 2004; Levy 2008). Within their conceptual category *embeddedness*, Henderson et al. (2002, 451, emphasis added by the author) recognise that

> *GPNs do not only connect firms functionally and territorially but also they connect the aspects of the* **social** *and spatial arrangements in which those firms are embedded and which influence their strategies and the* **values, priorities and expectations** *of managers, workers and communities alike. [...] Firms [...] arise from, and continue to be influenced by, the institutional fabrics and* **social and cultural contexts** *of particular forms of capitalism [...] in their countries of origin.*

Trust, they argue further, leads to stable formal and informal relations, which is crucial for an actor's *network embeddedness*. This is true even for firms that feature a high degree of vertical integration (Yeung 1998). A further 'informal' aspect they here point to is that "firms in the same economic sector usually share a common 'language' and a particular communication structure

specific to that sector" (Henderson et al. 2002, 454; Hess 1998). In a later work, Hess (2004) adds a third type of embeddedness to the original two – the *social embeddedness*. It posits that

> *Network actors, be they individuals or collectives, have a history that shapes their perception, strategies and actions, which therefore are pathdependent. This 'genetic code' represents the local/regional/national 'culture' [...]. If actors engage in global production networks, they carry the genetic code with them when going abroad and, at the same time, are exposed to the different cultures of their foreign network partners. (Hess 2004, 180)*

Overall, the GPN provides a broad approach to capture global production processes in global or transnational contexts. Yet, several authors have criticised empirical work to be very close in its findings to that of GCC/GVC approaches, thus calling for a conceptual refinement of the concept to better grasp the institutional dimension in empirical research (e.g. Bair 2008; Coe et al. 2008; Kulke 2007; Levy 2008). This is where CT may offer some fruitful complementary thoughts (Raynolds 2002). It may, first of all, help to specify some of the 'values', 'priorities', 'common languages' or 'social and cultural contexts' mentioned by GPN authors which hardly specified or conceptualised, and remain rather fuzzy. An exception is the aspect of 'trust', which appears in the GPN as well as in the GVC framework's 'relational' mode of coordination. Also, CT provides a broader framework to examine the different approaches to tackling the 'friction' (Tsing 2005), i.e. the uncertainty that exists between the changing relationships within production networks. Importantly for this case here, uncertainties are frequently related to quality issues. By assuming that there is no one universal understanding of quality as it is multi-faceted and constantly re-negotiated, CT is particularly useful in analysing trade coordination of products with quality designations that are difficult to codify as they are based on 'informal' norms and values. Finally, CT stresses the fact that coordination need not be reduced to one type of coordination, as suggested by Gereffi et al. (2005). Rather, firms can employ different conventions (and according coordination mechanisms) at the same time.

1.2.2 Convention Theory

> *Examining the construction and use of conventions can complement institutional and network theories by supplementing undersocialized conceptions of markets, emphasizing markets as evolving reified abstractions that orient actors in their efforts to coordinate successfully, and stressing the necessarily intersubjective nature of markets.*
>
> – Biggart & Beamish (2003, 458)

The Conventions school, or Convention Theory (CT), is part of the broader new pragmatic social sciences that originated in France in the mid-1980s. Outside of France, current contributions

on these new French social sciences have not yet been systematically perceived and considered, rather in extracts and (somewhat confusingly) using differing terminologies, such as sociology of conventions, pragmatic sociology, Actor-Network-Theory (ANT), theory of justification regimes, sociology of criticism, or Économie des conventions / Economics of Convention (EC) (Diaz-Bone 2011). Central to the school was a closely collaborating network of transdisciplinary scholars from the areas of sociology (Luc Boltanski, Alain Desroisières), economics (François Eymard-Duvernay, Olivier Favereau, André Orléan, Robert Salais and Laurent Thévenot) and political philosophy (Jean-Pierre Dupuy). Their goal was "[t]o develop a theory of the role of conventions in coordination of economic action [and the] [e]mpirical analysis of the different conventions involved in coordination of economic action, their variation and their dynamics" (Jagd 2007, 79). An insight gained from the first empirical studies on labour and wage relations was the general finding that all goods and persons need to be 'qualified' before they can be brought to and exchanged on the market (Salais & Thèvenot 1986). 'Giving someone or something quality' then was – and still is – a key aspect which creates the basis for conventions (Jagd 2007). Over time, the concept has been extended and refined to include most commodities (for clothing and food see e.g. Ponte & Gibbon 2005; Ponte 2002*a*; Raynolds 2004; Rosin & Campbell 2009; Sylvander 1995) and to discuss general economic activities (Boltanski & Thévenot 1991; Storper & Salais 1997).

Next to quality, uncertainty is one of the core aspects in CT. A common assumption among all CT scholars is that "coordination is problematic because of uncertainties" (Thévenot & Jagd 2004, 12). As indicated earlier in Chapter 1.1, uncertainty – unlike risk – is a situation in which actors are *unable* to determine a probability to the outcomes or consequences of their actions (Knight 1921). Orléan (1994*b*, 17), points to "three different obstacles" for neoclassical theory in understanding coordination processes by actors in non-cooperative situations (Jagd 2007, 77): "[First,] Incompleteness of the competitive logic due to uncertainty caused by the subject matter. [...][Second,] Incompleteness of strategic rationality due to socially caused uncertainty. [...] [And third,] Incompleteness of contracts due to uncertainty related to the future." CT assumes that these kinds of problems occur frequently, and causes social action to be understood as being generally unstable and uncertain.

According to CT, conventions emerge to provide a frame in which actors can coordinate this uncertainty. They are thus durable and objective 'solutions' which facilitate coordination by mitigating, or 'taming' uncertainty (Diaz-Bone 2009; Thévenot & Jagd 2004). It is important to note that rather than *eliminating* uncertainty, they provide a 'collectively recognised reference' (Orléan 1994*a*) which temporarily terminates one's speculations on the intended actions of others (Jagd 2007).

What then are conventions? In simple terms, they are ways of coordinating economic action through norms, values, standards, rules, or institutions (Dietsche 2011). In the words of Rosin

(2007, 116), conventions to mitigate uncertainties "may involve anything from unarticulated expectations of another's actions based on the understanding of that person's 'rules' of engagement [...] to the formalised rules of business contracts or international trade treaties". Yet, among CT scholars, (more or less subtle) variations of definitions and conceptualisations have emerged (see e.g. Table 1.1). A detailed discussion on variances in the use of the term can be found in Diaz-Bone (2009).

Table 1.1 — Important CT frameworks for analysing the plurality of justifications in economic action

Author(s)	Year	Name of Framework	Classification of Worlds/Conventions	Main focus/aim
Boltanski and Thévenot	1989, 1991, 1999, 2000	Worlds of Justification	Market, Civic, Domestic, Industrial, Renown, Inspired	General framework to analyse the progress of disputes in a complex society
Eymard-Duvernay	1989, 1994, 2002	Conventions of Quality	Market, Domestic, Industrial. Later: also Civic	The type of coordination (in an enterprise) relates to a specific definition of quality
Salais and Storper	1992, 1997	Conventions of Labour, Worlds of Production	Marshallian Market World, Network Market World, World of Innovation, Industrial World	Combinations of technologies and markets, product qualities, and quantitative practices of resource use

Source: Own compilation

Three of the most prominent conceptualisations within CT share the position that there is always a plurality of conventions in economic actions (Jagd 2007). In simpler terms, the point is that there are many ways to justify one's actions, for example when trying to overcome uncertainties in trade relations. These three frameworks are briefly presented in Table 1.1 and the second and third listed will be elaborated further in the context of agri-food studies in Chapter 1.3.2 (Boltanski & Thévenot 1991, 2006; Eymard-Duvernay 1989; Storper & Salais 1997). At this point, I will concentrate on the work developed by Boltanski & Thévenot (1991) whose publication *De la justification* was one of the first significant studies of the conventions school and includes the broadest number of conventions (English translation: Boltanski & Thévenot 2006, German translation: Boltanski & Thévenot 2007). Their starting point was to discover common attributes of situations of conflict and then develop a framework to trace and analyse their progress, while also showing how disputes connect and link people and objects (Boltanski & Thévenot 1999).

The six 'worlds of justification' (or conventions) they elaborate in this work are presented in Table 1.2 and show the different perspectives or positions from which one can justify the 'right' kind of action (for a detailed discussion of each of these worlds, see Boltanski & Thévenot 1999, 369-373). In their framework, each different convention has its own 'logic of action' which holds a particular *mode of justification* and an *order of worth* which allows someone to assess, judge and rank people or things accordingly (Bessy 2012, 17, Boltanski & Thévenot 1999, 367). In other words, when applying a certain convention, actors refer to objects, people and situations to which they assign a certain value or worth (which is ranked). In later works, the authors have noted a shift in the importance of these six conventions. Some might become less relevant to ground justifications, while other (new) worlds may become established over time, such as a green/environmental worth, or a communicative worth (Boltanski & Thévenot 1999, 369). I here include the green/environmental world within the civic world, as has been suggested by other authors. Boltanski & Chiapello (2005) have further identified the emergence of a network convention since the 1980s.

Let me illustrate the very basic ways in which the six original conventions can be applied by the simple example of three girls who each want to buy a new handbag: Melina is a practical girl who needs a bag in which she can neatly stow away her belongings so that she will quickly find everything. She also wants something long-lasting, so she will check the internet for information on the duration of the warranty as well as some facts and figures on the material of the bag which indicates how likely it is to rip or get damaged. However, she is also environmentally conscious and has been appalled by recent media coverage on labour conditions in developing countries. So she looks for bags that may be made of recycled or natural materials that have been produced in Europe or may look for some kind of Fair Trade label. Judith usually makes her own clothes and accessories but is currently too busy to make her own bag. She is attracted by unique and out-of-the ordinary things that have been crafted with dedication and creative passion. A friend has recommended her a small shop of whom she knows the owner and also that they sell products by local designers. Chantal on the other hand is interested in carrying a fashionable designer handbag, for example by GUCCI or PRADA. These brands are well known and famous for being extremely high-end and expensive. – Looking at these three cases through the CT lens by Boltanski & Thévenot (1991), it becomes obvious that Melina applies arguments from the *industrial* (with worth based on efficiency, productivity, measurable data) and *civic/environmental* (common welfare) worlds; Judith those from the *inspired* (passion, creativity and uniqueness) and *domestic* (trust, recommendations, tradition) worlds, and Chantal from the *market* (price, luxury) and *opinion* (public reputation and renown) worlds. Of course, other combinations of these worlds would be possible, though some combinations may be more prone to conflicting positions than others.

Table 1.2 — Worlds of Justification and Orders of Worth

	Market	**Industrial**	**Domestic**	**Civic/Environmental**	**Opinion/ Fame**	**Inspired**
Mode of evaluation (worth)	Price Competitiveness	Productivity Efficiency	Esteem Reputation Tradition	Collective interest	Public Opinion Renown	Grace Nonconformity Creativeness
Form of relevant information	Monetary	Measurable: criteria, statistics	Oral Exemplary Anecdotal	Formal Official	Semiotic	Emotional
Order of Worth						
Humans	Wealth Purchasing power	Efficiency Professional competency Expertise	Hierarchy Superiority Authority	Civic rules and representations Equality	Fame Reputation	Achieving perfection or happiness Creativity Ingenuity
Objects	Luxury Value	Standards Tools/methods	Association with rank or title	Legal forms Rights	Brand names	Relation to ideas or dreams
Elementary relationship	Exchange Possession	Control Functional link	Trust Etiquette Respect	Solidarity Membership	Recognition Identification	Passion Uniqueness

Sources: adapted from: Boltanksi and Thévenot, 1999; Rosin, 2007; Thévenot et al, 2000

What has been somewhat indicated in the handbag-example above, but what is also highly relevant to the case on food trade studied in the following sections of this dissertation, is that, as Ponte & Gibbon (2005, 7) put it,

> *The consequences of Boltanski and Thévenot's heuristic framework for the concept of quality are far-reaching: it suggests, first, that there is no 'universal' understanding of quality and, second, that quality is cognitively evaluated in different ways depending on what 'world' is used to justify evaluation and action – and hence on which broader normative order is invoked.*

A further, crucial point that also becomes apparent in the handbag example is that conventions are assumed to co-exist alongside each other at all times. This means that if an agent employs a certain convention in a given situation (e.g. to justify actions in reducing uncertainty), all other conventions still virtually exist as possible alternative logics of action. In the example above, this did not lead to intrinsic conflicts for the three girls. However, living in societies with multiple conventions is not without conflict, for example when a trading partner gives value to things in a different way than oneself would. But there is also room for compromise between conventions. The different types of conflict and compromise according to Boltanski & Thévenot (1999) are (as compiled by Jagd 2007, 82-82):

(1) Criticism denouncing a reality test as relevant to a particular world. This type of criticism is then internal to a specific world.
(2) Criticism can be more radical and argue that an alternative world should be considered as relevant. This dispute then transforms itself into a competition between two different reality tests [1]). In this situation we may further distinguish two ways of ending the dispute:
- A dispute ending in the acceptance (by some sort of power pressure) of one and only one test.
- A compromise between two worlds.
(3) Another variant is that the dispute is dropped without making a new agreement confirmed by a reality test, e.g. by forgetting or forgiving.

With regard to the conceptual status of institutions within CT, it had been given little attention for many years. More recently, however, the issue has now moved to the centre of CT discussions, and CT can generally be understood as institutional theory approach which has always used NIE as a critical point of reference (Diaz-Bone 2009). There has been a notable shift in the understanding of the relationship between conventions and institutions. The early definition of 'convention' by Lewis (1969), for instance, still posits that conventions can be reduced to 'rules' and thus suggests conventions may be equal to institutions. Similarly, Hodgson (2006, 2, footnote 2) reads some CT literature to adopt a broad definition of convention which is close to the understanding of a rule (see Chapter 1.2). Over time, however, there has been increasing critique regarding this simplistic view of conventions (e.g. Boltanski & Thévenot 1991; Lazega

[1] Variations of conflict will be shown in Article 3.

& Favereau 2002; Storper & Salais 1997). While there is still a lively debate on the convention/institution issue in the CT community today[2], there is now a general acknowledgement that institutions and conventions are not the same. Several authors argue that conventions are "more than simply institutions or rules" (e.g. Diaz-Bone 2009; Eymard-Duvernay et al. 2006; Lazega & Favereau 2002). Rather, to Boltanski and Thévenot (1991) for instance conventions include rules, but also the underlying principles which explain how rules are to be followed and understood. Storper & Salais (1997, 16-17) posit that some "inherited, longue durée conventions [...] take the form of formal institutions". For example, if the convention in a given economic sector is that certain product attributes (e.g. the productivity of a machine, the pesticide residues in food crops) need to be controlled and tested and compared with products of competitors, this may result in the formal institution of (government or sector specific) standards that are then legally binding minimum requirements for all actors wishing to participate in the given market segment.

Finally, it is also the mentioned plurality of worth which has an impact on the formation of institutions. Salais & Diaz-Bone (2008, 19) point out that

> *On the one side, in the EC framework, institutions implement common goods, principles of social justice, preconceptions of the individual (to some extent an expectation with regards to his/her behavior: is he supposed to be opportunist or reasonable?). Due to the plurality of values, principles, common worlds, for a given domain a wide diversity of institutional settings can emerge, as one can discover when comparing societies among space and time. On the other side, to take institutions as practices means that one should be aware that institutions are always embedded into processes of implementation, interpretation and revision which develop through social practices.*

Overall, CT is thus a promising approach to look at institutions (and their underlying principles) within a broader GVC/GPN approach. Its advantages are particularly obvious as it integrates both uncertainty and quality aspects. CT will thus be employed here to look at the overarching questions indicated at the end of Chapter 1.1. More precisely, thus, it will look at

Which conventions are employed to overcome quality-related uncertainties in cross-border trade? How are actions taken by importers justified?

These questions will be looked at in the context of the organic food industry. First, its specific and unique quality designations are of particular relevance and lead to increased uncertainty among downstream chain actors. As will be further elaborated below, the underlying principles of organic quality comprise particularly aspects of process quality, which are more difficult to monitor than product quality. These aspects thus require a more nuanced look at trade coordination mechanisms than simple market transactions or codified product parameters. At

[2]E.g. in the special issues of "Historical Social Research", Vol. 36 (2011) No. 4; and Vol. 37 (2012), No. 4.

the same time, the organic industry has become more professionalised and industrialised with standards (as *industrial* conventions) developed in major consumer markets as organic products enter conventional distribution channels such as supermarket chains. These processes of formalisation and industrialisation are both a result of, but also a reason for the rapid increase in demand in western consumer countries for certified organic products. In this context, the formerly 'local' organic systems have become a classic example of globalisation processes in production and trade, with increasingly fragmented production across the globe. With importers facing particularly high uncertainties in cross border trade, I will apply CT here to grasp the ways in which different types of importers deal with these situations and find their own solutions to uncertainties by drawing on a variety of conventions as mentioned above.

1.3 International Trade of Organic Food

The case of the organic food sector will be introduced in the following two sections. After a brief overview of existing definitions of 'organic' – which highlights their unique quality designations – I will sketch the recent dynamics of supply and demand in the global organic market and related uncertainties in trade (Chapter 1.3.1). Finally, I shall discuss in more detail some of the core issues that have been raised in extant literature around institutions and conventions in agri-food network (AFN) in general and in the organic sector in particular (Chapter 1.3.2).

1.3.1 Organics in Global Agri-Food Networks: Roots and Market Developments

While a plethora of different definitions of 'organic' has emerged over the past decades – particularly in the shape of codified standards (see Chapter 1.3.2; Chapter 3) – a brief look at the roots of organic agriculture (OA) helps to understand the complexity of organic quality designations which make these products particularly prone to uncertainty in trade. OA goes back to different (philosophical) ideologies and agricultural policies that originated in central and western Europe since the 1920s in particular. Important promoters were e.g. anthroposopher Rudolf Steiner and Sir Albert Howard. Over the years, OA became more and more formalised through farmers associations who followed particular production systems. An umbrella organisation was founded in 1972 with the International Federation of Organic Agriculture Movements (IFOAM). Their definition (IFOAM International Foundation for Organic Agriculture 2008, 02.08.2013) reflects the original values and summarizes the basic concepts of OA as being

> *... a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic Agriculture combines tradition, innovation and science to*

> *benefit the shared environment and promote fair relationships and a good quality of life for all involved.*

More precisely, one of the core principles is that of having a closed nutrient cycle on the farm, which is achieved by combining a cultivation of (food and fodder) crops and animal husbandry. The latter must address the natural needs of the animals' welfare. Other methods include crop rotation, high humus content in the soil, and chemical-free pest and weed control. Next to these environmental sustainability aims, what also appears in the definition by IFOAM are the social aspects that promote fair and healthy livelihoods to all actors involved in organic food production.

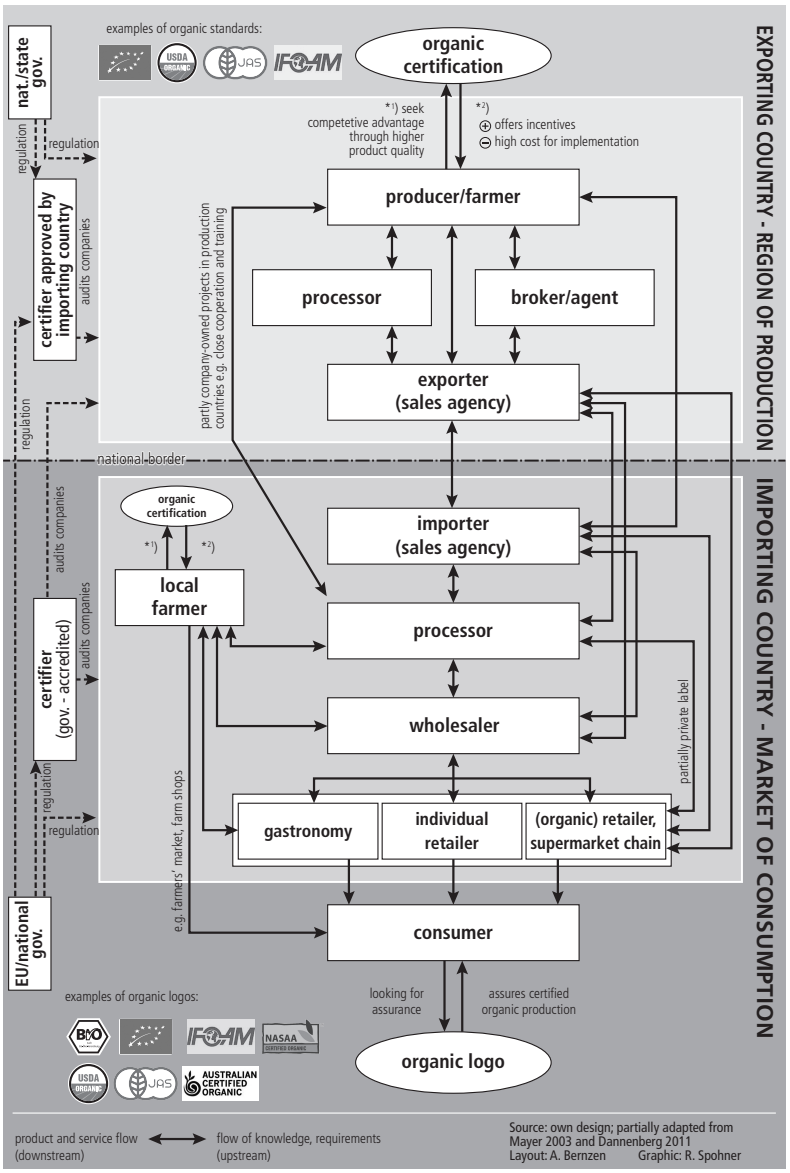
Crucially with regard to uncertainty issues, it becomes obvious that many of these organic principles are related to *process quality*, which cannot be tested ex post (i.e. after production, distribution and sale). In the food industry, process quality looks at how a crop is grown and processed, how animals are raised, kept, fed etc., at e.g. the location and directly surrounding environmental conditions of farmland or manufacturing plant, the levels of hygiene, types and amounts of external inputs such as fertilizers or pesticides, or labour conditions designations. *Product quality*, on the other hand, relates to attributes that are measurable, observable product qualities which include sensory properties (appearance and colour, texture, taste and flavour), chemical composition (e.g. fat, protein, moisture, vitamin content), physical properties and the contamination level (toxic and microbiological substances and residues). Another way of classifying product quality is to differentiate between search, experience and credence attributes. The former two refer to measurable properties related directly to the product, the latter foremost to process qualities (Baksi & Bose 2006; Reardon et al. 2001). The dominance of process quality in organic designations overall implies that to monitor and control the organic farming and production process, maximum geographical proximity would be required.

However, the originally local and regional production and distribution systems of organic produce have in many ways shifted by becoming part of large and global AFNs with fresh and processed products crossing national and continental borders before final consumption (Figure 1.1[3]).

Agri-food networks are one of the most important analytical approaches that "specify the ways in which the multiple practices and institutions that organize the provision of food are interrelated, and even coproduced" (Gregory et al. 2009, 21). They generally include actors from farming, upstream service and industries like science and technology products, and (downstream) food processing, marketing, distribution and retail to the final consumption by individual households. AFNs also include influential institutional actors such as the "state and [...] private bodies that regulate prices, terms of trade, food quality and environmental concerns relative to food

[3]Note that the source (Bernzen 2013*a*) is not part of this dissertation; however it addresses similar issues as Article 1 included here

Figure 1.1 — Transnational organic value chain and certification processes



Source: Own design, slightly adapted from Bernzen 2013*a*; Dannenberg 2012; Mayer 2003*a*.

production." As part of a global AFN, organics reflect the broader processes of globalisation in the way that food is produced, traded, marketed and consumed, including an increasing professionalization, industrialisation and fragmentation with division of labour on a global scale (Pimbert et al. 2001). This development is related above all to a large increase in demand for organic products. The industry has seen a 170 % expansion since 2002, with continuous double digit growth rates in sales turnover[4] (Sahota 2013). However, this demand is mainly

[4]Except for 2009 as a result of the global financial crisis.

concentrated in western consumer markets; Europe and the United States of America (USA) account for approximately 96 % of global sales, with Germany being the largest E.U. market and the second largest worldwide (Table 1.3). Production, on the other hand, is much less concentrated and can be found on all continents to varying degrees (Figure 1.2[5]). However, some areas – Latin America, Africa and Asia in particular – are almost completely dependent on exports due to the lack of own domestic markets (Sahota 2013).

Table 1.3 — Retail value of the world's 10 largest markets for organic food 2011

Rank	Country	Turnover in million EUR
1	USA	21038
2	Germany	6590
3	France	3756
4	Canada (2010)	1904
5	UK	1882
6	Italy	1720
7	Switzerland	1411
8	Austria	1065
9	Japan (2010)	1000
10	Spain	965

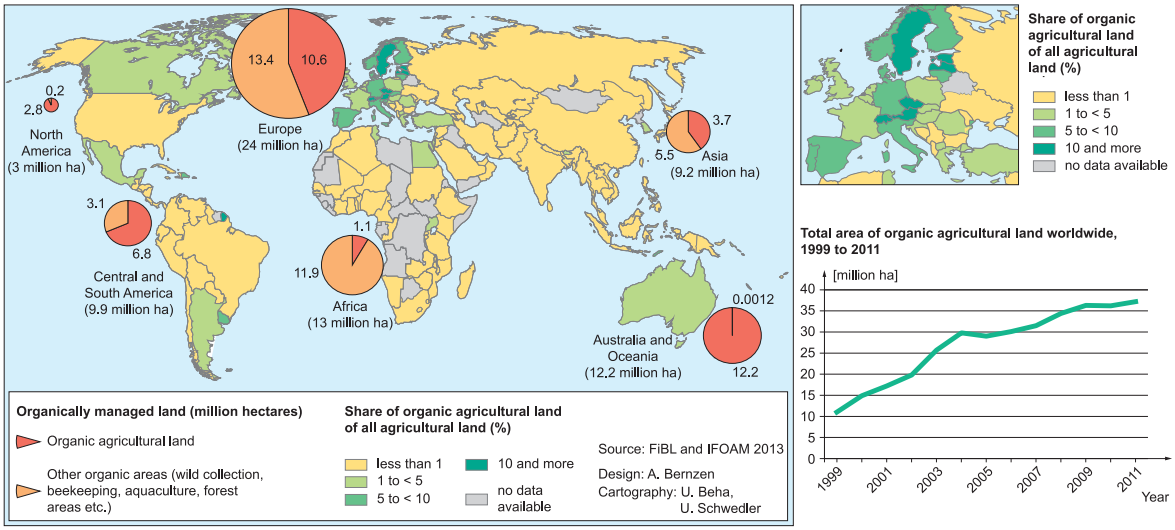
Source: FiBL Forschungsinstitut für biologischen Landbau & IFOAM International Foundation for Organic Agriculture 2013, 70-71

Overall, the organic food sector is thus a good example of the high extent in which volumes and varieties of food offered on global markets are increasing, but also of the fact that especially consumers in highly developed western societies have become used to a "Permanent Global Summertime", i.e. an all-year-round availability of even those products that are exotic or locally off-season (Trebbin 2012, 5).

Apart from changing consumer lifestyles which favour the environmental, ethical and potential health benefits that organic products are associated with (Sahota 2011), four key reasons are considered to have influenced the growth of the organic market: (1) expansion of the organic product range by conventional supermarket retailers and discounters; (2) new retail chains introducing organic food in their assortment, (3) large increase in sales among almost all retailers,

[5]Note that the source (Bernzen 2013*b*) is not part of this dissertation.

Figure 1.2 — Area and distribution of organic agricultural and other land, 2011



Source: Slightly adapted from Bernzen 2013*b*

and finally (4) a supply shortage combined with rising demand, resulting in higher purchase and consumer prices (e.g. Yussefi & Zerger 2007; ZMP in Dow Jones & Co. 28.11.2007; Bien & Schaack 2007). Today, the largest share of organic products is sold through conventional supermarkets, discounters and large retailers in the large consumer markets like the USA or Europe (Fitch Haumann 2011; Scholl et al. 2007). A phenomenon that has been observable in Germany over the past years is the strongly increasing number of so-called 'organic supermarkets' which sell organic only (or focus mainly on organic products); but are otherwise in terms of size and product presentation very much like conventional supermarkets. Some are even affiliated to conventional supermarket chains, such as German REWE's first 'organic market' in Düsseldorf which opened in 2005.

The strong surge in demand has seen imbalances in supply and demand emerge which became especially obvious during the peak growth around 2007-2008. The problem was, and still is, the relatively long conversion period of 18 to 36 months from conventional to organic farming which caused supply to stay behind demand, at least for certain commodities (Dorfer 16.01.2008). Furthermore, a problem for example in Germany was that – even where ecological conditions including climatic and soil conditions are favourable – many farmers were reluctant to convert to organic production (see e.g. BLE Bundesanstalt für Landwirtschaft und Ernährung 2007; Widmann 2008). One of the main reasons seemed to be the limited financial government support, especially during the conversion period which does not make it more lucrative than maintaining conventional production methods (Liebrich & Kuhr 17.10.2010). It is likely that this reason counts even more in countries without any financial government support for (organic and other)

agriculture, like the USA or Australia. Other factors hampering an increase of organic farming operations include (in some countries) an artificially high price for conventional products, increased land prices as a result of one-sided support for biogas crop production (Köpke & Küpper 2013), lack of information and thus high insecurity regarding organic production methods, economic viability and long-term market development on the farmers' side. Some academics saw the supply situation as the dominating issue in 2007-2008, forecasting an ongoing necessity to import organic produce from abroad, especially from Eastern and Southern European countries and third countries (Köpke & Küpper 2013; for the UK Morgan & Murdoch 2000; for Germany Prof. Dr. U. Hamm in SÖL Stiftung Ökologie und Landbau 4.12.2007). While this trend has been observable for some years now, the demand-supply imbalance of organic products will remain a relevant and growing issue over the years to come (Sahota 2013). Not only do developing countries and countries in transition benefit from this boom of export opportunities, but environmentalists also see long-term benefits of organic farming for sustainable land use.

However, a great concern in importing countries relates to food safety and the particularly sensitive product quality designations related to organic products. The above described processes of formalisation and industrialisation of organic have led to a somewhat heated debate both in local and global communities on the question on what organic actually means (Morgan & Murdoch 2000, 166, footnote 6), further hampering trade across borders and leading to large-scale efforts for a global harmonisation of its definition. The issue regards not only public health but also impacts international trade. Downstream value chain actors (importers and supermarkets) are seen to place special emphasis on product quality (Korneliussen & Grønhaug 2003). Consequently, uncertainties among organic importers in their transnational business relations are especially high as they are concerned about fraud, forged documents and that products imported from foreign countries do not meet the standards that organic products demand on the local market (Zerger in Widmann 2008; see also Ponte & Gibbon 2005). What adds to the uncertainty is the increased physical, institutional and cultural distance to their suppliers. This may cause importers to be more at risk of facing opportunistic behaviour by their suppliers (Dannenberg 2012; Glückler 2005). Overall, this would lead to negative consequences not only for the importers themselves (e.g. legal sanctions, losing business, bad reputation, negative press) but also to insecurity among end consumers who lose trust in the additional value of organically grown produce in comparison to conventional food.

1.3.2 Institutions and Conventions in Global Organic Agri-Food-Networks

With the excessive growth of the organic market, research in this area has substantially grown over the past decade, trying to analyse and unravel the connections, interlinkages and dynamics between manifold actors and industry-specific factors. Both formal and informal institutions have been somewhat recognised, both from the governmental and the non-governmental side. In general, the influence that researched institutions have on chain coordination and quality management has been looked at in case studies on local issues and/or rural development (e.g. Guptill 2009; Henryks & Pearson 2010; Kirwan 2006; Osswald & Dittrich 2009; Scholl et al. 2007). However, research in the field of international trade in organics has started to increase since about 2002 (e.g. Bacon 2005; Beuchelt & Zeller 2011; Bolwig et al. 2009; Claro & Oliviera Claro 2004; DeLind 2000; Demmeler 2003; Dünckmann & Mayer 2002; Dünckmann 2006; annual reports by FiBL Forschungsinstitut für biologischen Landbau & IFOAM International Foundation for Organic Agriculture 2013; Firth & Green 2006; Franz & Hassler 2008; Gibbon & Bolwig 2007; Guthman 2004*a*; Hamm et al. 2002; Hamm & Rippin 2007; Hatanaka 2010; Knickel et al. 2006; Kristiansen et al. 2006; Lockie et al. 2006; Mayer 2003*b*; Mayer 2003*c*; Morgan & Murdoch 2000; Mutersbaugh 2002; Nigh 1997; Raynolds 2004; Rice 2001; Sanders 2004; Thiers 2006; Zundel & Kilcher 2007). This work focuses on different aspects of the changing organic and agri-food system in the context of globalisation and (trade liberalisation) policies (on global trade in general, see e.g. Kulke 2005). Most of these studies are based on GCC, GVC, GPN or Relationship Marketing (RM) approaches, often combined or linked with economic theories such as NIE. However, most of this work has highlighted the exporters' perspective (e.g. Raynolds 2004; Franz & Hassler 2010), while little work addresses cross-border organic supply chain interactions between importers of organic products and their suppliers (for examples on conventional cross-border food chains, see Fold & Pritchard 2005; Pritchard & Burch 2003).

Institutions in agri-food networks

Among formal institutions, the issue of food standards has been the most dominating literature on global AFNs, not only around organics. These include both legally binding public (government) standards, but also private standards driven e.g. by transnational retailer organisations (e.g. Busch & Bain 2004; Dannenberg 2012; Dietsche 2011; Ouma 2010). These standards define both product quality characteristics (including food safety parameters), product authenticity aspects (e.g. protected geographical indication) and process quality characteristics (see Chapter 1.3.1; Reardon & Farina 2001).

Higgins et al. (2010) associate three trends with the emergence of global (private) food standards: First, trade liberalisation in particular through the World Trade Organization (WTO) which has led to an increased global regulation of (food) trade. Second, decreasing trust in existing

food supply systems by consumers due to a range of developments such as highly intensified agriculture, the increasing geographical distance between farmers and consumers, and a series of food scares (SARS, mad cow disease, foot-and-mouth-disease, rotten meat scandals, just to name a few). The latter have led to some rigorous import and hygiene restrictions in certain countries in order to protect the local environment and the population (e.g. in the E.U.; Australia and New Zealand have some of the world's strictest import conditions). Overall, the result is the introduction of new intermediaries (e.g. control bodies, distributors) who supposedly improve a thorough control of product quality (Morgan et al. 2006). Finally, third, an independent control system, or third-party certification (TPC), has become an important institutional system by means of which the adherence to standards is to be verified. This is also said to increase efficiencies in trade and reduce transaction costs (Reardon & Farina 2001).

The benefits of standards and TPC have, however, been subject to some critique (Guthman 2004*a*). For instance, the implementation costs can exclude certain suppliers from global markets; particularly smallholder farmers in developing countries (e.g. Hatanaka et al. 2005; Jaffee & Masakure 2005; Mayer 2003*a*). Furthermore, it has been noted that standards do not always lead to reduced forms of direct coordination (Dietsche 2011). Rather, Dolan & Humphrey (2000) have pointed out that process standards can even increase a firm's investments in monitoring their suppliers' adherence to standards e.g. through own on-site audits. The degree of investment depends somewhat on the risk a buying firm faces in the case requirements are not met (Nadvi 2008).

Similar discussions can be found in recent literature focusing on the issue of national and international organic standards (e.g. Mayer 2003*b*; Raynolds 2004; Reardon et al. 2001). The first standards emerged among organic farmers' associations in the 1970s in central Europe. The original "purpose of [...] organic standards was to allow [...] existing growers to differentiate themselves in the market, precisely so consumers would pay more for an organically grown commodity" (Guthman 2004*a*, 525). In the early 1990s, first governments in western consumer markets responded to the rapid increase in demand by implementing (supra-)national standards to regulate organic production and marketing, partly making certification mandatory in order to protect consumer and market interests. One of the world's most broadly disseminated standards today is the Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products (E.U. Standard) (also called EC Eco-Regulation) which first came into force in 1991 in all E.U. member countries and applies to all sections of the supply chain, even across national borders (Table 1.4 shows extracts from the revised 2007 standard).

Table 1.4 — Aim, Scope and Definitions of the Council Regulation (EC) No 834/2007 [...] on organic production and labelling of organic products

Article 1

1. This Regulation provides the basis for the sustainable development of organic production while ensuring the effective functioning of the internal market, guaranteeing fair competition, ensuring consumer confidence and protecting consumer interests.

It establishes common objectives and principles to underpin the rules set out under this Regulation concerning:

(a) all stages of production, preparation and distribution of organic products and their control;

(b) the use of indications referring to organic production in labelling and advertising.

2. This Regulation shall apply to the following products originating from agriculture, including aquaculture, where such products are placed on the market or are intended to be placed on the market:

(a) live or unprocessed agricultural products;

(b) processed agricultural products for use as food;

(c) feed;

(d) vegetative propagating material and seeds for cultivation.

...

3. This Regulation shall apply to any operator involved in activities, at any stage of production, preparation and distribution, relating to the products set out in paragraph 2.

Source: E.U. European Union 2007

Globally, it is accompanied by many other public (e.g. the United States Department of Agriculture of America, National Organic Programme (USDA NOP Standard) or Japanese Agricultural Standard (JAS)) and private (e.g. IFOAM, Demeter) standards. Partly, there are only small differences between these standards, yet they can lead as non-tariff barriers, like between the E.U. and the USA. For example, in their export study for the American Organic Trade Association, Fuchshofen & Fuchshofen (2000) find that some of the most relevant institutional trade barriers to the organic industry include foreign government regulations and national organic standards, problems of mutual acceptance of certification procedures, lack of government and industry support and customs tariff structure. They also point at cultural differences and language problems (see also Mattsson 2003).

Regarding the impact of certain actors and institutions in organic AFNs, there have been some mixed findings. On the one hand, in light of increasing supply shortages, balance of power is said to have shifted towards organic producers (Franz & Hassler 2008; Wycherley 2002). On the other hand, there are claims that today it is the private sector and retailers in particular, to-

gether with private standards that are the major driving forces transforming the global agri-food system (Busch & Bain 2004; Firth & Green 2006). Large market shares have created powerful positions for supermarkets within global AFNs which enable them to take strong influence on upstream producers; not only in terms of pricing negotiations, but also with regard to quality requirements (Franz 2011; Pimbert et al. 2001). Regarding the influence of governments, some authors state that changing policies in the course of international trade liberation will lead to increasing competition on the supply side and to reduced state influence (Sanders 2004). Others believe that, because standards and certification will remain 'imperfect', there will be an ongoing necessity for governments and international organizations to oversee the process (Gereffi et al. 2001). The major problem here lies in the fact that mutual recognition and equivalence among these different standards systems is still limited and thus an impediment to trade. In the light of these debates, there thus remains room for more clarification regarding the role of these institutions on trade coordination.

The impact of informal institutions has received much less attention in value chain and production network literature. There are a few studies for the case of organic food trade, mainly based on supply chain and relationship management (e.g. Claro & Oliviera Claro 2004; Håkansson & Snehota 1995; Wycherley 2002) that deal with trade barriers such as language and cultural differences. They suggest these factors may be of increasing importance as more organic goods have to be imported, and promote the employment of a cross-border integrator to handle contractual issues but also culturally induced differences between im- and exporters, including language (Claro & Oliviera Claro 2004; Gerlach et al. 2005; Wycherley 2002). A few national case studies find that a major impediment to smooth trade flows are a lack of or problems in communication and information flow among supply chain actors (Aakkula et al. 2006; Ermann 2005; Firth & Green 2006; Kottila & Rönni 2008).

Trust has been more frequently thematised. While most extant literature focuses on food networks in general, the specific role of trust and its significance within the value creation process of organic food have been pointed to in a GPN context (Franz & Hassler 2010). Hofstede et al. (2010), from a management studies perspective, contribute to work on inter-organizational trust by developing a typology of trust for the food sector which aims to identify different cultural handlings of trust creation. As the model is relatively new, it has yet to prove its applicability in further empirical research. On the level of case studies dealing with trust, a recent study on the agri-food sector of meat and cereals by Fischer (2013) shows that effective communication and favourable past business relations can have a strong positive impact on trust in supply chain partners. For the Finnish organic sector, Kottila & Rönni (2008) show that trust can also be developed in situations of power imbalances in a value chain, or in cases that trading partners support different value systems.

Reputation has also been conceptualised as an institution (Glückler 2005). There has been some evidence that media, as well as NGOs, can play an important role in shaping the image or reputation of organic products in a given society, which – if positive – increases commitment of different actors (Kottila 2006). Image is here understood as a concept or idea that is shaped in the minds of the public regarding a particular matter; in this case product group. It has been shown that the image of organic food has risen since the mid-1990s and that there are certain attributions which mostly refer to an 'added value' over conventional food that consumers associate with organic food (Bruhn 2002). However, there is also an indication that food scandals in organics influence purchasing behaviour and that the source region – and its image – strongly influence the possibility to sell a product on the market (Gleirscher 2003).

Overall, the most important formal and informal institutions relevant to the organic food sector derived from extant literature can be summarised as follows. Among formal institutions we find above all governmental laws and regulations, i.e. food safety regulations applying to imports; and governmental regulation and supervision of organic standards and according certification procedures. Informal institutions here include trust, reputation (of e.g. firms, brands, products, countries), and other (cultural) rules and norms prevalent in a given society (e.g. social and environmental welfare, business mentality, communication). It is to these that I dedicate the focus of the study. The following subsection will lay out how CT can be useful in this endeavour and give a brief overview of how CT has been applied in agri-food studies so far.

CT in agri-food research

Raynolds (2004, 738, 728) points out that the "the utility of CT concepts [lies] in analysing the quality norms, rules, and institutional arrangements fuelled by the global expansion in certified organic markets and the resilience of the organic movement's founding principles." She also argues that CT "is theoretically compatible with and complementary to an analysis of agro-food networks and their governance" (see also Raikes et al. 2000; Wilkinson 1997). CT has thus become increasingly influential in works on AFN since the late 1990s, also in the English-speaking academia (Murdoch et al. 2000; Raynolds 2004; Wilkinson 1997). An overview of some of the most influential studies since the mid-1990s and their major findings can be found in Appendix 'CT Literature'. These publications demonstrate how CT provides a useful framework to examine both formal and informal institutions: Following Boltanski & Thévenot (1991), standards and certification systems – understood here as formal institutions – can be captured within the *industrial* world; the *domestic* convention is based on trust and tradition; public reputation and image can be found in the *opinion* world. The bases for other informal institutions like social and environmental welfare are indicated at within the *civic* or *green/environmental* world. It has been argued that CT is particularly helpful for food with

complex quality designations (e.g. fair trade or organic), as CT can capture their underlying norms and values (Marsden et al. 2000).

Recent literature shows two major applications of CT in AFNs. First, analyses of quality designations of food (e.g. Freidberg 2003; Marsden et al. 2000; Murdoch et al. 2000; Ponte 2009; Ponte & Gibbon 2005; Raynolds 2002; Raynolds 2004; Renard 2003; Renard 2005; Sylvander 1995; Truninger 2008; Wilkinson 1997). The general argument is that there has been a 'quality turn' in the sense that quality (and its differentiation) has become more important in production and consumption, rather than in the Fordist regime which placed more emphasis on quantitative criteria (Ponte 2002*b*; Stamm 2004). This differentiation in quality thus challenges the predominant *market* principles which base on price mechanisms in coordinating AFNs. It has been argued that alternative conventions which persist in specific food sectors, such as *domestic* or *civic* conventions, are likely to be confronted by established Fordist *market* and *industrial* conventions (Raynolds 2004; Sylvander 1995). For the organic sector, this means that there has been much debate and negotiation around the definition of what 'organic' actually implies, i.e. the precise parameters of the organic designation. The second challenge then is to develop an appropriate production network that fulfils the demands and criteria of buyers and consumers. In this production network, "conventions – as negotiated entities – represent temporally malleable solutions to the uncertainties (e.g., product quality) inherent in a social relationship involving inequalities of knowledge, skill and power among its participants." (Rosin & Campbell 2009, 37).

One example of this strand of research is the study by Ponte & Gibbon (2005). It explicitly links CT to GVC approaches in a comparative case study of global clothing and coffee chains to stress the importance of quality for lead firm governance across larger distances. They employ the four quality conventions developed by Eymard-Duvernay (1989) who links them respectively to according types of coordination that aim to overcome quality uncertainties (Ponte & Gibbon 2005, 37-38):

Market coordination: Price expresses differences in quality, i.e. more expensive products have a higher quality. This coordination will only dominate if there is no uncertainty regarding quality.

Domestic coordination: Trust is the basis on which uncertainty is resolved. Interpersonal trust is developed through long-term relationships, existing personal connections or recommendations. Quality is institutionalized by repeated action.

Industrial coordination: Uncertainty regarding quality is solved through independent third-party assessments. Inspection bodies test the product with regard to its adherence to precisely defined measurable criteria or standards. Certificates can be the outcome of such procedures.

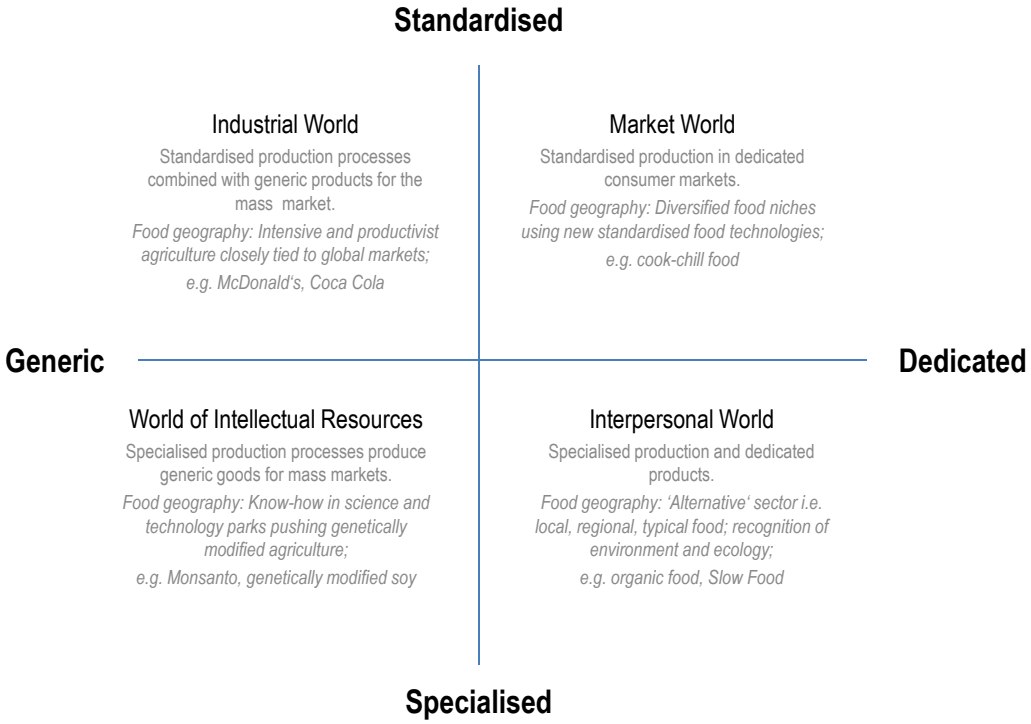
Civic coordination: The value of a product is determined on the basis of its contribution to societal or environmental welfare.

Their finding that the clothing value chain is dominated by *industrial* coordination as opposed to *domestic* coordination in the high-end speciality coffee chain has been criticised to reduce the discussion to the dichotomy between 'conventional' and 'alternative' type of marketing. It would consequently neglect the heterogeneity of organic chain actors and the variation of conventions employed at different parts of the chain. In fact, this critique is made for most of the studies in this line of CT research (Rosin 2007).

Further, a strict separation of the four categories in convention theory is rarely possible in most markets. This is because there will usually be several quality conventions and thus different types of enterprises existing alongside each other within a certain value chain. Yet, Allaire & Boyer (1995), point out that "broad trends of historical transition can also be identified in most primary commodity filières". According to Stamm (2004), this transition has been observable in the trade of organic food products. This trade has witnessed a shift from *civic* coordination in the early phases of the industry in which actors all followed the same common values, resulting in an intrinsic motivation to avoid conflict, to a rather *industrial* form of coordination nowadays. The first obvious indicator for *industrial* coordination is the strong increase of organic products distributed in 'conventional' supermarket chains. Wycherley (2002) understands 'conventional' as actors in the supply chain whose strategies are aimed at maximising financial performance, with little importance placed on the environmental or health impacts of the products; as opposed to 'pioneer companies' who were in early stages usually smaller producers, wholesalers, processors and retailers and linked to an alternative set of values drawn from religious or moral standpoints on health, environmental sustainability or animal welfare. Other indicators for the shift from civic to industrial coordination mechanism are the regulatory changes on (trans-) national levels by introducing exact definitions of 'organic' product characteristics, as well as complex monitoring systems which are meant to ensure adherence to these standards (see e.g. Ermann 2005; Dünckmann 2006).

The second major application of CT in agri-food literature relates to the classification of firm behaviour as they strategically position themselves in given markets. Studies often use the 'Worlds of Production' framework by Storper (1997) and Storper & Salais (1997) as a starting point (Morgan et al. 2006; Murdoch & Miele 1999; Murdoch & Miele 2004; Sage & Goldberger 2012; Stræte 2004). Each of the conceptualised 'Worlds' is made up of different combination sets of conventions. One of the strengths of these studies is that they have highlighted how one firm can move between different worlds/conventions in markets. For example, Murdoch & Miele (1999) examine how an egg processing firm and an organic food retailer in Italy move between the four 'Worlds of Production', as shown in Fig. 1.3. The organic egg processor thus moved

Figure 1.3 — Worlds of Food within Storper's 'Worlds of Production'



Source: Adapted from Morgan et al. 2006; Murdoch & Miele 1999, Storper 1997

from generic (eggs) to more dedicated products (e.g. organic eggs) to participate in these niche markets.

However, some of these studies have been criticised for being too narrow or uniform and neglecting certain conventions from the framework by Boltanski and Thévenot (Rosin 2008). Similarly, Morgan et al. (2006) call for an integration not only of economic activity, but also culture, ecology and politics/institutions. Further, they argue that 'worlds of production' or 'worlds of food' have a spatial aspect to them: "[I]n fact, it is likely that differing nations, regions and localities will combine differing aspects of these worlds" (Morgan et al. 2006, 24).

1.4 Research Questions

The research questions that are addressed in this dissertation are part of the broader discussion of how uncertainties regarding product quality are coordinated in global AFNs. The aim of this work is to contribute to this discussion by providing an improved understanding of how institutions – analysed in particular through a CT lens – are employed by importers of highly sensitive products in the cross-border relations with their suppliers. This will be achieved through a comparative case study of firms importing organic food into Germany and Australia, thus following the assumption by Morgan et al. (2006) cited above that conventions may differ from nation to nation. To my best knowledge, no such comparative study has been carried out before.

The reasons and motivations for looking at these issues are derived first and foremost from conceptual considerations, while at the same time the topicality of the case study on organic food should not be underestimated. As discussed in the chapters above, there have been calls to refine existing conceptual frameworks dealing with global production processes, like GCC, GVC or GPN, to explicitly bring to the fore in empirical research the institutional impacts on actors involved in these economic activities. Particularly the relative influence of informal institutions on import and quality management as opposed to formal institutions has not been given sufficient attention. A focus in this research will thus lay in identifying the (relative) influence of formal, but also informal, institutions on organic trade.

I argue that CT serves as a fruitful complementary approach to grasp these dimensions. This dissertation will employ and build on both of the two above discussed strands of CT agri-food literature. First, with regard to quality designations, I move away from the idea that a whole chain is dominated by a single convention and recognise that actors at a particular position within the network – in this case, importers in different nations – may have different understandings of the 'organic' quality designation which each bears particular uncertainties. Second, with regard to firm classifications in their strategic positioning on markets, I focus on the cross-border coordination process and suggest that there are different types or 'groups' of firms which focus on particular types of conventions to overcome uncertainties when dealing with their suppliers. I here follow the claim by Murdoch & Miele (2004), Morgan et al. (2006) and Rosin & Campbell (2009) to include a broad range of justifications to gain a more comprehensive understanding of the diversity of firms' approaches. This is necessary as "organic agriculture is dynamic with no one market structure defining it. Organic producers are likewise a dynamic group with a wide range of justifications for their production choices" (Sage & Goldberger 2012, 59). The framework by Boltanski & Thévenot (1991) is assumed as a suitable concept and I argue that their worlds of justification can grasp the various logics that importers apply to overcome quality uncertainties.

My motivation with regard to the case study on organics stems from the fact that I was intrigued by the massive growth of the organic market and its implications for farmers and traders on a global scale. When I first started investigating toward this study in 2007-2008, the retail sales growth rate of organic food was reaching its peak in Europe. More and more organic products from abroad – and increasingly from developing countries – were placed on retailer's shelves across the E.U. and other western consumer markets. However, there was also an observable increase in consumer awareness for food safety and quality issues. A number of media scandals on organic food further sensitised the public regarding these issues, and society started questioning the added value or assumed environmental, social, health and safety benefits of certified organic products. Overall, this makes organic trade a compelling case by which to examine institutional impacts on importers' coordination mechanisms for such sensitive products.

This dissertation considers three distinct analytical dimensions: (1) Agents of economic exchange (i.e. decision makers in importing firms, certifiers and other stakeholders), (2) Regions (i.e. analyses on transnational/national level), (3) Institutions (formal and informal institutions; captured in part through conventions).

The research questions of this dissertation are based on both conceptual and practical considerations and can be summarized as follows:

1. **What is the type and the source of uncertainties that importers of organic produce face?**
2. **What is the role of formal institutions like standards and certification processes in sourcing strategies and quality coordination? Are differences between German and Australian companies observable, and how can they be explained?** Behind this question stands the assumption that formal institutions will generally become more important in the face of increasing international diffusion and equivalence agreements of organic standards. In this case, importers would reduce their (quality) coordination efforts to the degree that tasks of monitoring and controlling quality standards can be conducted by third parties. This would also lead to reduced differences in product quality perceptions between suppliers and importers.
3. **How can norms and values regarding social and environmental welfare be observed in trade coordination? How can the actual contribution made through organic agriculture to these areas be rated?**
4. **What is the general composition and prominence of individual conventions (and related formal and informal institutions) within the coordination mechanism of organic imports?** Here I assume that firms do not rely on formal institutions and market criteria alone, and suggest that both a good reputation and trust are decisive

reference points for importers to reduce uncertainty.

a) Which variations in preferences can be observed between German and Australian firms, how could they be explained?

b) Do certain types of firms place an emphasis on specific conventions? Do (quality) coordination mechanisms differ between 'conventional' firms and more 'alternative' firms? If yes, how and why?

5. Which factors influence the degree of direct coordination (or vertical integration) between an importer and his suppliers?

2 Methodology and Overview of the Articles

The research questions that have been derived from the broader scientific context and the analytical framework provide the basis for the selected methodological approach of the empirical study that will be elaborated on in Chapters 3 to 5. To provide a better insight and transparent understanding of the results presented in these articles, the following two sections will explain in detail the choice of the case study regions and empirical methods: The analysis of cross-border trade coordination by the case of organic food imports (Chapter 1.3) was explored from the perspective of two countries, Germany and Australia (Chapter 2.1), particularly by means of qualitative interviews (Chapter 2.2). I close the methodological discussion by making some critical remarks on the limitations of the data in Chapter 2.3. The final chapter here (2.4) will present an overview of the articles included in this dissertation, which – to the greatest part – build on the collected empirical material.

2.1 Selection of Case Study Countries: Germany and Australia

The relevance of 'organics' for the broader research question has been identified through current societal debates and according scientific literature (Chapter 1). The choice of two different case countries is in line with Morgan et al. (2006) and Sage & Goldberger (2012). The latter suggest for organic producers that the variation in the choice of conventions applied by actors can partly be attributed to their geographic location. More comprehensive results would thus be possible by considering a broader spectrum of western consumer markets. Germany and Australia were chosen as case countries partly out of practical and pragmatic considerations, but also as they feature some structural and physio-geographical differences which provide the bases for some interesting research-related comparisons. Obvious similarities between the two are that they are both democratic, have highly developed and pluralistic market economies, and both are strong importers of organic foods. Notable differences I discuss here that regard the relevant aspects for the trading environment of organic food are compiled in Table 2.1.

In terms of (voluntary) integration into higher economic and political entities, Germany is member state of the EU, which means that actors in Germany must abide by both EU and national law. This also has an impact on the legislation regarding the import of foodstuffs, as many standards in food hygiene have been harmonised in the Single European Market (BVL Bunde-

samt für Verbraucherschutz und Lebensmittelsicherheit 20.08.2008). E.U. law is also applicable in the field of organic labelling (Chapter 3). Australia, on the other hand, is not part of a major supranational political union. It is member of the Commonwealth of Nations, which, in contrast to the E.U., "is based on unwritten traditional procedures, and not on a formal constitution or other code" (Commonwealth of Nations 1971). Despite several bilateral free trade agreements and intensified relations with overseas' nations (esp. CER with New Zealand, bilateral trade agreements with the USA and several Asian countries) Australia remains relatively isolated both economically and politically (e.g. Bernzen 2008; Braun 2007).

Australia is thus solely responsible for its own policies, which include strict food safety standards, labelling requirements and sanitary and phytosanitary standards which are supervised by Australian Quarantine and Inspection Service (AQIS) and can be an impediment to market access, especially for fresh produce. These are partly a result of the changing ecological and physical conditions for farming. Australia's geographic isolation compared to Germany is no longer sufficient to protect the natural indigenous environment from external dangers beyond the degree that this has already taken place. The past two centuries of European settlement have caused immense ecological damage, partly through import of alien flora and fauna, partly through unfavourable climatic conditions including drought and flooding. This, in combination with relatively infertile soils and inadequate farming methods has led to land degradation by soil erosion, salinity and deforestation (e.g. Braun 2010; Diamond 2005). These circumstances also make it very difficult for farmers to grow some commodities according to organic farming practices.

Differences can also be observed with regard to agriculture and the organic market. With a population of just over 22 million, Australia's market size for (organic) foods is small compared to Germany's (pop. approx. 80.5 million, Destatis Statistisches Bundesamt 2013). Germany is currently the second largest organic market worldwide with 2011 sales of USD 9.33 billion, where retail sales have been growing by almost 10 per cent despite the global financial crisis (BÖLW Bund Ökologische Lebensmittelwirtschaft 2012). However, a large discrepancy between supply and demand has been noted for the past decade. While retail sales have increased by 127 per cent since 2002, the increase in organic agricultural land only grew by 47 per cent (Köpke & Küpper 2013). Australia currently features the largest agricultural area under organic management worldwide with 12 million hectares (Willer 2012), though much of this is extensive grazing land for cattle. It has noted retail sales to grow by an estimated 41 per cent between 2006-7 and 2008-09 (Kristiansen et al. 2010; no newer data available). Production increase, however, is lagging behind with an increase rate between 6 to 15 per cent p.a. (RIRDC Rural Industries Research and Development Corporation 2006; no newer data available). While domestic sales values of organic products are not systematically recorded in Australia, various authors have

estimated its value to range between AUD 623 million (2007) and AUD 947 million (2009) and suggest a further increase in demand (Mitchell & Wynen 2012).

It is important to note that, traditionally, Australia is above all a leading exporting country of agricultural goods, which has led to its strong support of free trade and elimination of tariffs over the past decades and is reflected, for instance, in its prominent participation in the so-called Cairns Group[1] (Bernzen 2008). Due to the global increase in demand in organics, Australia's organic industry has also seen great opportunities to participate in exports in this sector. However, like in Germany, we can observe that local demand is outstripping supply, at least in certain commodities, also due to a long period of droughts until 2009-10. Apart from climatic challenges, the most important barriers are, like in Germany, seen in the slow conversion rate to organic farming practices, and in inefficiencies in supply chain management and integration (RIRDC Rural Industries Research and Development Corporation 2006). Limiting factors to conversion include the lack of financial government support: while there is some financial support on E.U., national and state levels in Germany (Nieberg et al. 2011), there is no direct support at all for farmers in Australia (Mitchell & Wynen 2012). Lack of certain organic goods is met by imports, processed goods above all from Europe, the US and New Zealand, but increasingly also from China (Halpin 2004; Paull 2007*a*; Paull 2007*b*; RIRDC Rural Industries Research and Development Corporation 2006). All the same, the distance from Australia to its supplier markets abroad is substantially higher than Germany's to its main supplier markets in Europe.

Finally, the variations in the organisation and regulation of organic quality standards in Germany and Australia, discussed in more detail in Chapter 3 (Article 1), are by no means arbitrary. Rather, they reflect the different broader underlying political systems of the two countries which have been acknowledged in various studies that have examined and classified existing varieties of capitalism since the 1980s (see Höpner 2009: page 313, for an overview). Hall & Soskice (2001), for instance, classify Germany as a Coordinated Market Economy (CME) and Australia as a Liberal Market Economy (LME); Amable (2003) categorizes them as Continental-European and market-based (or Anglo-Saxon) forms of capitalism, respectively. It is thus no surprise, for example, that Australians take the general approach of mandating standards only when obvious market failure can be observed.

[1] "The Cairns Group is a coalition of 19 agricultural exporting countries which account for over 25 per cent of the world's agricultural exports. During the current WTO Doha Round of negotiations the Group has continued to push for the liberalisation of trade in agricultural exports, a cause that unites the Group across language, cultural and geographic boundaries. Made up of developed and developing countries across five continents, the Group is committed to achieving free and fair trade in agriculture that provides real and sustainable benefits for the developing world." (Cairns Group 19.07.2013)

Table 2.1 — Key characteristics of the organic trading environment for Germany and Australia

Characteristics	Germany	Australia
Population	80.5 million (Dec 2012) (3)	23.1 million (Jun 2013) (1)
Classification according to 'Varieties of Capitalism'-categories by (a) Hall & Soskice (2001), and (b) Amable (2003)	(a) Coordinated market economy (b) Continental-European Capitalism	(a) Liberal Market Economy (b) Market-based Capitalism
Economic and political integration	European Union (E.U.) as political and economic community of 27 countries; European Economic Area (EEA)	Commonwealth of Nations; Closer Economic Relations (CER) with New Zealand; several bilateral free trade agreements
Geographical distance to major source markets	Relatively low (Eastern and Southern Europe)	Relatively high (NZ, Asia, Europe, US)
Import regulations related to hygiene and food safety	Harmonisation through the General European Food Law: Regulation (EC) 178/2002 of 28th February 2002, effective since 2006. Free trade of goods across E.U. member states	Very strict AQIS: 1. Quarantine Act 1908 2. Imported Food Control Act 1992
Geographic integration (spatial)	Central Europe, borders with 8 E.U. countries, one non-E.U. country (Switzerland)	Australasia, geographical isolation (island)
Ecological conditions of agricultural land	Relatively good rainfall and soil fertility (regional variations)	Increasing problems due to soil degradation, drought, flooding, biodiversity loss (regional variations)
Retail sales of organic	EUR 6.59 billion (2011) (2)	EUR 0.534 billion (AUD 0.947 billion) (2009) (4)
Market share of organic	3.7 per cent (2011)	(2) 1 per cent (2009) (6)
Market growth rate	9 per cent (2) (2011)	41 per cent (2006-7 to 2008-9) (6)
Production growth (increase in area under organic management)	2.3 per cent (2011) (2)	6-15 per cent (2005-06) (8)

Continued on next page

Characteristics	Germany	Australia
Area under organic management	0.991 million ha (2)	12 million ha, of which 97 per cent under extensive grazing management (6)
Support of organic industry	Financial and other support programmes on E.U., national and state levels for all segments of the organic supply chain (5)	First financial government commitment by the State Government of Victoria between 2008-2011, supporting the organic industry with AUD 1.08 million (7). Otherwise, hardly any support (4)
National organic regulation	E.U. Standard (mandatory minimum standard and certification) with E.U. logo, German government logo, various private standards with own logos	Domestic government standard (voluntary certification), export standard (mandatory certification for exports), both without logos; various private standards with own logos

Sources: (1) ABS Australian Bureau of Statistics (2013) (2) BÖLW Bund Ökologische Lebensmittelwirtschaft (2012) (3) Destatis Statistisches Bundesamt (2013) (4) Mitchell & Wynen (2012) (5) Nieberg et al. (2011) (6) Kristiansen et al. (2010) (7) Wynen et al. (2011) (8) RIRDC Rural Industries Research and Development Corporation (2006); and as cited in text.

2.2 Data collection and analysis

A combination of several empirical methods was applied, while clear emphasis was placed on qualitative methods in the shape of semi-structured interviews (Chapter 2.2.1) due to the explorative character of the study and the unavailability of relevant and comparable statistical trade data. Additional quantitative data was collected among importers in an online questionnaire (Chapter 2.2.2) to support the hypotheses and results drawn from the qualitative material (in the sense of "methodological triangulation", Flick 2004; Kaplinsky & Morris 2001). Complementary information was collected from various other sources (Chapter 2.2.3).

2.2.1 Qualitative Interviews

The primary source of empirical data for this study was collected during semi-structured, guided expert interviews. Given the focus on importing firms, these interviews were led with decision makers (buyers, quality managers, CEOs) of firms based in Germany and Australia that im-

port organic foodstuffs. In total, I interviewed 26 importing companies in Germany, and 19 in Australia (partly together with Boris Braun). Furthermore, to better understand the broader context of the importers' activities, complimentary interviews were led with experts who are not themselves part of the value chain, but nonetheless important actors in the broader organic agri-food network (e.g. certification bodies, government agencies) (7 in Germany, 10 in Australia). A compact overview of interview numbers per country and type of interview partner is shown in Table 2.2. For detailed specifications, see Appendix 1.

Table 2.2 — Case study database: Interviews led in Germany and Australia between February and October 2010. Interviewed firms by share of organic business and number of employees, and interviewed experts

Interviewees	**Germany**	**Australia**
Importing firms	**26**	**19**
Of which 'organic' share of business is 90 to 100 per cent	12	9
Of which the no. of employees is:		
250 and more	2	0
50-249	4	1
49 and less	6	8
Of which 'organic' share of business is less than 90 per cent	14	10
Of which the no. of employees is:		
250 and more	5	2
50-249	4	4
49 and less	5	4
Experts	**7**	**10**
certification bodies, government representatives, specialized lawyer, independent researchers, consumer boards		
TOTAL	**33**	**29**

Identification and selection of interview partners

Defining the size and identifying all items of the total population of importing firms in Germany and Australia proved difficult using secondary data and statistics. While in Germany, the market research organisation ZMP Zentrale Markt- und Preisberichtstelle für Erzeugnisse der Land-, Forst- und Ernährungswirtschaft GmbH (2007, 23.08.2013) notes a total number of 900 import-

ing firms, detailed company information held by certifiers is protected under a confidentiality clause. For Australia, the number of importers was estimated at 120 (personal communication with Paul Kristiansen and Alexandra Mitchell, authors of the Australian Organic Market Reports 2008 and 2010, respectively). Here, some large certification bodies do provide detailed company profiles of their customers, e.g. in the online databases of Australian Certified Organic (ACO) and National Association for Sustainable Agriculture, Australia (NASAA). These, however, did not cover all relevant firms by far.

Several different sources were thus tapped to identify relevant importing firms and possible interview partners (Table 2.3).

Table 2.3 — Sources for identifying importing firms of organics in Germany and Australia

Country	Source
Germany	Anuga trade show exhibitor database www.anuga.de IHK-database (NACE code Großhandel mit Naturkost) Online company databases: www.organic-bio.com www.greentrade.net www.bio-siegel.de www.wer-liefert-was.de
Australia	Certifying Bodies: ACO customer database www.aco.net.au NASAA customer database www.nasaa.com.au
Both	BioFach trade show exhibitor database www.biofach.de Personal recommendations by project cooperation partners "Snowball system" i.e. recommendations from interview partners

In both Germany and Australia these sources included, beyond remarks in extant literature on the subject, a systematic search within the exhibitors' database of the largest international annual trade show for organics, BioFach in Nuremberg, Germany. Correspondence with scholars familiar with the organic industry (e.g. Prof. Dr. Ulrich Hamm, Universität Kassel-Witzenhausen and Prof. Dr. Achim Spiller, Universität Göttingen) had suggested this database as a good reference point, albeit not a complete list. Relevant exhibiting companies were contacted in advance, or directly approached at the shows. Preliminary interviews with representatives of the organic food industry from Australia (e.g. André Leu) and several German import managers could be arranged during the 2008 and 2009 shows. First full-length interviews were held at the 2010 BioFach trade show. After this, the most important way of identifying possible interview partners

was, however, snowball sampling, i.e. personal references and recommendations by project and interview partners. For Germany, other sources included the exhibitor database of the largest international food trade show (conventional and organics), Anuga, and various private commercial internet company databases (Table 2.3). Overall, this procedure follows the "theoretical sampling" approach which implies that the sample is extended in due course of the empirical data collection and depends on the outcomes of interviews and (informal) conversations (Glaser & Strauss 1998).

While qualitative methods of this kind do not generate data that is statistically representative, it does enable the researcher to gain in-depth insights and a differentiated understanding of complex processes among individual firms, especially for concepts that are difficult to quantify (e.g. uncertainty, trust, reputation). Based on this information, firms in the sample can be categorised according to prevalent characteristics. For example, firms with certain characteristics may experience specific uncertainties or perceive them to be more or less influential. To this end, within the two case countries representing a range of western consumer markets, the aim was also to cover a broad spectrum of firms that import organic foodstuffs. When choosing the interview partners, attention was explicitly paid to include firms that varied in terms of

- size (number of employees)
- the type of business (supermarket chains, other retailers, wholesalers, processors, agents)
- their product range (generalists and specialists)
- the type of product sold (plant- and animal-based products)
- their seasonality (seasonal and non-seasonal)
- the degree of processing (fresh, dry bulk or processed foods)
- the share of their total turnover that organics made up (two categories: <90 per cent and 90-100 per cent; see Table 2.2)

The type of relevant network experts beyond the actual value chain was based first of all on existing literature examining similar areas of research. Certification bodies, Governments and private associations as standard setters have been identified to have a strong influence on trade coordination (e.g. Dannenberg 2012; Nadvi 2008; Ouma 2010). Other experts were private, specialized research institutes or consumer boards. While many of the relevant organisations were easy to identify, finding the right contact person (e.g. within a Government Department) was frequently only possible by means of "theoretical sampling" (snowball system). For example, cooperation partners in Australia had provided contacts of both importers as well as representatives of major certifiers. German interview partners, for instance, recommended contacting a lawyer specializing in organic regulation and labelling laws.

Data collection

It is important to note that in expert interviews, it is not the interviewee as a person that is at the centre of attention. Rather, he functions as a representative of his firm and possesses specific knowledge to reflect on the firm's position, power and actions within a broader institutional and societal context.

The semi-structured, guided interviews were conducted between February and October 2010 (except for one in February 2011). In most cases, the interviews were led face-to-face in the two countries and lasted between 45 minutes and 2.5 hours. In few cases, shorter follow-up interviews with selected interviewees were carried out where clarification or new input on market development was needed. The interviewed firms were located throughout Germany. In Australia, the majority of relevant firms had their premises in the south-eastern part of the country (New South Wales, Victoria, some in southern Queensland). In few cases, and with firms in other areas, telephone interviews were conducted for logistical reasons (very long distances within the country). With two exceptions, all interviews were digitally recorded. Where this was not possible, detailed (hand) written notes were taken.
The position or function of the interviewees was often dependent on the size of the firm; while in small and medium sized companies it was frequently possible to speak to the General Manager or CEO, large companies delegated a quality or purchasing manager. In both cases, they had a good overview of decision making processes in selection and coordination of suppliers (abroad). A written interview guideline was developed to improve the structure and guidance of the interviews and allow for better comparability of the responses. The topics and subquestions of the guideline were chosen with reference to the above defined research questions and hypotheses, and refined from information gained during preliminary conversations and short interviews with a more informal character. While the open questions of the guideline left room for individual interpretations and also allowed new issues to be addressed by the interviewees if they wished to do so, the overarching topics interviewees were asked to reflect on were (see Appendix 1 for the full version of the guideline):

- general business facts and figures
- the type of organic food traded and/or processed
- suppliers and customers of the organic food products
- advantages and disadvantages of certain suppliers
- the impact of standards and certification systems on their business
- trade cooperations and sources of information
- their assessment of the institutional framework / actors within the network.

Due to the heterogeneity of the other network experts, key topics and specific questions were adapted for each interview partner (complete list of interviewed experts in Appendix 1). Common issues were the respective national organic regulation systems, the development and implementation of public and private standards, certification processes and general developments on the domestic and international organic markets.

Data analysis

The recorded interview material was transcribed in large parts and uploaded into a MaxQDA project, a software tool for qualitative data analysis which helps to structure and interpret the data through codings, memos, word counts etc. Text segments were marked with codes that had been derived from the theoretical frameworks (e.g. the different conventions of CT), and topics concerning specific company characteristics. Analysis followed above all the process of a structural content analysis which aims to detect certain structures regarding the content of the texts in question (Mayring 2010). The prominence and significance of each convention per country ('average' to 'very strong') was determined in our interviews by first counting how often, on average, a convention was mentioned by each company interviewee in the due course of his or her argumentation (quantitative analysis). Secondly, and more importantly, the qualitative content analysis indicated how much emphasis and significance our interviewees gave each convention (qualitative analysis).

For confidentiality purposes, the names of firms and interview partners were anonymised when citing them directly or indirectly in all articles in Chapters 3 to 6. Each interview was given a code indicating the country (DE for Germany, AUS for Australia), the type of interviewee (IMP for importer, EXP for network experts), followed by a number (consecutive numbering for interviews). Where necessary for the context or the research question, the type of firm and additional characteristics are mentioned along with the citation; e.g. *DE-IMP06, German importer and wholesaler, organic and conventional foods.* The tables in Appendix 1 provide an overview of the conducted interviews, including key characteristics of the firms and organisations. The names of importing firms and according interview partners are not included; but given for interviewed experts and their organisations.

2.2.2 Online Questionnaire

It has proven useful in other value chain analyses to cross-check qualitative data through other methodological approaches (e.g. Dannenberg 2012; Dietsche 2011; Kaplinsky & Morris 2001). After the recorded interviews had been transcribed and coded using MaxQDA software, the results of the interviews were further specified through a quantitative standardised online questionnaire covering all relevant aspects as addressed in the interviews. The questionnaire, ac-

companied by an according cover letter, comprised a total of 33 questions and was sent to all identified importers of organic foodstuffs in Germany and Australia (sources as in Table 2.3), including those which had already been interviewed. To allow maximum comparability of data between the two countries, only very few questions were slightly adapted to acknowledge the different organic standards and certification bodies in the two countries. An exemplary questionnaire for Australia can be found in Appendix 1. Questions concerned the following points:

- reasons for trading organics
- the type of organic food traded and/or processed
- name of firm's brand (if applicable)
- suppliers and customers of the organic food products
- preferred/unpreferred supplier countries
- importance of specific product- and supplier-related criteria to the importing firm
- experiences with China, Europe, South-East-Asia, Central- and South America, USA and Canada as suppliers
- experiences with and personal requirements regarding standards and certificates
- reasons for discontinuing business relationships with suppliers
- significance of personal relationships with supplier
- impact of other stakeholders, e.g. media, NGOs
- general facts and figures on the business, e.g. no. of employees, duration of business with organics

Australian firms (n=29) received the questionnaire by e-mail as a PDF which could be filled out and returned by e-mail. We additionally offered a reply paid postal service to our Australian project partners at the University of New England, Armidale. However, the latter was only used by two firms. In Germany, with a considerably larger number of identified firms (n=241) the questionnaire was programmed online (www.q-set.de) and a link to the survey was sent to verified e-mail addresses. This procedure was the preferred option here as firms could be contacted quickly and submitted data could be directly extracted and exported into data processing and analysis programmes (e.g. SPSS statistical software). Yet, a low response rate to the survey (41 German and 16 Australian questionnaires) poses serious limitations to the data. While it makes statistically representative evaluations of the data impossible, some basic descriptive analyses were able to bring to the point some of the major findings of the qualitative interviews (see also Chapter 2.3).

2.2.3 Additional Material

For an understanding of the broader context into which our interviewees were embedded that goes beyond the somewhat subjective statements in the interviews, various other sources were tapped. These included legal documents (such as the EC-Eco Regulation which regulates organic production and trade in the E.U.), information provided on government websites and organic research platforms (e.g. www.oekolandbau.de), statistics (as far as available, e.g. by the ZMP) and media coverage on organic products in the respective countries. Drawing on media was based on the assumption that the image (or reputation) of organic products (or their suppliers; see Chapter 4) is reflected in – and also partly created by – national media which are not only read and viewed by consumers but also by members of the organic food network. Articles of interest were identified in three to four leading national print media which cover a broad spectrum of political positions within the two countries (Germany: Süddeutsche Zeitung, Frankfurter Allgemeine Zeitung, die tageszeitung; Australia: The Sydney Morning Herald, The Age, The Herald Sun, The Australian). Within the research project leading to this dissertation (ImPOrt), one Bachelor (Lea Wilhelm) and one Master (Navina Manirjo) thesis respectively were written on the specific issue of how organics are featured in the media in Germany and Australia, providing a general database.

2.3 Critical reflections on the empirical material

A few points must be considered with regard to the validity of the methodological approach and the collected data.
A first point refers to the lack of available statistics on relevant supply chain actors, i.e. determining the total population of importing firms, especially at the outset of the study. The problem related not so much to those firms that focus solely on organics and have been an established part of the organic network for some decades. The number of these firms is limited, and most are represented at the BioFach trade shows. The difficultly lies more in determining the newer (smaller) importers that have only over the past five to ten years entered the organic market (due to rising demand) and for whom organics is not their core business. This was true particularly for the German market, which is much larger in terms of the number of players than Australia.

Another weakness in certain important firm characteristics among the sample of importing firms was that determining the (monetary) share of the total import market our interviewed firms hold was not possible. This can be attributed also to a lack of data availability. Firstly, statistics on volumes and value of imported organic food products (unprocessed and processed)

to Germany and Australia are not yet collected systematically and comprehensively; some data is not available publicly. A recent German study that drew on various sources was only able to estimate that, depending on the crop, between 2 per cent and 95 per cent of organic produce sold in Germany is imported (BÖLW Bund Ökologische Lebensmittelwirtschaft 2012). A second problem was that some firms were not able to provide us with the relevant internal trade data.

A second issue was to encourage and convince firms to participate in this study. Particularly large, highly professionalised and commercially oriented firms saw no added value to their business by sacrificing time for an interview. Also some large, relevant players in among the traditional and larger organic firms were not willing to commit, often for lack of time. More comprehensive results would surely have been attained by including these firms in our sample of interviewees. However, their conduct of business (e.g. direct commitment in countries of production) can be somewhat captured via the company websites. Also, other interviewees frequently commented on these large players, comparing them to others on the market.

Furthermore, a total objectivity among interviewees cannot always be taken for granted. Thus, subjective interpretations and assessments made by the interviewees could also be mixed with actual facts. Some were well able to distinguish their personal opinions from their company's general take on things; in some cases, it was not that obvious and required a sensitised interpretation of the data. Furthermore, in Australia, I frequently realised that importers were not aware of the newly implemented domestic standard (AS 6000, see Chapter 3). This suggests that even 'experts' may have a lack of relevant know-how.

A final critical point concerns the quantitative data collected in the online questionnaire. The low number of responses (41 German and 16 Australian companies responded) makes statistically representative evaluations of the data impossible. Basic descriptive analyses were carried out using SPSS statistical software for quantitative data. Yet, the results of this survey did, to some degree, enhance, underline and bring to the point some of the major findings of the qualitative interviews. This is insofar not surprising as many interviewed firms also responded to the online survey. An executive summary of the results, complemented by according graphs and tables, was sent to those participating firms who had indicated that they were interested to receive them.

Finally, on a more positive note, problems related to cultural differences or language barriers that occur when researchers are operating outside their own home country and in developing countries in particular, were not apparent in the collection of the empirical material for this study. This is above all thanks to the fact that the primary researcher (author) spent many formative years of her life in Australia and thus not only has a close to native command of the language, but also understands the underlying socio-economic and cultural specifics in Australian society.

2.4 Organisation of the Dissertation – Overview of the Articles

The following Chapters 3 to 6 each present one individual article which, respectively, were published (Chapters 1 and 4) or in review at the time when this dissertation was submitted (late August 2013). The first three articles are based above all on the empirical data that was collected between 2010-2011 and give answers to (parts of) the research questions related to the organic industry as listed above. While Chapters 3 and 4 give specific attention to one institution (organic standards as formal institutions and reputation as an informal institution, respectively), Chapter 5 provides a synthesis of all institutions and thus a broad discussion of the conventions employed by German and Australian firms. Finally, Chapter 6 paints the broader context of the Australian agricultural and food industry and suggests some trends for future developments and urgent questions that should be addressed in this region. In Chapter 7 I present and discuss the major findings before the background of the posed research questions, considering also some additional empirical findings not included in the articles.

The first article in Chapter 3, *'Sustainable Standards'? How Organic Standards in the EU and Australia Affect Local and Global Agrifood Production and Value Chains*, was published in 2012 as a chapter in an edited book that was the product of various sessions held at the 'Agri-Food Research Network' Conference XVII hosted by Monash University in Traralgon, Victoria, Australia in December 2010. Within a broader GPN framework, this article contributes to literature on food and environmental standards and discusses the impact of German and Australian organic food standards on value chain segments in the context of the two countries' specific national policy environments. The article also addresses the issue of how organic agriculture can enhance food security, particularly in Australia.

The second article in Chapter 4, *Reassessing Supplier Reputation in International Trade Coordination. A German and Australian perspective of Global Organic Food Networks*, is a paper that was prepared for and presented at the 2013 IGU Mini Conference 'Dynamics in Food and Agriculture based Supply Chains' in Berlin in July 2013. It is currently under review for a special issue of the German journal ERDE which will contain selected papers from this conference. This article deals with the multiple facets of reputation in international trade relations and how it can help to mitigate uncertainties across large distances. Drawing on reputation literature and convention theory, I explore how German and Australian importers of organic food handle not only their own firm's reputation, but also that of their suppliers, supplier countries and organic standards and certification bodies.

The third article in Chapter 5, *Conventions in Cross-Border Trade Coordination. The Case of Organic Food Imports to Germany and Australia* is the final and refined result of various papers that have been presented on different occasions (e.g. at the Association of American Geographers

Conference 2012 in New York, at the Third Global Conference on Economic Geography, 2012 in Seoul, South Korea, or at the Symposium für Wirtschaftsgeographie, Symposium for Economic Geography, 2011 in Rauischholzhausen, Germany). The text included here is the revised version which has been resubmitted for second review to the international journal *Environment and Planning A*. It was co-authored by Boris Braun. Rather than focusing on one specific institution and/or convention, this article provides a comprehensive discussion of which conventions (of the Boltanski and Thévenot application) are employed by Australian and German importers to overcome quality-related uncertainties in cross-border trade, showing also which conventions are more emphasised in certain countries and types of firms. Conceptually, it argues that CT is a useful complementary approach to other frameworks for value chain and production network analyses.

The fourth and final article in this compilation in Chapter 6, *Australien als 'Global Food Superpower'? Landwirtschaft und Lebensmittelsektor Australiens im Wandel* (Global food superpower? Changes and current challenges in Australia's food industry) was published in 2012 in the widely-read geographic journal *Geographische Rundschau* which targets the German-speaking community of geographers (a summary in English is provided at the end of the article). Co-author is the Australian economic geography professor Bill Pritchard. This article looks at Australia as a case of the changing global character of agricultural and food production and trade, using a value chain perspective to outline these processes. Current dynamics and challenges for farmers, food processors and retail in Australia are highlighted. Furthermore, it discusses how the unique Australian environmental situation, related natural risks, and political as well as structural factors currently question Australia's future as the next Global Food Superpower.

3 'Sustainable Standards'? How Organic Standards in the EU and Australia Affect Local and Global Agrifood Production and Value Chains

BERNZEN, A. (2012): 'Sustainable Standards'? How Organic Standards in the EU and Australia Affect Local and Global Agrifood Production and Value Chains. In: FARMAR-BOWERS, Q., HIGGINS, V. and J. MILLAR (eds.): Food Security in Australia. New York (Springer): 281-296.

Abstract: As production processes become more globalized, the impact of public and private standards can reach far beyond nation state borders. This is the case, as in the area of food standards, where market regions set standards that have to be followed and met by producers and manufacturers in locations all over the world. The effects of this development reach from improved production processes (e.g. environmentally or regarding worker protection) on the one hand, to an exclusion of large numbers of potential producers (e.g. smallholder farmers in developing countries) on the other. There has also been discussion on the impacts of these standards on global and local food security.

By the example of two national organic standards systems with differing regulatory implications, the European Union (EU) (legally mandatory certification) and Australian (voluntary certification), this paper aims to give an insight into the impacts and significance of these standards in (international) trade coordination, which key drivers are behind their implementation, and which positive but also challenging consequences can arise for the affected actors along the organic value chain at different geographical locations. With special focus on the sustainability potential of these standards for local and global agrifood systems and the potential contribution of organic agriculture to food security, it is shown that (1) while organic standards explicitly prescribe more environmentally friendly farming and production methods, there is scope for further research which scientifically proves its long term sustainability and contribution to food security, (2) government regulation is important to promote the growth of sustainable certified organic food systems, and (3) there is need for further mutual recognition of standards worldwide to reduce exclusion of suppliers from developing countries.

Keywords: global value chains, organic agriculture, food standards regulation, sustainable farming systems, food security

3.1 Introduction

A consequence of the global division of labour is the increase not only of the total number of value chain players participating in product production processes, but also an increase in the geographical distances between them (Gereffi et al. 2005). Standards may be an appropriate tool to govern product and process characteristics of economic activities while making them more transparent and thus ensuring quality and safety in these areas. In recent years, a large array of standards has been developed which differ not only with regard to their geographical diffusion, but also in terms of their respective goals and the key drivers involved (Nadvi and Wältring 2002).

The role of standards has also received much attention within the field of social sciences, including economic geography over the past few years (e.g. Braun 2005; Dannenberg 2008; Higgins et al. 2010; Mutersbaugh et al. 2005; Nadvi 2008; Ouma 2010). Here, the discussion takes place particularly in the context of theoretical concepts dealing with international trade and governance processes along global value chains (Gereffi et al. 2005) and production networks (Henderson et al. 2002). Generally speaking, a value- or production chain can be understood as the connection from raw material(s) via production and manufacturing processes to the final product's point of sale (Kulke 2008).

Based on this broader theoretical framework, this chapter aims to contribute to existing standards literature [1] by focusing on different impacts that organic food standards have on value chain segments under specific national policy environments. In a comparative approach between the EU and Australia, particular attention is given to sustainability on the environmental, economic and social levels. Assuming that value chain governance is a key to sustainable food security (El-Hage Scialabba 2007) and standards are one aspect of this governance, I will also address the contribution organic agriculture can make to food security. Before discussing the two cases in more detail, a short overview of the rise and role of food and agricultural standards in global value chains will be given.

Due to their powerful position within international food value chains, environmental and social standards (Figure 1) are set mainly by industrialized nations such as the EU or the USA, while developing countries are still broadly 'standard takers' (Nadvi 2008).

The increase in the number and variety of standards over the past decades can generally be explained by two parallel developments. First, food products are highly sensitive consumer goods and are frequently in the spotlight of public and social discussions (e.g. Lockie et al.

[1] For food standards, see also e.g. literature summarized in Higgins et al. 2010.

Figure 3.1 — Environmental and Social Standards in the Food Sector (selection)

2006). Actual or perceived food scandals, environmental scandals [2] and scandalous working conditions caused media and civil society organizations (e.g. Greenpeace, Oxfam) to encourage critical observation of production methods among the general public. This led to an increasingly informed population and higher awareness in society and among consumers (Lockie 2006; Nadvi and Wältring 2002). A second trigger for the development and implementation of environmental and social standards was the concentration of the European food retail sector to a few large companies and/or chains (e.g. Busch and Bain 2004). One could observe the rise of large international supermarket chains and manufacturing companies as well as increasingly complex contracts between producers, suppliers and customers along value chains that became more and more globalized. This complexity was to be reduced by the introduction of, adherence to and control of standards that apply to all segments of the respective value chain, and thus facilitated the coordination of trade flows.

The drivers behind these food standards are thus to be found both among public bodies (such as national governments) as well as in the private sector (Busch and Bain 2004; Bingen and Busch 2006). Due to increasing pressure from society, the large European food retailing chains saw the need to introduce their own standards. The number of these private standards, and especially the number of companies and products certified to them, has risen significantly over the past 15 years, and some have become quasi-mandatory (Busch and Bain 2004; Dannenberg 2008).

Apart from labelling regulations, an independent control system (third party certification) is a key element of many standards, by which companies can – at least to some extent – externalize certain control functions regarding, for example, product quality or production processes. Here,

[2] These include, respectively, e.g. mad cow disease, swine flu, dioxin, E. coli contamination, and the discussion around whaling and oil leakages.

accredited certification bodies carry out regular audits to inspect whether the standard's requirements are met by all companies along the value chain and whether stringent documentation and traceability are guaranteed (e.g. Bingen and Busch 2006). Depending on national regulations, certification bodies can be either state-operated or private, non-governmental businesses (e.g. Thiers 2006).

Following this introduction, the structure of this chapter is as follows. Drawing on recent literature, the next two sections will give a brief overview of the existing organic standards and regulation in the EU and in Australia. The following section draws both on literature as well as on my own empirical data drawn from 60 qualitative interviews with company representatives and organic industry experts in Germany and Australia in 2010. It discusses both the positive and challenging impacts of these standards for the different segments of the value chain (i.e. producers and farmers, manufacturers, retailers and consumers), including the question of whether and how organic standards regulation can contribute to food security, sustainable or resilient food systems. The final section concludes this chapter with some remarks on the 'sustainability' potential of environmental standards and ongoing challenges.

3.2 Organic Standards in the EU and Australia

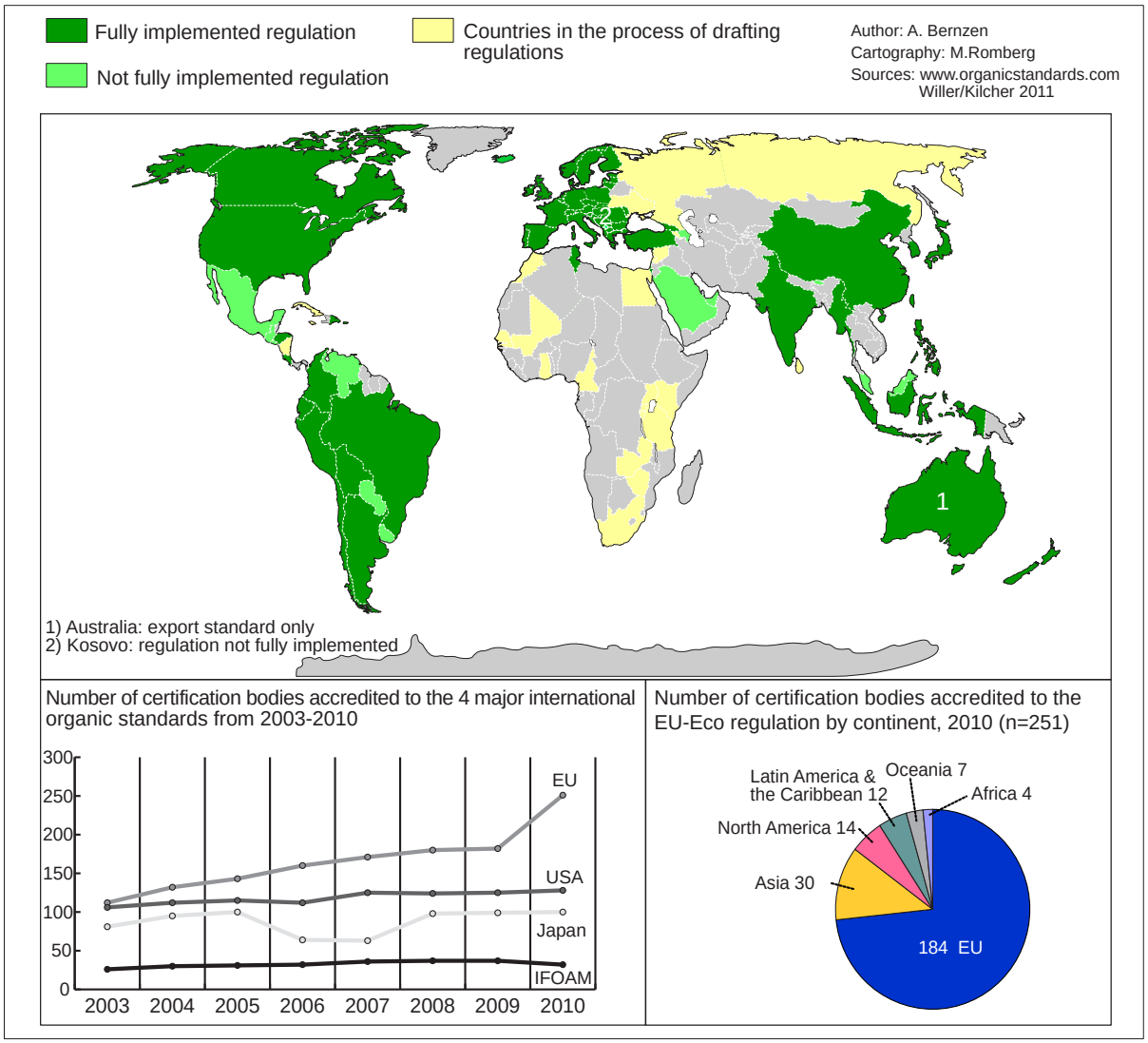
3.2.1 EU regulation on organic farming

Organic food products are currently experiencing double digit growth rates and are thus one of the fastest growing food sectors globally. In 2010, Germany was the largest market for organics in the EU and the second largest worldwide, with a turnover of EUR 5.8 billion and a three per cent share of organics among total national food sales (Willer and Kilcher 2011). The total number of operating businesses certified against the EC-Eco-regulation has risen beyond the 200,000 mark (BÖLW 2010).

In the EU, organic farming practices go back to the 1920s. The common idea was to grow and produce healthy, chemical-free and tasty food in a sustainable way, making sure that the environment was protected. Professional organizational structures were created since the 1980s in the shape of umbrella organizations and organic farmers associations, some of which still hold private organic standards today (e.g. in Germany: Bioland, Naturland, Demeter).

Over the past 20 years, the number of producers and manufacturers entering the organic market grew rapidly, which caused the previously manageable group of 'niche' actors in the organic sector to become much more extensive, confusing and anonymous. In order to maintain and strengthen consumer trust in the organic brand as well as protect them from misleading labelling practices,

Figure 3.2 — Implementation of Organic Standards Worldwide / Number and Dispersion of EU-accredited Control Bodies Worldwide



Source: Bernzen and Dannenberg 2012.

both private organic farmers associations and the international umbrella organization for organic farming (International Federation of Organic Agriculture Movement (IFOAM, founded in 1972)) urged European government to regulate the term 'organic' at an EU level. The basis for the first minimum EU standard launched in 1991 were private standards by farmers associations and the Codex Alimentarius issued by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO). Since then, products (including imports) sold on the EU market with an organic declaration (on their label) must fulfil (at least) the

criteria of the EC-Eco-regulation, and all companies along the value chain must be certified accordingly by an accredited control body (Table 1).

Today, the revised and effective version 'Council Regulation (EC) No 834/2007 on organic production and labelling of organic products' is one of the most important (supra-) national standards worldwide which set legal requirements for organic agriculture (Figure 2).

3.2.2 Organic Standards in Australia

In comparison to the EU, the Australian market for organic produce is small with a 2010 turnover of EUR 536 million (Willer and Kilcher 2011). While it has also experienced steady growth rates of over ten per cent annually in recent years and is said to be one of the fastest growing markets worldwide (IBISWorld 2010), its share of total national food sales lies at approximately one per cent. The number of certified operators in Australia was approaching 3000 by the late 2000s (Mitchell et al. 2010), much less than in the EU, but also continually increasing by an average of four per cent. At the same time, Australia features the largest area of organically managed land worldwide (over 12 million ha), most of this being extensive grazing land and pastures (Willer and Kilcher 2011).

Agricultural practices applied by Australia's first organic farmers in the 1940s were based on ideas and values imported from Europe (Jones 2010). These often challenged the significantly different natural settings in Australia, which led to the native landscape being somewhat adapted to fit the ideals developed for European circumstances. Like in Europe, first attempts at more widely recognized organic standards and certification processes came in the shape of private organizations who audited operators against their own private standards and used their own logos (see Figure 1).[3]

The story behind the development of public organic standards in Australia started off with quite a different motivation than in Europe, and has experienced some very recent dynamics which leads to a currently heterogeneous setting with two public (Government) standards and various private ones. Generally, Australia has very strict food policies, labelling requirements and sanitary and phyto-sanitary standards which are supervised by the Australian Quarantine and Inspection Service (AQIS) (for imports).

[3] e.g. 1986: National Association for Sustainable Agriculture Australia (NASAA); more followed in the 1990s/2000s; the peak body Organic Federation of Australia (OFA) was founded in 1997.

These can be related to Australia's geographic isolation (compared to the EU) and the perceived need to protect the natural environment and arable land from external threats[4] (e.g. Diamond 2005). The Federal Government only slowly began taking an interest in more sustainable farming methods (including organic) from the 1980s (e.g. Andree et al. 2010, Higgins et al. 2008), later driven mainly by the implementation of the 1991 EC-Eco-regulation with its strict import requirements. State and federal governments have always been in strong support of policy measures that benefit conventional, export-oriented production and marketing. In order for Australian organic produce to be sold in the European market, the Government was forced to respond by implementing standards and a compliance scheme which was recognized by the EU as being equivalent to that of the EU itself (Wynen 2007). The result was the 1992 national organic standard (in the following: National Standard) which became mandatory for export purposes. The main actors involved in its development were public (AQIS) and private (NASAA, Biological Farmers Australia (BFA), and other organic grower organizations) bodies. Today, we find in the Australian organic sector a co-regulatory system instead of a mandated (e.g. EU) or self-regulatory system. This implies that the organic sector and the government work together for standards as part of 'hybrid' governance strategies.[5]

A key event which triggered the launching of the second public organic standard, the Australian Standard for Organic and Biodynamic Products (AS 6000-2009; in short: AS 6000), was a 2007 court case regarding the mislabelling of conventional eggs as organic. At the time, judges faced the problem that there was no reference document providing a recognized definition for the term 'organic' within the Australian market. To fill this gap, AS 6000 was developed by a Technical Committee consisting of representatives from relevant organizations, such as government agencies, certification bodies, consumer interest organizations, organic farmers associations and trade/retailer associations, other industry representatives as well as technical experts. It was also open for public comment and received record numbers of responses from both the public and industry representatives. The first version was launched and published by Standards Australia in October 2009. In addition to regulations on sustainable food production it also contains relevant paragraphs on organic cosmetics. This standard is voluntary[6] but can be used by government to execute existing legislation (e.g. misleading or deceptive conduct in labelling) (see Table 1).

[4] The past two centuries of European settlement have caused considerable ecological damage through the introduction of alien flora and fauna, unfavourable climatic conditions including drought and flooding, and habitat destruction from extensive tree clearing and urbanization. In combination with relatively infertile soils and inadequate farming methods, these factors have led to land degradation by soil erosion, salinity and deforestation.

[5] see Higgins et al. 2010 for a case on Environmental Management Standards in the Australian dairy industry.

[6] Generally speaking, very few standards are actually mandated in Australia, the general approach being to leave the market to regulate itself and only interfere when obvious market failure can be observed.

3.2.3 Organic standards, food security and value chain sustainability

The last decade or so has seen a growing interest in the potential impacts that alternative and sustainable types of agriculture (such as organic farming) have on food security.[7] A good number of publications, ranging from peer reviewed papers and articles to conference proceedings (with collections of individual case studies), reviews or position papers, have emerged that deal with the potential of organic agriculture to contribute to food security, often in comparison to conventional (chemical) farming. One of the most detailed and comprehensive collections of overview reports and case study papers at present are the conference proceedings for the 'International Conference on Organic Agriculture and Food Security' organized by the FAO and held in Rome in 2007 (e.g. El-Hage Scialabba 2007).

While keeping in mind that a considerable number of these publications fall into the 'grey literature' category, and the scope of this chapter does not allow for a detailed review, some general comments can be made. Overall, we can see that the authors differentiate between the impact of certified vs. non-certified organics, local vs. global food security, and the impact on food security in developing countries vs. developed countries. Regarding the latter point, most case studies in fact deal with the global South, where solving food security issues seems more urgent at present; those that deal with industrialized countries are mostly case studies in Europe or Northern America. Explicit studies on Australia are extremely scarce (see below). Many authors are positive or at least optimistic that organic farming is a future alternative to conventional (chemical) farming with positive impacts on food security (e.g. Badgley et al. 2007; Parrott and Marsden 2002), while also recognizing the challenges organic agriculture is facing in this regard (e.g. El-Hage Sciabbala 2007; Halberg et al. 2009; Paull 2010). Some are very critical of this prognosis (e.g. Connor 2008; Trewavas 2004). A few papers also highlight the need for stringent international, national and private organic standards, policies and regulations (e.g. El-Hage Sciabbala 2007). All publications stress the urgent need for more research in order to come to a comprehensive conclusion on the contribution that organic agriculture can make to food security.

As Badgley et al. (2007) point out, 'production methods are but one component of a sustainable food system'. We thus need to look beyond the farm level for a comprehensive understanding of the potential contribution organics can make towards sustainable food security and systems. This section will look at the positive and negative consequences of the described European and Australian organic regulations and standards for individual segments of the value chain. Where

[7] '*Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.*' (World Food Summit 1996 in Halberg et al. 2009) Four dimensions of food security are defined as: Food Availability, Food Access, Food Stability, Food Utilization.

possible, the above mentioned literature on organic agriculture and food security will be drawn upon.

Producers and farmers are in charge of the agricultural production of raw materials. How could organic farming (standards) enhance the environmental sustainability of food production or the viability of their farms? The viewpoints on this issue are quite heterogeneous. European policy tends to support organic food production as a contribution to environmental and regional sustainability; and there are EU rural development programmes and funds for research on organic agriculture, production and marketing. In Australia, organic farming is generally viewed by conventional farmers and farming organizations as environmentally damaging: it is equated with refusal to use chemicals such as herbicides and fertilizers, resulting (in this view) in degraded soils and the unchecked spread of weeds.[8]

The actual environmental impact of production according to organic standards has been addressed in a number of case studies over the past decade. The majority of these studies suggest that organic farming can be a sustainable alternative to conventional land management, as it is said to show major benefits to the environment, maintaining or even resulting in increased yields (Badgley et al. 2007; various chapters in Kristiansen et al. 2006; for Australia, Dumaresq and Greene 2001; Wells et al. 2000). A few grey literature case studies for arid and semi-arid countries have found organic systems to be more drought-resistant, a fact that could be worth looking at in the Australian climatic context.

However, it remains a controversial debate. There is no clear answer as yet to the question of whether organic agriculture will further 'conventionalize', including a further increase in scale (with larger organic farms) and remain environmentally sustainable in the process, as this depends on various factors (Best 2006; Lockie et al. 2006; Thiers 2006, see also literature summarized in Andrée et al. 2010). Critics also argue, for instance, that a complete shift to organic production would result in lower productivity which would be insufficient to guarantee food security around the world (Connor 2008, Kirchmann et al. 2008, Trewavas 2004). A major concern raised in Australian studies is the long-term low phosphorus level in soil under organic management (Burkitt et al. 2007; Penfold et al. 1995).

While more research seems necessary to come to a clear conclusion regarding the environmental sustainability of organic farming methods, one economic incentive and motivation for farmers

[8]This latter view is interesting in so far as that (a) productivist agricultural practices (as found e.g. in Europe, Australia or the US) have been shown to include a broader set of practices that are 'widely recognized as environmentally damaging and probably unsustainable in the long term' (Andrée et al. 2010; Dibden and Cocklin 2005, 2009), and (b) that organic standards, both in the EU as well as in Australia, have the explicit objectives to be sustainable. They accordingly prescribe detailed farming practices aiming to improve environmental management. These include, for instance, rules on biodiversity, landscape-, soil- and water management, plant protection and livestock husbandry.

to produce according to organic standards is the attractive premium price that can be gained on the market for certified produce (e.g. Best 2006; Hatanaka et al. 2005; Higgins et al. 2010). This not only applies to consumer markets such as the EU, Australia or the US, but to many other countries around the world. Organic standards have increased opportunities for producers in developing regions to participate in the organic markets of developed nations – not only for so-called 'exotic' products, but also for seasonal products or cost-competitive alternatives. In this way, the EC-Eco-regulation has a decisive impact on production and processing in so-called third countries which seek market access to the EU. Australian standards will have minimal effect in these countries due to more flexible import regulations (see below). At the same time, there is an ongoing discussion on the potential exclusion of smallholder farmers in developing countries from large international markets because they are unable to afford the time-consuming and cost-intensive certification of their operations (Bingen and Busch 2006; for GlobalGAP see e.g. Dannenberg 2008). This is the case especially if a separate certification is required[9] for every respective new market that could theoretically be tapped (e.g. González and Nigh 2005; Hatanaka et al. 2005).

The next segments in the value chain are *food processors* who refine raw material and produce end products; and *retailers* who sell both fresh and processed food to commercial and private customers. For these types of firms, the implementation of standards and third party certification systems has facilitated the entry of formerly conventional companies to the organic market, contribute to competition and make organic products accessible for mass consumption (Mutersbaugh et al. 2005). This is shown for instance by the entry of large supermarket chains and discounters into the organic market.[10] Thanks to their powerful position and high demands in terms of volume and quality standards within global production networks, these companies often have a large potential to influence organic market growth and push certified organic production. In combination with growing consumer demand for local or regional produce, this can be especially applicable to local producers of organic goods. Suppliers are frequently not only required to adhere to minimum organic standards (such as the EC-Eco-regulation), but often also to stricter private retailer standards. Retailers often conduct their own audits on top of third party certification. The main reason here is to minimize any potential risk of a food scandal, resulting in negative press and a loss of reputation as a consequence (unpublished interview data 2010).

However, the regulation of organic agriculture and its related control systems also creates various problems. Scientists as well as trading companies criticize certain aspects of the existing

[9] There are still variations between the organic standards held by major economies with a high organic market share worldwide and mutual acceptance is still not always given.

[10] Recent years have also shown the establishment of purely organic supermarket chains, such as basic or Alnatura in Germany.

certification system[11] (unpublished interview data 2010). While Australian interviewees tended to trust and rely on certification bodies and their inspections, in Germany a common accusation was that company audits were no more than an inspection of documentation and other 'paperwork' which could facilitate actions of fraud, e.g. declaring conventional goods as organic.

A further concern is *product quality*. An issue often addressed is the lack of knowledge regarding organic production and processing methods among those farmers, often in developing countries (Bingen and Busch 2006), who have only recently been encouraged to convert to organic management as a result of increasing demands within the EU or other organic markets. This knowledge gap is often related to insufficient consultation and training. 'New' organic farmers are familiar neither with the organic 'ideology' nor with the details of overseas' organic standards (see also Thiers 2006). Given that certifying bodies themselves are not permitted to consult the operators they inspect, some certifiers have (independent) subsidiaries which offer consultation services. Alternatively, necessary training of farmers is frequently only provided by committed importing companies in buying countries who place a strong emphasis on close relationships with their suppliers (see also Bingen and Busch 2006). If this kind of involvement does not exist, either due to lacking expertise or personal and financial resources, there is a fair chance of mismanagement and employing farming practices that do not satisfy (European) standards. This is why some producing countries suffer from severe problems regarding their reputation, above all China (see also Thiers 2006), but also Turkey, and – within the EU – Italy or Spain (unpublished interview data 2010).

While the above mentioned problems refer mainly to the EU, discussion regarding the use of organic standards remains more on a macro-level among traders in Australia. Formerly to gain consumer trust, most operators selling products labelled organic in Australia chose to be certified against an organic standard. Today, AS 6000 can serve Australia's regulatory authorities as a tool to enforce existing legislation (Lockie et al. 2006). This means that making false, misleading or deceptive claims on the quality of a product on its packaging is now illegal and can lead to prosecution.

However, companies are not forced to use one particular standard – unlike in the EU where EC-Eco-regulation is a requirement – and opinions vary on the usefulness of the new AS 6000 or National Standard, or the benefits of public versus private organic standards. AS 6000 is still at a very early stage, hardly any operators are certified against this standard. On the domestic market, private standards are still predominantly used. For exports, until a single standard has

[11] Certifiers are accredited by Government authorities. In most European countries, certifiers are private, non-governmental businesses that are independent of standard-setting (organic farmers') associations. In Australia, many organic farmers associations are simultaneously standard developers/holders and certifiers of these standards (or have subsidiaries).

been created from the existing two public organic Australian standards, companies still refer to the National Standard governed by AQIS. To import an organic product for sale in Australia, the importer should be able to prove that it comes from an 'equally reliable system'. These latter systems are determined by the Government.[12] Overall, import regulations of organic produce to Australia are much less restrictive than those of the EU and involve much less administrative involvement on the part of Government bodies and agencies (Grolink 2010).

On another level, importing companies often complain that general AQIS import regulations are often more troublesome than organic standards themselves and can be an impediment to market access especially for fresh produce (see Table 18.1). For example, where AQIS requires a certain product to be fumigated before entering the country, this procedure is against the organic principle and goods would lose their organic status.

Like farmers, the values that end consumers associate with organic food are equally heterogeneous. Attributes range from a belief in 'healthy', 'sustainable', 'responsible', 'safe' and 'high quality' foods to confusion and scepticism regarding the integrity and trustworthiness of organically labelled products (Lockie 2006). Recent studies have shown, however, that certification logos are crucial for end consumers as they make it possible to identify products that are monitored to meet a certain organic standard (e.g. Higgins et al. 2008). These logos can refer to public and private standards. The hexagon-shaped organic logo introduced by the German government in 2001 (see Figure 3.1) has since been able to gain a high level of awareness and thus also consumer trust and acceptance. Some trading companies and retailers believe that having too many different logos is a disadvantage because this will confuse the consumer regarding the attributes of organic quality, conventional, and genetically-engineered foods (Lockie 2006), especially where there is no legal definition of the term 'organic'. The latter point of criticism is also apparent in a recent study on marketing communications of organic products on the Australian market (Henryks and Pearson 2010). They argue that AS 6000 can contribute to sustainable growth of the organic market by enhancing consumer demand and assurance. The question of the relative commitment and responsibilities of government and industry in pushing an aligned marketing campaign (including a single logo) for higher consumer awareness is still undergoing renegotiation.

[12] Currently accepted are the EC-Eco-regulation, USA National Organic Programme (USA NOP), Switzerland, Japan, Canada, Taiwan and New Zealand; as well as the IFOAM group of standards.

Table 3.1 — Comparison of the EU and Australian Settings (grey) and Organic Standards Regulations

Characteristics	EU	Australia
Geographic integration (spatial)	Europe, bordering on several non-EU countries.	Australasia, geographical isolation (island)
Import and hygiene regulations	EU-harmonization of food standards. Free movement of goods within the EU.	Very strict (AQIS): 1. Quarantine Act 1908. 2. Imported Food Control Act 1992.
Ecological conditions of agricultural land	Relatively good rainfall and soil fertility (regional variations).	Increasing problems due to soil degradation, drought, flooding, biodiversity loss (regional variations).
Support of organic industry	Subsidies, expected to increase. Research funding programmes.	No direct financial support. Almost no funding of R&D.
Standard names and year of implementation	Council Regulation (EC) No 834/2007 on organic production and labelling of organic products (2007, replaces first version of 1991)	(1) The Australian Standard for Organic and Biodynamic Products – AS 6000-2009 (domestic and import standard) (2009). (2) The National Standard for Organic and Bio-Dynamic Produce (export standard) (1992).
Spectrum	Process standard.	Process standard.
Relevance	Crucial for food sold as organic in the EU; with increasing imports, gaining importance in non-EU countries producing for the EU market.	AS 6000: reference document to assist enforcement of existing legislation in Australia. National Standard: crucial for Australian organic produce intended for export and common for the domestic market.
Regional dispersion	EU (legally effective); globally (certification).	Australia.
Function	Quality and environmental standard.	Quality and environmental standard.

Continued on next page

Characteristics	EU	Australia
Key drivers	EU-Commission, EU member state Ministries of Agriculture, European organic farmers' associations.	AS 6000: organic industry, government, consumer groups in Australia. National Standard: Australian government and certification bodies in response to 1991 EU standard.
Forms	Management standard, labels.	Management standard.
Regulatory implications	Mandatory certification against standard for sale as 'organic' on EU market	AS 6000: voluntary certification against standard for sale on Australian market, but companies must be able to substantiate organic claim. AS 6000 reference document in court (leads to quasi-mandatory certification against AS 6000 or other 'equally reliable' standard). National Standard: mandatory certification for exported Australian organic produce.
Ongoing developments	New mandatory EU logo as of July 2012; international efforts made to harmonize standards and facilitate mutual acceptance of different standards worldwide.	Ongoing development of AS 6000, efforts made to create one single standard for both domestic and export markets.

3.3 Conclusions

This chapter has shown the extent to which standards have gained importance in the production and trade of organic food in different national policy and environmental circumstances (Table 18.1) and has given some insight on the potential impacts of these standards on sustainable food systems and food security. When looking at improving food security on a local and national level, an important question still focuses on the degree to which farmers can increase domestic food production with cheap, low-cost, locally available technologies and inputs. At the same time, this should be carried out in a way that does not add to previous and ongoing environmental harm caused by agriculture. This is true and urgent not only for developing countries, but

perhaps increasingly also for Australia given the environmental problems the country is facing and growing population that needs to be fed. While organic standards explicitly prescribe more environmentally friendly farming and production methods, and while some studies provide evidence that there is potential for contributing to longer term sustainability and food security, more research is needed in this regard. In contrast to Australia, the EU benefits from public funding for R&D projects on organics.

However, even if we assume that organic agriculture is environmentally, economically and sociably more sustainable in the long-term and can contribute to food security, increasing consumer demand for certified products is not sufficient to promote and increase production. Relevant national political and institutional national are also crucial to encourage farmers to convert to these alternative types of agriculture[13] (see e.g. Andrée et al. 2010; Higgins 2008a). There are signs that the Australian organic industry would welcome increased Government involvement, including mandatory certification and a single standard with government-issued logo like in the EU. However, due to the current relatively higher commitment of the private sector, it is important that they support a single standard to increase the potential of organics to contribute to a more sustainable food system.

In countries with voluntary standards, like Australia, certification and product labelling become quasi-mandatory for companies to stay competitive and maintain consumer confidence. In the case of large markets with significant volumes of imported goods and mandatory certification systems, such as the EU or the US, the geographical range of relevant standards can extend far beyond the countries of the standards' origin. In both cases, the certification and unbroken documentation of the flow of goods along the value chain are thus crucial criteria when traders, importers and retailers choose their suppliers.

Despite various advantages of standards and third party certification, notably the improved (though not perfect) cross-border traceability and the possibility to implement and monitor farm management practices that aim towards more social and environmental sustainability, the examples discussed also show some problematic areas. On the one hand, committed importing companies see the need to invest in their own projects in production countries or provide training to ensure 'organic' knowledge and product quality. On the other hand, producers in developing countries who are faced with significant financial and management investments when implementing organic standards may ultimately be excluded from participating in the market. In order to reduce trade barriers, establish more transparency and avoid the exclusion of smallholder farmers as far as possible an 'International Task Force on Harmonization and Equivalence in Organic

[13] Some studies show that this may not apply to such a degree to non-certified organic farming on the local level for own consumption e.g. in developing countries.

Agriculture (ITF)' was formed at the initiative of UNCTAD[14], FAO and IFOAM between 2003 and 2008, which developed tools towards a harmonisation and simplified mutual recognition of organic standards worldwide.

The observed difficulties in this global harmonization process, however, pose the question of how far national standards are deliberately employed as non-tariff barriers (NTB) and protectionist measures. Another controversial point is the question of whether too much global harmonization will lead to a watering down of organic standards.[15] The Australian approach with its greater flexibility in the acceptance of several global organic standards for imports is seen by some as a 'role model' to overcome these NTB issues (Grolink 2010).

In general, it can be assumed that the increasing importance of standards will have a continuous, strong impact on the world organic trade regime. Their relevance for society, both among consumers as well as producers, and persisting challenges for the public and private sectors in the implementation of standards to contribute to increasingly sustainable food systems and improve food security, make these standards – as one type of regulation in the global value creation processes – an important field of research.

Acknowledgements

This paper is based on work supported by the German Research Foundation under the research project 'ImPOrt'. I am grateful for the constructive feedback of one anonymous reviewer, as well as for support received by Boris Braun, Peter Dannenberg and Paul Kristiansen.

3.4 References

Andrée, P., Dibden, J., Higgins, V. & Cocklin, C. (2010). Competitive productivism and Australia's emerging 'alternative' agri-food networks: producing for farmers' markets in Victoria and beyond. *Australian Geographer,* 41(3), 307-322.

Badgley, C., Moghtader, J., Quintero, E., Zakem, E., Chappell, J. M., Aviles-Vázquez, K., Samulon, A. & Perfecto, I. (2007). Organic agriculture and the global food supply. *Renewable Agriculture and Food Systems*, 22(2), 86-108.

Bernzen, A. & Dannenberg, P. (2012). Ein "Visum" für Obst. Umwelt- und Sozialstandards im internationalen Lebensmittelhandel. *Geographische Rundschau,* 64(3), 44-52.

Best, H. (2008). Organic agriculture and the conventionalization hypothesis: A case study from Western Germany. *Agriculture and Human Values*, 25(1), 95–106.

[14] United Nations Conference on Trade and Development

[15] see Dibden et al. 2011 for a discussion of the harmonisation down-process in the context of the Sanitary and Phyto-sanitary Agreement (SPSA) as part of World Trade Organization measures.

Bingen, J. & Busch, L. (2006). Shaping a Policy and Research Agenda. In J. Bingen & L. Busch (Eds.), *Agricultural Standards: The Shape of the Global Food and Fiber System* (pp. 245-250). Dordrecht: Springer.

BÖLW, Bund Ökologische Lebensmittelwirtschaft (Ed.) (2010). Zahlen, Daten, Fakten: Die Bio-Branche 2010. Bonn.

Braun, B. (2005). Building global institutions: The diffusion of management stan-dards in the world economy – an institutional perspective. In C. G. Alvstam & E. Schamp (Eds.), *Linking Industries Across the World: Processes of Global Networking* (pp. 3-27). Aldershot: Ashgate.

Burkitt, L. L., Small, D. R., McDonald, J. W., Wales, W. J. & Jenkin, M. L. (2007). Comparing irrigated biodynamic and conventionally managed dairy farms. 1. Soil and pasture properties. *Australian Journal of Experimental Agriculture*, 47(5), 479-488.

Busch, L. & Bain, C. (2004). New! Improved? The Transformation of the Global Agrifood System. *Rural Sociology*, 69(3), 321–346.

Connor, D. J. (2008). Organic Agriculture Cannot Feed the World. *Field Crops Research*, 106, 187-190.

Dannenberg, P. (2008). Challenges for African Food Producer in the Integration in International Value Chains – the Example of the Food Standard GlobalGAP in the Horticultural Production Region Mt. Kenya. *Zentralblatt für Geologie und Paläontologie,* Teil I 3(4), 337–353.

Diamond, J. M. (2005). *Collapse. How societies choose to fail or succeed.* New York: Viking Press.

Dibden, J. & Cocklin, C. (2005). Sustainability and agri-environmental govern-ance. In V. Higgins & G. Lawrence (Eds.), *Agricultural Governance: Globalization and the New Politics of Regulation* (pp. 135-152). London: Routledge.

Dibden, J. & Cocklin, C. (2009). 'Multifunctionality': Trade protectionism or a new way forward? *Environment and Planning A*, 41(1), 163-182.

Dibden, J., Higgins, V. & Cocklin, C. (2011): Harmonizing the governance of farming risks: agricultural biosecurity and biotechnology in Australia. *Australian Geographer*, 42(2), 105-122.

Dumaresq, D., & Greene, R. (2001). Soil Structure, Fauna and Phosphorus in Sus-tainable Cropping Systems. RIRDC Publication No. 01/130. https://rirdc.infoservices.com.au/downloads/01-130. Accessed 12 August 2011.

El-Hage Scialabba, N. (2007). Organic Agriculture and Food Security. Conference document. International Conference on Agriculture and Food Security, Rome, Italy, 3-5 May 2007.

Gereffi, G., Humphrey, J. & Sturgeon, T. (2005). The Governance of Global Value Chains. *Review of International Political Economy*, 12(1), 78–104.

González, A. A. & Nigh, R. (2005). Smallholder participation and certification of organic farm products in Mexico. *Journal of Rural Studies*, 21, 449–460.

Grolink (2010). The Organic Certification Directory. *The Organic Standard 113.*

Halberg, N., Peramaiyan, P. & C. Walaga (2009). Is Organic Farming an Unjusti-fied Luxury in a World with too many hungry People? In: H. Willer, H. & L. Kilcher (Eds.), *The World of Organic Agriculture. Statistics & Emerging Trends 2009* (pp. 95-100). Frick and Bonn: FiBL and IFOAM.

Hatanaka, M., Bain, C., & Busch, L. (2005). Third-party certification in the global agrifood system. *Food Policy*, 30, 354-369.

Henderson, J., Dicken, P., Hess, M., Coe, N. & Wai-Chung Yeung, H. (2002). Global production networks and the analysis of economic development. *Review of International Political Economy*, 9(3), 436–464.

Henryks, J. & Pearson, D. (2010). Misreading between the lines: Consumer confusion over organic food labeling. *Australian Journal of Communication*, 37 (3), 73-86.

Higgins, V., Dibden, J. & Cocklin, C. (2008). Building alternative agri-food net-works: Certification, embeddedness and agri-environmental governance. *Journal of Rural Studies,* 24(1), 15-27.

Higgins, V., Dibden, J. & Cocklin, C. (2010). Adapting Standards: The Case of Environmental Management Systems in Australia. In V. Higgins & W. Larner (Eds.), *Calculating the Social: Standards and the Re-configuration of Governing* (pp. 167-184). Basingstoke: Palgrave MacMillan.

IBISWorld (2010): Organic Farming In Australia. http://www.ibisworld.com.au/industry/default.aspx?indid=1912. Accessed 5 May 2011.

Jones, R. (2010): *Green Harvest: a history of organic farming and gardening in Australia.* Collingwood: CSIRO Publishing.

Kirchmann, H., Bergström, L., Kätterer, T., Andrén, O., & Andersson, R. (2008). Can organic crop production feed the world? In H. Kirchmann & L. Bergström (Eds.), *Organic Crop Production – Ambitions and Limitations* (pp. 39-72). Dordrecht: Springer.

Kristiansen, P., Taji, A. & J. Reganold (Eds.) (2006). *Organic Agriculture. A Global Perspective.* New York: Comstock Publishing Associates.

Kulke, E. (2008). *Wirtschaftsgeographie.* Paderborn: Schöningh UTB.

Lockie, S. (2006). Capturing the Sustainability Agenda: Organic Foods and media discourses on food scares, environment, genetic engineering and health. *Agriculture and Human Values*, 23(3), 313-323.

Lockie, S., Lyons, K., Lawrence, G. & Halpin, D. (2006). *Going Organic. Mobilising Networks for Environmentally Responsible Food Production.* Cambridge: CABI.

Mitchell, A., Kristiansen, P., Bez, N. & Monk, A. (2010). *Australian Organic Market Report 2010.* Chermside: Biological Farmers of Australia Ltd.

Mutersbaugh, T., Klooster, D., Renard, M.-C., & Taylor, P. (2005). Certifying rural spaces: Quality-Certified Products and Rural Governance. *Journal of Rural Studies*, 21, 381-388.

Nadvi, K. (2008). Global standards, global governance and the organization of global value chains. *Journal of Economic Geography* 8(3), 323–343.

Nadvi, K. & Wältring, F. (2002). *Making Sense of Global Standards.* INEF Report 58. Duisburg: Gerhard-Mercator University.

Ouma, S. (2010). Global Standards, Local Realities: Private Agrifood Governance and the Restructuring of the Kenyan Horticulture Industry. *Economic Geography*, 86(2), 197-222.

Paull, J. (2010). The Future of Organic Agriculture: Otopia or Oblivion? *Innovative Science Editions*, I, 11-14.

Parrott, N. & T. Marsden (2002). *The real green revolution: organic and agroecological farming in the south.* London: Greenpeace Environmental Trust.

Penfold, C., Miyan, M., Reeves, T. & Grierson, I. (1995). Biological farming for sustainable agricultural production. *Australian Journal of Experimental Agriculture*, 35, 849-856.

Thiers, P. (2006). China and Global Organic Food Standards: Sovereignty Bar-gains and Domestic Politics. In J. Bingen & L. Busch (Eds.), *Agricultural Standards: The Shape of the Global Food and Fiber System* (pp. 193-217). New York: Springer.

Trewavas, A. (2004). A critical assessment of organic farming-and-food assertions with particular respect to the UK and the potential environmental benefits of no-till agriculture. *Crop Protection*, 23, 757–781.

Wells, A. T., Chan, K. Y. & Cornish, P. S. (2000). Comparison of conventional and alternative vegetable farming systems on the properties of a yellow earth in New South Wales. *Agriculture, Ecosystems and Environment*, 80, 47-60.

Willer, H. & Kilcher, L.(Eds.) (2011). *The World of Organic Agriculture. Statistics and Emerging Trends 2011.* Bonn and Frick: IFOAM and FiBL.

Wynen, E. (2007). Standards and Compliance Systems for Organic and Bio-Dynamic Agriculture in Australia: Past, Present and Future. *Journal of Organic Systems*, 2(2), 38-55.

4 Reassessing Supplier Reputation in International Trade Coordination. A German and Australian Perspective of Global Organic Food Networks

BERNZEN, A. (in review): Reassessing Supplier Reputation in International Trade Coordination. A German and Australian perspective of Global Organic Food Networks. ERDE (Special Issue on International Agri-Food Networks).

Lieferanten-Reputation in der Koordination von internationalen Handelsbeziehungen. Das Beispiel der Importe von Bio-Nahrungsmitteln von Deutschland und Australien

Abstract: Uncertainties are especially high among importing firms and for products with sensitive and 'critical' quality characteristics in a societal context, such as food. While much recent literature on this issue has focused on the implementation of standards and certification systems, I argue that also reputation plays an important role for trading firms to mitigate uncertainties across large distances. Reputation may or may not reflect reality, and is based on public and networked information (e.g. the media, individuals). This article draws on convention theory in a case study based on qualitative interviews among organic food importers to Germany and Australia. I first show that the degree of their public exposure implies specific risks, and strongly influences importers' coordination strategy. I then go on to examine how, in these firms' supplier relations and risk management, not only the reputation of (potential) suppliers counts, but also the reputation of supplier countries, and institutional systems such as standards and certification bodies. Intensive involvement and first-hand experience with certifiers and suppliers in exporting countries can, in some cases, cause firms to challenge their existing beliefs. I conclude that a good reputation is still essential for (improving) market access, even when basic prerequisites such as legally mandatory certification are fulfilled.

Zusammenfassung: Unsicherheiten sind unter importierenden Unternehmen für qualitätssensitive Produkte, wie zum Beispiel Lebensmittel, besonders hoch. Während sich die jüngere Literatur zu diesem Thema auf die Umsetzung von Standards und auf Zertifizierungssysteme fokussiert hat, wird in diesem Beitrag argumentiert, dass auch die Reputation von Handelspartnern für Unternehmen wichtig ist, um Unsicherheiten über große Distanzen zu reduzieren. Reputation wird dabei durch öffentliche und vernetzte Information begründet. Die hier dargestellten Ergebnisse basieren auf einer empirischen Fallstudie von Importunternehmen für biologische Nahrungsmittel in Deutschland und Australien und werden mithilfe der Convention Theory ausgewertet. Zunächst wird gezeigt, dass das Ausmaß der öffentlichen Wahrnehmung bzw. die Abhängigkeit des Importeurs von öffentlicher oder vernetzter Reputation spezifis-

che Risiken beinhaltet und seine Koordinationsstrategien stark beeinflusst. Anschließend wird untersucht, inwiefern für diese Importeure in Handelsbeziehungen und beim Qualitätsmanagement nicht nur die Reputation der potentiellen Lieferanten eine Rolle spielt, sondern auch das Ansehen der Lieferantenländer und entsprechender institutioneller Systeme wie zum Beispiel Standards und Zertifizierungsstellen. Intensive Beteiligung und Erfahrungen aus erster Hand mit Zertifizierern und Lieferanten in Exportländern können in manchen Fällen Firmen dazu veranlassen, ihre bestehenden Ansichten infrage zu stellen. Abschließend kann gesagt werden, dass eine gute Reputation noch immer essentiell für den Marktzugang ist, auch wenn Grundvoraussetzungen, wie beispielsweise die gesetzlich verpflichtete Zertifizierung, erfüllt sind.

Keywords: *Reputation - Trade - Convention Theory – Organic agri-food networks – Imports – Germany – Australia*

4.1 Introduction

The food industry has been particularly affected by bad press in the media over the past years (Jaffee and Masakure 2005), well illustrated by events in early 2013 when three scandals hit Europe within only a few weeks (horse meat mislabelled and sold as beef in deep freeze lasagne, conventional eggs mislabelled and sold as organic, toxic corn entering the EU as cattle and pig feed). This causes not only a reputation loss of the firms involved, but also a general uncertainty among end consumers of which products can still be trusted.

However, the question of who is to blame is not easy to answer as division of labour and complexity along value chains increase. From the sourcing of raw materials to the end consumer, products and their components are increasingly produced, processed, traded and marketed through various channels in different geographical and institutional environments (Figure 4.1). In general, the past decades have seen a significant increase in the number of possible suppliers for a certain product due to sinking transportation costs, improved logistics and communications systems in addition to highly competitive labour wages (Grant 2000). A large share of these new suppliers is located in developing counties who are looking for business opportunities by producing for western markets (e.g. Dannenberg 2012, Dolan and Humphrey 2000). One could argue that this process leads to advantageous increased competition on both the price and quality dimensions. On the other hand, this rapidly growing pool of new and mostly unknown suppliers confronts buyers with more (complex) information to be handled and less transparent supplier systems across borders and continents (e.g. Dietsche and Braun 2008, Gereffi et al. 2005). In short, a firm's transaction costs rise to tackle the increased uncertainties regarding the right choice of suppliers and the quality and traceability of products and production processes.

The level of complexity and uncertainty in trade coordination depends on the product and the firm's position within the value chain (Figure 4.1, Gereffi et al. 2005). Regarding product types,

uncertainties are especially high among firms that trade high value and 'high risk' products with critical and sensitive product specifications that are in focus of general public debates (Trebbin and Hassler 2012). The food industry is a good example with increased concerns regarding food safety; a notable sector within the industry is that of organic food. It has been the fastest growing food sector over the past decade (Sahota 2012), and has not only seen massive growth in turnover in high income regions such as the EU, the US, Canada, Japan or Australia, but also the number of firms and producers grow from a niche phenomenon to a large array of players wanting to participate and claim their share of the pie (Bernzen 2012). Regarding the position of a firm along the value chain (Figure 4.1), high uncertainties are prevalent among importing companies, as I argue, due to increased geographical, but sometimes also institutional and cultural distance from their direct suppliers. Lacking this proximity, which is presumed to support and enhance economic exchanges that are based on trust and reciprocity (Dannenberg 2012, Glückler 2005), importers may be especially prone to facing opportunistic behaviour.

In this paper, I argue that reputation is a key point of reference to reduce these uncertainties across larger geographical distances, and examine the relevance and impact of reputation from the perspective of firms importing organic food products into Germany and Australia. The rest of this paper is structured as follows: After an introduction into theoretical concepts of value chain analyses and reputation, I will address the following questions on the basis of insights drawn from Convention Theory (CT). First, what is the perceived reputation of one's own firm, which type of reputation is it based on (public, network) and what are the major risks which threaten an established high reputation? Second, I will look at the perceived reputation of existing and potentially new suppliers. This also includes the reputation of its immediate cultural setting and institutional framework, i.e. the country, the standard it is certified against, and the certification body conducting the audits (Figure 4.1). I argue that reputation is influenced by (a) the source of reputation (public, network) and (b) the importing country. The hypothesis here is that own (personal) experience can fundamentally change existing reputations that have previously been formed primarily through the media and third parties. I will also explain how reputation leads to certain measures of trade coordination, including new supplier selection and degree of vertical integration. I conclude that a good reputation is still essential for (improving) market access, even when core criteria such as legally mandatory certification are fulfilled.

4.2 Theoretical Approaches to Reputation and Value Chain Coordination

How do buyers overcome uncertainties and minimize the risk of opportunistic action by their suppliers? How can the latter gain trust and secure their position on the market? Within the

field of economic geography, different concepts have been adopted and developed that provide analytical frameworks for the analysis of global economic exchange and coordination mechanisms in international value chains. Many studies – in particular those applying Global Commodity Chain, Global Value Chain or Global Production Network approaches – have highlighted the role of public and private product and process standards to govern international trade and increase transparency and traceability along the value chain (e.g. Dolan and Humphrey 2000, Franz and Hassler 2010, Ouma 2010). Some scholars of economic geography and business management have also drawn on Principal Agent Theory (e.g. Dannenberg 2012) or network approaches (e.g. Braun and Dietsche 2009, Kühlmann 2009) to address issues of opportunistic behaviour and conflicting interests in global value chains. However, studies focusing on intangible factors that influence buyer's decisions regarding preferred suppliers have been scarce.

Table 4.1 — Public versus networked reputation

	Public reputation	**Networked reputation**
Diffusion	public, i.e. broadcasting over media, business press	network, i.e. communication within trust relations (word of mouth)
Scope	theoretically unlimited, i.e. public	limited, by membership in a personal network
Reliability	thin information, i.e. low reliability due to unknown origin of judgement	thick information, i.e. high reliability due to trusted contact towards the origin of judgement

Source: slightly adapted from Glückler 2005

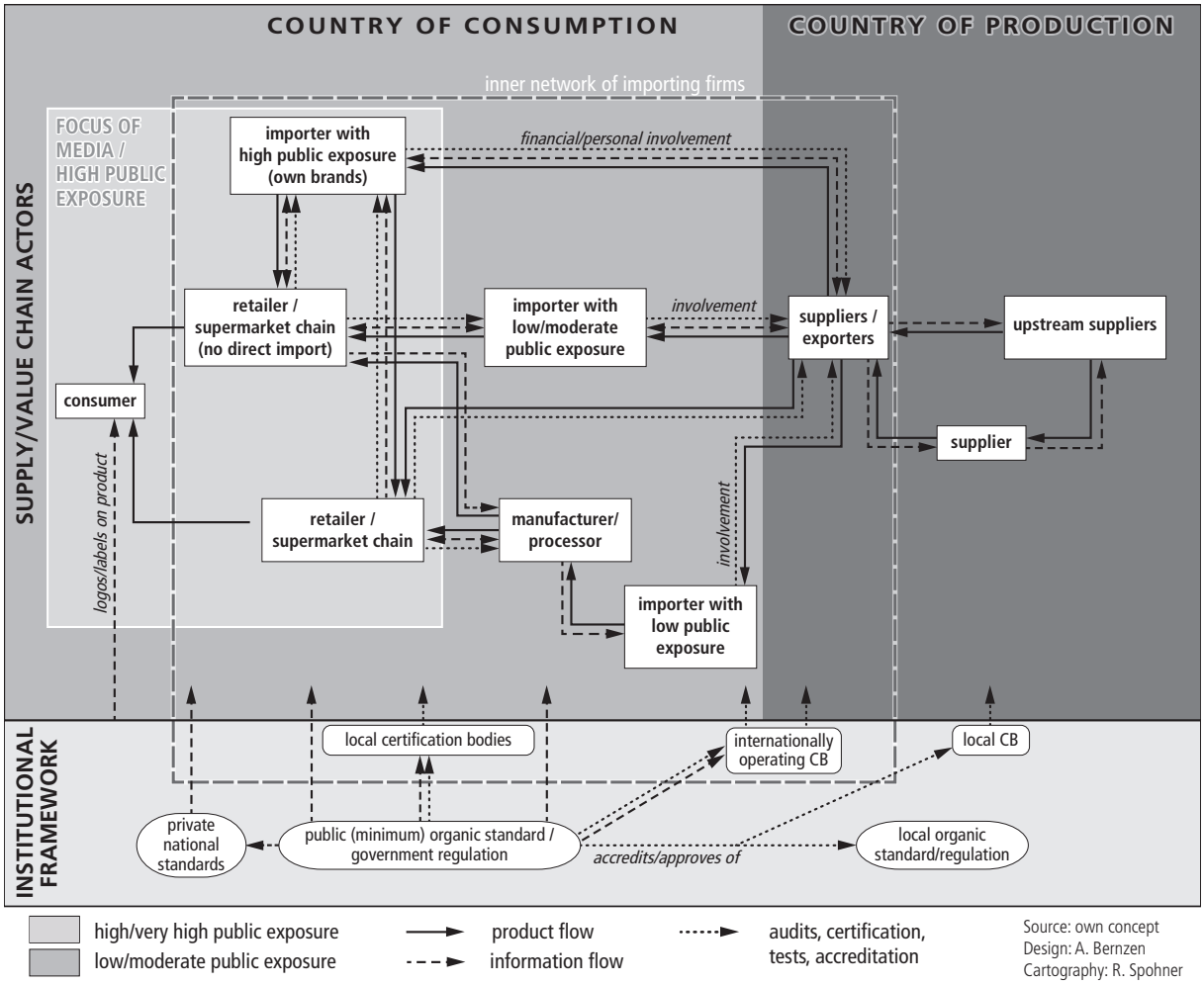
One such intangible factor is reputation, or Corporate Reputation (CR), which has also been termed an intangible asset (Falkenreck 2010). It has been defined as "the expectation of future performance based on the perception of past behaviour" (Glückler 2005: 1732), or to "represent publics' cumulative judgements of firms over time" (Fombrun and Shanley 1990: 235). To measure reputation, I here adopt the conceptualisation by Schwaiger (2004), which has been found to deliver the most valuable results in recent research (Sarstedt et al. 2013). It sees reputation as a two-dimensional attitudinal construct of both cognitive and affective elements, i.e. an (individual) stakeholder's objective knowledge and subjective perceptions about the firm, and his emotional mindset (Schwaiger 2004, Eberl 2006). But how are these perceptions and judgements created? Glückler and Armbruster (2003) argue that the communication channel is crucial for the credibility of the reported (reputational) information. They distinguish between public and network reputation which differ in terms of their diffusion, scope and reliability (Table 4.1).

Much of the existing literature exploring reputation has taken place in the context of stakeholder interests and comes from the disciplines of economics and business management (e.g. Falkenreck 2010, Suh and Houston 2010, Sarstedt et al. 2013, Fombrun and Rindova 2000), though it has also found its way into economic geography (e.g. Farole et al. 2011, Glückler 2005, Patchell 2008). In the context of supply chain coordination, extant studies on reputation have shown that a good reputation has a variety of advantageous outcomes or consequences. These include, e.g. increased customer commitment, loyalty and word-of-mouth, improved satisfaction and customer acquisition (for a literature overview, see e.g. Sarstedt et al. 2013). Furthermore, reputation may reduce the risk of opportunistic behaviour among suppliers as it would put the latters' good reputation at stake (Shapiro 1983, Kühlmann 2009). As a perceived antecedent to trust (Suh and Houston 2010), reputation would also lower transaction costs required for negotiations and monitoring among suppliers (Bergh 2010). However, some scholars have noted a research gap regarding the impact of reputation on buyer's decision making processes (Eberl 2006, Falkenreck 2010) and claimed that more studies were needed on the way that judgements are formed among different kinds of stakeholders (Gabionetta et al. 2007).

Thus, the influences of reputation and trust are of high importance. In this context, I argue that one should consider the reputation not only of trading partners along the supply chain (i.e. firms; buyers/suppliers) but also of objects or entities which are a constitutive part of the business and the institutional framework, such as standards, certification bodies, logos, and brands (e.g. Veloutsou and Moutinho 2009, see Figure 4.1). Overarching and relevant to all is the reputation a given country has among actors of a certain industry.

A conceptual approach beyond marketing literature that specifically addresses reputation as one basis of decision making and coordination is Convention Theory (CT). This framework, which has its roots in French sociology of the late 1980s, has proven useful in recent studies due to its conceptually differentiated treatment of uncertainty rather than codifiability or complexity (as in GVC) and its ability to grasp the role of intangible factors such as reputation or trust (Ponte and Gibbon 2005, Raynolds 2004). CT posits that actors have different value systems which define how they assign value (or worth) to a person or an object (Rosin 2007). Conventions as categorised by Boltanski and Thévenot (2006 [1991]) that have proven useful for studies in the agri-food sector (Raynolds 2004, Rosin and Campbell 2009), include *industrial conventions*, where worth is measured through statistics and measurable, standardised information; *civic conventions* (social and/or environmental welfare, mutual norms), and *market* (price, competitiveness). This paper will focus on another two of their six originally depicted conventions: *Domestic conventions* capture networked reputation, as worth is measured through trust, long-term relationships or through personal recommendations. *Opinion conventions* explicitly refer to the way in which actors justify their actions by referring to someone's value (worth) that has been determined on the basis of his public reputation or fame. Brand names, for instance,

Figure 4.1 — Public exposure and network of importing firms along international value chains of organic food (schematic, simplified)



are often used when evaluating objects. Public opinion and renown are thus essential in this context.

4.3 Methodology

In this paper, the role of reputation is analysed from the perspective of firms in Germany and Australia that import organic products into their respective countries. Doing so helps to achieve more comprehensive results by considering a broader spectrum of western consumer markets. Both countries are highly developed pluralistic market economies and feature high degrees of urbanization and according urban lifestyles among consumers. On the other hand, Germany and

Australia feature some striking structural, physio-geographical and market-related differences (Bernzen 2012). With regard to the regulation of the organic sector, it is important to understand that German traders must abide to EU law which stipulates that all products sold under the organic label must be – at least – certified against the EU standard (mandatory certification against EC-Eco-Regulation). In Australia, on the other hand, certification is voluntary, but one must be able to prove that the product is equivalent to the new domestic organic standard (AS 6000). This results in quasi-mandatory certification against one of the seven national private standards, or for imports, one of the larger international ones. These two regulatory systems reflect the two countries' varieties of capitalism, with Germany as a coordinated, and Australia a liberal market economy (Hall and Soskice 2001).

I focused on qualitative research methods for the purpose of my study. Data was collected during semi-structured, guided interviews with selected relevant supply chain actors, namely decision makers (buyers, quality managers) of firms based in Germany and Australia. The interviewed companies ranged from large retailers, supermarkets and wholesalers, manufacturers (with and without own brands), to small traders and agents. Thus, I included firms with varying degrees of public exposure, or, in other words, firms that differ with regard to their primary reliance on public and/or networked reputation, respectively. Overall, I defined four levels of public exposure a firm can have (low to very high); their criteria and the respective number of firms I interviewed per country are depicted in Table 4.2. In terms of the firms' product range, they included seasonal and non-seasonal, fresh and dry, plant- and animal-based products; some offered a wide product assortment while others were very specialized, e.g. trading tea or coffee only. Furthermore, I also considered the share of a firm's turnover that is generated by sales of organics, interviewing a balanced number of importers that commit their business 100 per cent to organics, and those that do not.

In total, 26 firms were interviewed in Germany and 19 in Australia between February and October 2010. The results in this paper however are based on those 15 interviews with companies from each country, which best addressed the issue of reputation. A follow up standardized questionnaire was sent to the same companies to reconfirm trends drawn from the qualitative material. Clearly, these results are not of a representative nature. Yet, it is a viable method to explore in more depth the complex interconnections between firms' trade coordination on global markets and the reputation within the network. Complementary interviews with industry experts and stakeholders, such as certification bodies, independent research institutes, consumer boards, legal advisors and government representatives were conducted to better understand the broader context of the importers' activities (8 in Germany, 11 in Australia).

Table 4.2 — Firms' levels of public exposure; number of interviewed firms in dataset per level.

Criterion/ Public exposure	Own stores (retail)	Sell branded product (own or private label)	Firm's name = brand name	Reputation relies on public or network	Typical firm type	No. of interviewed firms in Germany	No. of interviewed firms in Australia
very high	yes	yes	partly	Public	supermarket chain, retailer	2	3
high	no	yes	yes	public / networked	(large) manufacturer with own brand	2	3
moderate	no	yes	no	networked (some public)	manufacturer for private label, wholesaler for branded products	6	6
low	no	no	no	Networked	trading agents, importer/wholesaler for fresh produce, processor of raw ingredients	5	3

Source: own data

4.4 The "Invisible Importer"? - Public exposure and reputation risks among importing firms

> *As importers, we just don't have a name on the public market. We don't appear anywhere. Our [product] may be packaged and labelled under fifty different brands, but at the end of the day, it is always the brand owner's [reputation that is damaged], not ours.*
>
> – German importer, moderate public exposure, translated from German original quote, DE-IMP7

With the exception of a few supermarket chains and retailers who import direct, and (larger) importers whose branded products also carry the firm's name, most importing firms have a rather low exposure on public markets, as illustrated by the quote above, and shown in Figure 4.1. This fact is mirrored in the number of interviewed firms as shown in Table 4.2.

When characterizing the bases of reputation for their firm, and the perceived risks which could damage it, my interviewees elaborated on quality, responsibility, and to some degree, performance indices. However, responses varied somewhat between high and low exposure firms (Table 4.3).

Similarities among all types of firms regarding quality indices are a certification against a reputable (organic) standard, and reliable and consistent supply (volume and quality-wise). Second, with regard to demonstrating responsibility, transparency regarding the business and sold products are very important. The latter aspect, though, is much more significant to upstream ('invisible') suppliers who rely much more on networked reputation. These firms are usually required to provide their customers (e.g. supermarkets) with highly detailed information regarding not only their own firm's business conduct, but also information on the name, location, certification-status etc. of their upstream suppliers ("traceability back to the source").

Firms with high and very high public exposure emphasize and publicly communicate the fact that the quality of their offered products meets higher standards than the minimum required by law, thus differentiating their brands from other players on the market. This is true also for supermarket chains, who sell only very little organics in terms of their total revenue share. As my interviewees argued, they offer organics as an important "image product" for strategic rather than for profit-making reasons.

At the same time, featuring organics is connected to some specific potential risks for these firms. First, sourcing sufficient volumes of consistent quality organic product is much more difficult than in the conventional sector. This means that in cases of supply shortages, the shelf may have

to stay empty. Especially large supermarkets believe that this could have a negative impact on their reputation among consumers:

> *Availability is not easy. [...] you've got to have core lines that [...] are there for the customers and on a regular basis. So disappointment is not something that customers deal with very well.*
>
> – Australian supermarket manager, very high public exposure, AUS-IMP18

Second, there are (albeit minor) issues with organic product labeling. In Germany, due to the strict EU regulation and obligatory certification and highly complex labeling laws, some firms fear they may not comply with these and risk sanctions. Furthermore, but particularly in Australia, retailers fear that the high number of different organic standards /logos may cause confusion among consumers regarding the product's quality, ultimately leading to mistrust of the organic brand altogether. Yet, the greatest risk and fear of firms with high public exposure is that their firm will get negative media coverage. This is because for them, ultimately, reputation relies on the goodwill of the public. While supermarket chains, discounters and other retailers have the opportunity of influencing their reputation though direct, consumer-oriented marketing measures at their stores, they also argue, that "you cannot let such a small product segment of your business ruin your reputation" (Former German supermarket manager, DE-IMP27) –and, like large brand manufacturers, take strict, according measures in their supply chain coordination as a consequence, which is also felt by upstream suppliers:

> *...what retailers are scared of most is negative press. Much of what we do today and many of those partly exaggerated quality management requirements that now exist and are making life extremely hard for producers also, are really based mainly on this fear of negative headlines in the media. And so this has to be top priority.*
>
> – German importer, low public exposure, translated from German original quote, DE-IMP4

The largest number of importers, on the other hand, remains 'invisible' to the public and end consumer, and these firms rely on networked reputation to establish and maintain their position in the industry. Thus, apart from demonstrating high quality and responsibility indices as noted above, it is extremely important to them to perform well, gain expertise in the specifics of organics, and use this to build strong networks within the organic sector. It may also help them to commit to strong ethical and environmentally friendly business standards. Accordingly, it is not so much the media that pose a threat to these firms, but rather the risk of losing their good name by repeatedly delivering bad quality product to their customers – perhaps even by neglecting due diligence – or through negative reports spreading around the network by word of mouth. The latter is critical in so far as that the organic sector is still much smaller in terms of its number of players than in the conventional sector, and news thus spread much faster.

Table 4.3 — Reputation indices and bases for firms trading organic products

Indices	Bases of Reputation	significance for firms with high/very high public exposure	significance for firms with low/moderate public exposure	Risks
Quality	certified against (minimum or higher) organic standard(s)	high	high	contamination, loss of organic certificate, fraud, listing on 'black list'
	reliable and consistent supply (quality and quantity of product)	**very high**	**very high**	supply shortages, variations in delivered quality
	offer product with higher quality than the minimum required (by law), i.e. 'image product'; also regarding level of residues in tested product	**very high**	average	confusion among consumers regarding organic quality due to multiple standards and logos contamination, negative media report/scandal
	tradition in trading organics, high expertise	high	**very high**	employers without according expertise on the specifics of organics
Performance	long-term business operations (economic stability)	high	**very high**	
	(part of) large (international) firm	size relevant on domestic market	average	
Responsibility	ethical and social, environmentally friendly business conduct	high	high	behaviour that risks integrity, credibility, honesty
	transparency regarding business and suppliers, traceability to the source	high	**very high**	sourcing from unknown suppliers in case of supply shortages

Source: own data

4.5 Supplier reputation and value chain coordination

4.5.1 Networked reputation of supplier firms

Which factors generate a supplier's reputation among 'visible' and 'invisible' importers? How does this influence the latters' value chain coordination? First of all, suppliers' reputations are based on networked information but also, as relationships become more established, on their own experience with the firm that they have gathered over time. To gain a good reputation, a supplier must continually demonstrate similar quality, performance and responsibility indices as noted above for importing firms (Table 4.3). However, when importers are looking for *new* suppliers, certain attributes cannot be experienced *ex ante*, and in most cases importers will ask other players within their network which impressions they have of a potential new trading partner abroad:

> *With suppliers, particularly, if you hunt the globe for stuff, you are generally looking for some kind of referral. I will always ring someone else that's buying from them and say: Hey, can they supply, are they genuine, have you had any problems, what are your thoughts?*
>
> – Australian manufacturer and brand owner, moderate public exposure, AUS-IMP1

This is where the 'invisible' supplier's networked reputation is crucial, as he will only in few cases dispose of an internationally disseminated public reputation, and will only be recommended to new buyers if he has proven his positive qualities to others. Some importers in my study even argued that they would not trade with a firm that they had no other (external) reference on.

My data also suggests, however, that it is not only the networked reputation of the firm itself that influences importers in their selection of new suppliers. Especially where few networked references are available, the reputations of (i) the country a new supplier is from, (ii) the standard it is certified against, and (iii) the certification body (CB) which tests and controls the firm's compliance with the standard have a major impact on the supplier's assumed business conduct or product quality. These reputations and assumptions, combined with personal experience (from past transactions), reveal some key uncertainties among importers and have a decisive impact on the way they coordinate trade relations with suppliers abroad. By reading the empirical material (interviews) through a CT lens, one can identify typical ways in which importers justify their value chain coordination by referring to reputational issues.

4.5.2 Reputation of supplier countries

Two geographic regions were most elaborately discussed in terms of their reputation by the importing firms I interviewed. First, Asia – and China in particular – as an overall challenging or difficult region to source from; and second, the so-called 'western' nations such as the US, Canada, New Zealand, Australia, and Western Europe. The latter group of countries was generally perceived to have a good reputation as countries of origin among Australian and German firms. Yet, a differentiated look at these regions' reputations from the German and Australian perspective, respectively, shows some striking variations and decisions made in trade coordination.

'Western' countries have a very good reputation among Australian importers. This is based on public and networked reports as well as own (mainly long-distance) experience with suppliers in these countries. The latter are believed to have an understanding for high quality product, good business ethics, and, moreover, understand the specifically strict requirements posed by the Australian Quarantine and Inspection Service (AQIS) at Australian customs. Thus, these countries are preferred supplier countries to Australian firms, and their standards are all accepted by national Australian regulations for organic imports. German firms, on the other hand, do not much mention the US or Canada as supplying countries, which may be related to the fact that the EU and US organic standards have only recently been mutually recognized as equivalent; and the fact that most products grown in North America can also be sourced in Europe. Looking at Europe, though, German importers differentiate much more between the reputations of individual European countries/regions. With reputation based much more on own (proximity-related, hands-on) experience than in Australia, there is a lively debate within the importers' community on whether or not Southern European countries have reliable and integer suppliers. While some rely on products from these regions (also counter-seasonally) and fulfill their local customers' demands of EU product, a considerable number of the interviewees reported that the reputation of countries such as Italy, Spain, or Greece was damaged because imported goods had repeatedly been tested to contain high residue values, there were apparent cases of fraud, and, finally, many of these countries were on major German discounter Aldi's list of 'high risk' suppliers. Suppliers from Northern Europe are perceived to represent more often the core values of organic (agricultural) production. According measures taken by German importers to overcome these uncertainties are (apart from asking for recommendations on suppliers) increased testing of products imported from these areas, either on-site or samples in (in-house) laboratories. Sourcing from more than one supplier per product is also a strategy followed.

Among suppliers in developing and emerging nations, China's reputation stands out as the overall most critically regarded one both among German and Australian importers. Some firms were

also concerned regarding South American and African countries as well as India and Bangladesh, but to a lesser extent, which is why I will exemplarily focus on China in the following. Major issues associated with these countries relate to quality (e.g. contamination, lax audits) and responsibility indices (e.g. differences in business mentality, high risk of fraud). Before commencing trade with China, much of this negative reputation is generated through public channels who report on food scandals (e.g. melamine in baby milk), and through a firm's network to some extent. The firms I interviewed propose three main strategies to mitigate the (assumed) reputation-related risks: (i) No-China policy, i.e. refraining from sourcing from China. In the case where China seems the only alternative (e.g. availability or tradition of certain products, e.g. certain types of tea; supply shortages elsewhere, financial constraints), firms either (ii) import certified product, often combined with additional tests, or (iii) engage in high-intensity cooperations with producers in China. It is particularly in the third case where my data suggests that shifts and changes in one's reputation of another occur through own experience.

The degree of vertical integration, or the ways and depth of involvement importing firms show in 'high risk' countries depends on various factors. Given that importers from all levels of own public exposure demonstrated personal and financial investment in production countries, it was mainly the public exposure and type of their customers, their firm's dedication to organic value systems, and as Ponte and Gibbon (2005) have also pointed out, the size and available capital that are important explanatory variables. Thus, it is mainly importing firms with high exposure (Table 4.2) selling directly to supermarkets and retailers who had a very high level of financial investment and 'hands on' commitment in production countries. Committed low or moderate exposure importers generally had a critical minimum business volume, frequently included organic values within their business culture, and sold direct to retailers. All this should not obscure the fact that, despite little direct involvement in countries of production in organics, large supermarket chains, such as German Rewe, Edeka or Aldi, or Australian Coles and Woolworths, have some of the most stringent monitoring systems – they can't afford any scandals that ruin their reputation.

Overall, German firms invested more financial and personal resources than Australian firms. High-involvement measures aimed at building long-term partnerships among German firms included part-ownership of production sites, own subsidiaries in supplier countries, sending own staff or trainers familiar with local culture and language, and/or frequent visits. While some Australian firms do cover their suppliers' costs for certification or offer training regarding organic farming methods or intelligent marketing strategies, most of the firms I interviewed opted for coordination type (ii) as mentioned above. Two firms stated that they import Chinese product through German trading firms, as they have a high reputation for quality management systems. One explanation for this finding may lay in their take on standards and certification systems.

4.5.3 Reputation of organic standards and certification bodies

The reputation of international standards and certification bodies mirrors to some extent the reputation of certain countries or economic regions. It is thus no surprise that the reputation of public organic standards from highly developed countries is very good among Australian importers. For example, the EU, US, Japanese and IFOAM organic standards are some with the largest geographical dissemination (also in terms of the number of certified operators), and are accepted as 'equally reliable' as the Australian domestic standard (Bernzen 2012 for an in-depth discussion). Accordingly, the reputation of CBs certifying against these standards e.g. in Europe or in the US is that they are reliable, strict, and large enough to meet AQIS requirements. A pragmatic approach to supplier and/or product selection is thus to look for one of these standards for imported products. In combination with three large and four smaller local Australian certifiers (each with own standard and logo), and the non-existence of a singular 'government' logo, the number of variations in terms of organic logos on products offered to Australian consumers is very high.

While Australian importers focus above all on importing *certified* product, and preferably with a *reputable standard*, many German firms not only debate the reputation of a *standard*, but also whether a CB is reputable. Here, certification against the EU minimum standard is mandatory, and the according German government logo for certified organic product has earned a good reputation among consumers since its introduction in 2001. Yet, especially firms with high and very high public exposure and experience in production countries criticize the standard for being too lax, too flexible in its possible interpretations, and point out various loopholes which pose a risk in their point of view. It is frequently these same firms who also pay much attention to the choice of CBs, as networked reputation and some own experience seem to paint a heterogeneous picture of how integer and thorough CBs – especially those operating in other countries – conduct their audits. All in all, even though most firms are certified only against the EU standard, and only the critical demand higher standards (e.g. private standards by organic farmers associations, Soil Association or Biosuisse standards for some imported commodities, or company-own standards), almost all firms conduct tests of the purchased product in in-house or commissioned to third parties – they do *not* rely fully on the certification system overseen by their government.

4.6 Conclusions

The above discussions have given an insight into the multiple ways that reputation affects buyer's decision making processes (as called for by Eberl 2006, Falkenreck 2010) and value chain coordi-

nation processes across larger distances. In my interviews of Australian and German importing firms it has become clear that reputation plays an important role when it comes to selecting your new suppliers. In this sense, my findings support those of other reputation scholars who have pointed out that reputation leads to positive word-of-mouth and benefits in customer acquisition (Sarstedt et al. 2013). Yet, not only 'thick' and reliable networked reputation on a firm itself is a decisive reference point, but also the reputation of a country of origin and the standard and certification body the supplier is using. A given reputation also seems to influence a firm in the choice of how externalised of internalised product quality management is carried out (degree of vertical integration).

However, my findings somewhat oppose those of Suh and Houston (2010) who see reputation as a given antecedent to trust, and that of scholars arguing that it lowers transaction costs required for negotiations and monitoring among suppliers (e.g. Bergh 2010). The data presented shows that even when suppliers have been found and their good *ex ante* reputation through networks has been deemed 'reliable' by own experience, this does not lead to a complete relationship of trust between buyer (importer) and supplier. In line with findings by e.g. Dannenberg (2012), the interviewed downstream firms with high public exposure rely above all on public reputation among the media and end consumer and do everything in their might to avoid media scandals. The indices that have originally substantiated the suppliers' reputation (such as quality, performance and responsibility indices) are continuously tested and/or supported, particularly – but not only – in business with "risky supplier countries". This is particularly crucial as the vulnerability of product brands has been shown to be much more noticeable in the food and drinks industry; and what Wilkinson (2002: 335) has argued for sports brands may now also seem applicable to supermarket and high-end organic brands, namely that "the brand is transferred from the product to the firm itself and identified with life-style aspirations".

The variations between German and Australian importers regarding the foci and generation of the suppliers' reputation, that of supplier countries and standards or CBs suggests that 'geographical and institutional distance do matter', and touches on the debate whether reputation as an intangible asset is only confined to a local area, or can be transferred to global markets. It has been indicated for the wine industry that a "territorial collective reputation" is important (Patchell 2008: 2366). But would an Australian importer be more critical of European organic standards and CBs if he was closer, both geographically and institutionally? Also, the example of some German firm's high involvement in Chinese agricultural production sites illustrates that intense contact and communication can render existing negative reputations into more positive ones. It can, however, also reconfirm existing doubts and concerns.

Glückler and Armbruster (2003) argue that networked reputation bridges uncertainty that is related to the lack of formal institutions such as legislation, standards and certificates. Yet, the

preceding analysis shows that uncertainty exists also where formal institutionalisation is given. A good reputation is still essential for (improving) market access, even when core criteria such as legally mandatory certification are fulfilled. Thus, not only formal and legal requirements set by states, firms and organisations e.g. in the shape of codified product standards, or market based i.e. price related arguments are decisive for a buyers decisions supply chain coordination.

In the context of international trade coordination analyses in economic geography, I conclude here by calling for a greater inclusion of 'informal' or 'intangible' factors such as reputation or trust into existing concepts. Using CT can assist in this endeavour by showing how something intangible (reputation) is then expressed in very tangible actions.

Acknowlegements

The empirical research was funded by the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG) within the project *ImPOrt*. Without this financial support the empirical research in Germany and Australia would not have been possible.

4.7 References

Bernzen, A. 2012: 'Sustainable Standards?' How Organic Standards in the EU and Australia Affect Local and Global Agri-Food Production and Value Chains. – In: *Farmar-Bowers Q., V. Higgins* and *J. Millar* (eds.): Food Security in Australia. – New York: 281-296

Bergh, D. D., D. J. Jr. Ketchen, B. K. Boyd and *J. Bergh* 2010: New frontiers of the reputation-performance relationship: Insights from multiple theories. – Journal of Management **36**: 620–632

Boltanski, L. and *L. Thévenot* 2006[1991]: On justification. The Economies of Worth. – Princeton

Braun, B. and *C. Dietsche* 2009: Unternehmensnetzwerke und Stakeholderansprüche im Handel mit Entwicklungsländern. – In: *Kühlmann T. M.* and *H.-D. Haas* (eds.): Internationales Risikomanagement. Auslandserfolg durch grenzüberschreitende Netzwerke. – München: 247-276

Dannenberg, P. 2012: Standards in internationalen Wertschöpfungsketten. – Wirtschaftsgeographie **53**. - Münster

Dietsche, C. and *B. Braun* 2008: Changing the chains: Bangladeshi shrimps, consumer preferences and environmental issues in international trade relations. – The Journal of Geo-Environment **8**: 1-13

Dolan, C. and *J. Humphrey* 2000: Governance and trade in fresh vegetables: The impact of UK supermarkets on the African horticulture industry. – Journal of Development Studies **37**: 147-176

Eberl, M. 2006: Unternehmensreputation und Kaufverhalten. – Wiesbaden

Falkenreck, C. 2010: Reputation Transfer to Enter New B-to-B Markets. Measuring and Modelling Approaches. – Heidelberg

Farole, T., A. Rodríguez-Pose and *M. Storper* 2011: Human geography and the institutions that underlie economic growth. – Progress in Human Geography **35**: 58-80

Fombrun, C. and *V. Rindova* 2000: The Road to Transparency: Reputation Management at Royal Dutch/Shell. – In: *Schultz M., M. J. Hatch* and *M. H. Larsen* (eds.): The Expressive Organization: Linking identity, reputation and the corporate brand. – Oxford: 77-96

Fombrun, C. J. and *M. Shanley* 1990: What's in a Name? Reputation Building and Corporate Strategy. – Academy of Management Journal **33**: 233-258

Franz, M. and *M. Hassler* 2010: The value of commodity biographies: integrating tribal farmers in India into a global organic agro-food network. – Area **42**: 25-34

Gabbioneta, C., D. Ravasi and *P. Mazzola* 2007: Exploring the drivers of corporate reputation: a study of Italian securities analysts. – Corp Reputation Rev **10**: 99-123

Gereffi, G., J. Humphrey and *T. Sturgeon* 2005: The governance of global value chains. – Review of International Political Economy **12**: 78-104

Glückler, J. 2005: Making embeddedness work: social practice institutions in foreign consulting markets. – Environment and Planning A **37**: 1727-1750

Glückler J. and *T. Armbrüster* 2003: Bridging Uncertainty in Management Consulting: The Mechanisms of Trust and Networked Reputation. – Organization Studies **24**: 269-297

Grant, R. 2000: The Economic Geography of Global Trade. – In: *Sheppard E.* and *T. J. Barnes* (eds.): A Companion to Economic Geography. – Oxford: 411-431

Hall, P. A. and *D. Soskice* 2001: Varieties of Capitalism: The Institutional Foundations of Comparative Advantage. – Oxford

Jaffee, S. and *O. Masakure* 2005: Strategic use of private standards to enhance international competitiveness: Vegetable exports from Kenya and elsewhere. – Food Policy **30**: 316-333

Kühlmann, T. M. 2009: Risiken der Kooperation in grenzüberschreitenden Netzwerken von Unternehmen. – In: *Kühlmann T. M.* and *H.-D. Haas* (eds.): Internationales Risikomanagement. Auslandserfolg durch grenzüberschreitende Netzwerke. – München: 135-154

Ouma, S. 2010: Global Standards, Local Realities: Private Agrifood Governance and the Restructuring of the Kenyan Horticulture Industry. – Economic Geography **86**: 197-222

Patchell, J. 2008: Collectivity and differentiation: a tale of two wine territories. – Environment and Planning A **40**: 2364-2383

Ponte, S. and *P. Gibbon* 2005: Quality standards, conventions and the governance of global value chains. – Economy and Society **34**: 1-31

Raynolds, L. T. 2004: The Globalization of Organic Agro-Food Networks. – World Development **32**: 725-744

Rosin, C. 2007: Justyfing the 'Alternative': Renegotiating Conventions in the Yerba Mate Network, Brazil. – In: *Maye D., L. Holloway* and *M. Kneafsey* (eds.): Alternative Food Geographies. – Oxford

Rosin, C. and *H. Campbell* 2009: Beyond bifurcation: Examining the conventions of organic agriculture in New Zealand. – Journal of Rural Studies **25**: 35-47

Sahota, A. 2012: The Global Market for Organic Food and Drink. – In: *Willer H.* and *L. Kilcher* (eds.): The World of Organic Agriculture. Statistics and Emerging Trends 2012. – Bonn: 121-136

Sarstedt, M., P. Wilczynski and *T. C. Melewar* 2013: Measuring reputation in global markets - A comparison of reputation measures' convergent and criterion validities. – Journal of World Business **48**: 329-339

Schwaiger, M. 2004: Components and Parameters of Coporate Reputation - an empirical Study. – Schmalenbach Business Review **56**: 46-71

Shapiro, C. 1983: Premiums for high quality products as return to reputation. – Quarterly Journal of Economics **98**: 659-679

Suh T. and *M. B. Houston* 2010: Distinguishing supplier reputation from trust in buyer–supplier relationships. – Industrial Marketing Management **39**: 744-751

Trebbin, A. and *M. Hassler* 2012: Farmers' producer companies in India: a new concept for collective action? – Environment and Planning A **44**: 411-427

Veloutsou, C. and *L. Moutinho* 2009: Brand relationships through brand reputation and brand tribalism. – Journal of Business Research **62**: 314-322

Wilkinson, J. 2002: The Final Foods industry and the changing face of the global agro-food system. – Sociologia Ruralis **42**: 329-346

5 Conventions in Cross-Border Trade Coordination. The Case of Organic Food Imports to Germany and Australia

BERNZEN, A. & B. BRAUN (2014): Conventions in Cross-Border Trade Coordination. The Case of Organic Food Imports to Germany and Australia. *Environment and Planning A* 2014, volume 46, doi:10.1068/a46275.

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Abstract Monitoring and tracing product and process qualities along global supply chains have become increasingly challenging tasks for companies at the downstream end of the chain. High levels of uncertainty in trade coordination arise among importing companies in the face of these developments. The conceptual aim of this paper is to show, by the example of organic food imports to Germany and Australia, how convention theory can contribute to the analysis of trade coordination in global value chains. Our empirical results affirm that industrial conventions such as standards and third-party certification have gained increasing significance over the past two decades. Simultaneously, however, we argue that *industrial conventions* are not enough to overcome uncertainties in trade. They do not necessarily lead to reduced differences in perceptions of product quality between suppliers and importers. Less tangible factors such as trust established through relationship management and reputation are likewise significant. Furthermore, not only companies with a certain ideological tradition, but also individual people with altruistic motives within other types of firms, can determine how 'dedicated' a firm is in pushing trade coordination according to *civic* and *domestic conventions*. *Market conventions* (ie, the importance of price and competitiveness) are stressed more by Australian firms reflecting the country's liberal market economy and low state subsidies especially in the area of agriculture. Finally, compromises between conventions are sometimes necessary to end a situation of conflict between buyer and supplier.

Keywords: *convention theory, global value chains, imports, organic food, quality standards, Australia, Germany*

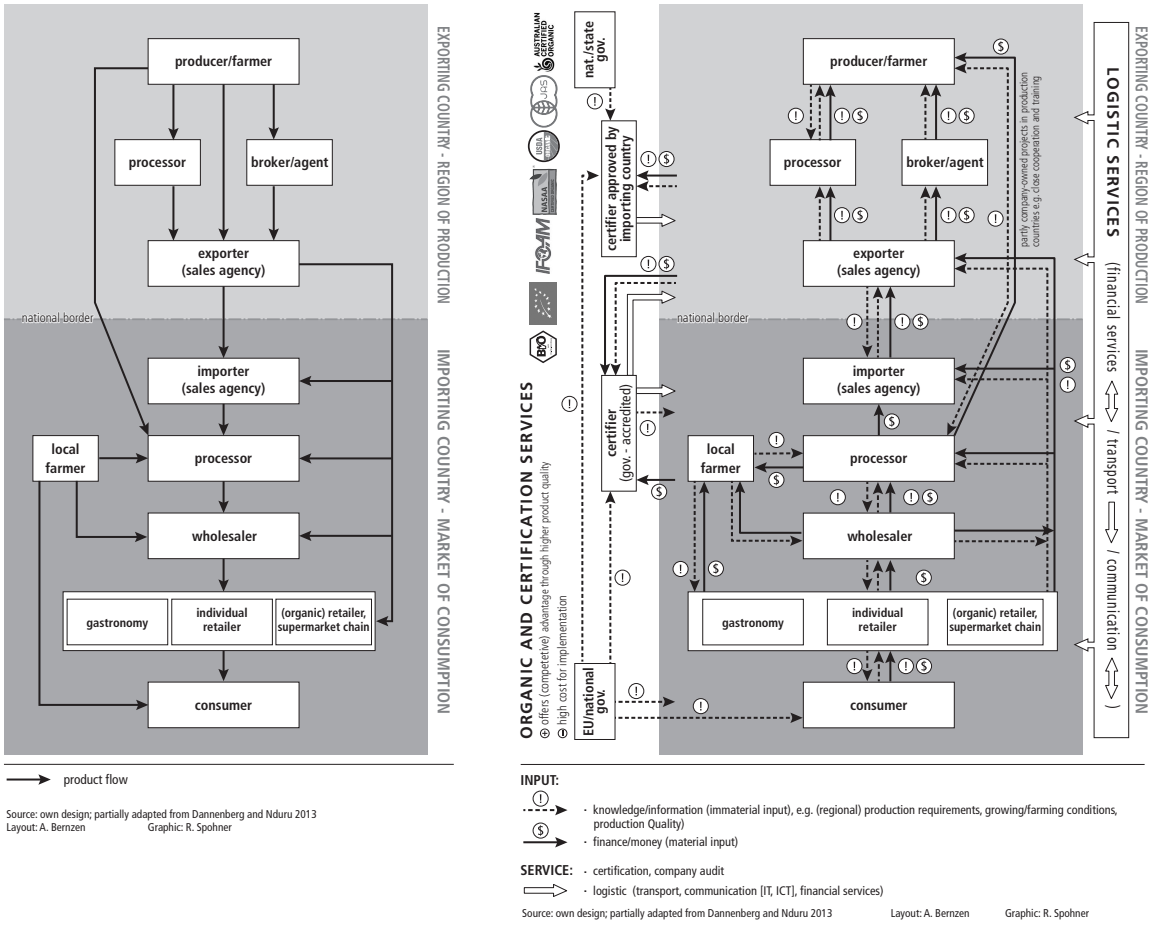
5.1 Introduction

Globalization processes today are marked by two distinct features: an extensive geographical spread of economic activities and a high degree of functional integration (Dicken, 2011). Over the past few decades we have seen production become more fragmented, the geographical distance between trading partners grow, and supply chains become longer, also due in part to decreasing transaction costs. At the same time, supply-chain elements are functionally linked as part of a diligently organized whole. Nonetheless, these processes have overall caused processes of monitoring and tracing product quality and manufacturing to become more difficult and somewhat tedious tasks for companies at the downstream end of the chain.

Especially high levels of uncertainty in trade coordination arise among importing companies. This is because they operate not only in different cultural settings, but also in different legal and regulatory systems (Figures 5.1a and 5.1b). Most importantly, they can be held liable if the imported goods do not meet domestic product requirements. The latter are particularly strict in the food sector, where a great concern in importing countries relates to food safety and specific process quality standards, which is a growing global issue not only for public health but also because of the impact that it has on international trade. Here, buyers are also concerned about fraud or forged documents (Ponte and Gibbon, 2005). This can lead to negative consequences, not only for the importers themselves, but also in terms of increasing insecurity among end consumers. The latter issue has been particularly apparent in the debate around organically produced food, a sector where demand for certain commodities exceeds local supply in countries of consumption, and imports thus gain importance.

Studies on the organic industry have substantially increased in number over the past decade due to the strong growth of the organic market (eg, Franz and Hassler, 2010; Hamm et al, 2002; Kristiansen et al, 2006; Raynolds, 2004). The special perspective and particular uncertainties faced by importers have, however, only been marginally or implicitly addressed [eg, Freidberg (2003); for examples on conventional cross-border food chains, see Dannenberg and Nduru (2013) and Pritchard and Burch (2003)]. A lot is at stake for organic importers: they face additional uncertainties due to the increased demands on product and process quality which are regulated through according public and private standards. Importantly, they can only sell their product as organic—and with the attractive higher profit margin—if the product has been officially certified against one of the locally accepted standards (Fig. 5.1b). Thus, finding substitute suppliers in case of delivery shortages due to crop failures, for instance, is not an easy task. What adds to the problem is that the number of possible suppliers (ie, certified suppliers) is still much lower than in the conventional sector, especially for certain crops. This is despite the fact that organic food is currently the fastest growing food sector in the world with global sales of organic food and drink having tripled since 2000 to US $59 billion in 2010 (Sahota, 2012).

Figure 5.1 — Global organic supply chain (schematic): 5.1a) Product flow 5.1b) Input and service flow incl. standards and certification processes



Established approaches which have offered valuable insights in explaining governance and coordination between global value chain actors presently include the global commodity chain (GCC) (Gereffi and Korzeniewicz, 1994) and global value chain (GVC) (Gereffi et al, 2005). However, they only marginally look at uncertainties and have also been criticized for neglecting the influence of institutions (eg, Gibbon and Ponte, 2008; Gibbon et al, 2008). Alternative frameworks, such as the global production networks (GPN) approach (Henderson et al, 2002), have been developed to overcome this analytical weakness. Yet, some scholars have noted that extant studies applying GPN have not yet successfully integrated institutional contexts to explain economic relations (eg, Coe et al, 2008).

Alternative concepts in the discussion of value chain analyses in the field of economic geography (including agrifood studies) have only recently begun to receive more attention. These come from the discipline of new pragmatic French sociology, such as convention theory (CT) or économie des conventions (EC) [for an introduction in English, see Jagd (2007) or Wilkinson (1997)]. We

argue, in line with other authors from different disciplines (eg, Freidberg, 2003; Morgan et al, 2006; Ponte, 2009; Rosin and Campbell, 2009; Wilkinson, 1997) that this approach provides a useful 'toolkit' which helps to analyze and explain economic actors' motivations, strategies, and power relations while moving beyond purely economic factors that focus on market dynamics and industrial formalization (Ponte and Gibbon, 2005). Moreover, it encompasses analytical dimensions which address also the more holistic quality designations of organic. The conventions concept serves as a framework to explore how uncertainties can be addressed across political borders and larger distances (geographical and cultural) and by doing so, also analyze the role of institutional variations (Wilkinson, 1997).

Following these considerations, our major conceptual objective of this paper is thus to show, by the example of organic food imports to Germany and Australia, how CT— as developed by Boltanski and Thévenot (1991; 1999)—can be a useful alternative or complementary approach to the analysis of trade coordination in global value chains next to concepts such as GCC, GVC, or GPN. On a more practical level, we further contribute by emphasizing the particular role and uncertainties facing importing firms, which have not been the focus of agrifood literature so far.

By choosing two case countries with differing national institutional frameworks (in the organic sector), we address the need suggested by Morgan et al (2006) to attend to regional variations in agrifood geography, and by Sage and Goldberger (2012) to incorporate regulatory structures into the analysis of (agricultural and market) 'places'.

We argue that, despite being contested and criticized [for instance, in the 'conventionalization' debate (Guthman, 2004a)], *industrial conventions* such as standards and certification systems (Table 5.1) have gained even more importance over time. At the same time we stress that they are not sufficient to overcome uncertainties in trade, and other less tangible factors must also come into play.

5.2 Institutional context: defining organic quality through standards

In global trade, defining and negotiating food quality is a crucial albeit complex issue, especially given the politically and socially constructed nature of 'quality' (Mansfield, 2003). Its exemplary character of changing norms and values in society and economy has been substantiated in recent debates (eg, Sonnino, 2009). To assess the quality of food, we must consider the different quality dimensions. First, *product quality* includes observable and measurable product properties (sensory, chemical, physical, contamination level). However, these attributes say little or nothing about the production *process* (eg, types and amounts of external inputs such as fertilizers or

pesticides, labor conditions), *distribution, retailing*, or "cultural and ethical qualities" (Renard, 2005, page 421).

Actors from both ends of the value chain have driven the measurability of quality (Sonnino, 2009). Standards have been developed: for example, in response to changing consumer demands for increased food safety following a series of food scandals, and to simplify global trade of products by making their quality characteristics more transparent, more comparable, and easier to monitor. These standards specify different product and process attributes and appear in the shape of different public and private food safety [eg, HACCP (Hazard Analysis and Critical Control Points), IFS (International Food Standard)], environmental (eg, 'organic' standards, GlobalGap, ISO 14001), and social standards, such as 'fair trade' (eg, Bernzen, 2012; Freidberg, 2003). The growing significance of these standards and their corresponding certification systems in (global) production and value chains have received growing attention in the field of social sciences over the past years (see, eg, Braun, 2005; Busch and Bain, 2004; Guthman, 2004a, 2004b; Higgins et al, 2010; Nadvi and Wältring, 2002; Ouma, 2010).

Generally speaking, when we discuss 'organic' food in global agrifood contexts today, we implicitly refer to 'certified organic' food that is produced according to one of the many public or private organic standards that exist around the world, leaving out of the equation 'de facto organic' food that is mostly grown on microscale levels for self-provisioning. Organic standards regulate, above all, production processes of agricultural products (plant and animal) and their further processing along the value chain (Figures 5.1a and 5.1b). While regional adaptations of standards have taken place over time, it is important to note that the core values and ideas of contemporary organic production systems have their roots in the (anthroposophist) movement that evolved in the 1920s in central Europe. This movement aimed at achieving social and environmental welfare by growing and producing healthy, chemical-free, and tasty food locally in a sustainable manner, ensuring that the environment was protected (eg, Guthman, 2004a; Kristiansen et al, 2006). Taking this into consideration, it is not surprising that recent scientific literature on organic food has identified quality as a key factor in the (international) trade of organic products (Busch and Bain, 2004; Raynolds, 2004).

Like most other product and process standards, organic standards include labeling regulations, and also prescribe an independent control system (third-party certification) as a key element. Accredited certification bodies carry out regular audits to inspect whether the standard's requirements are met by all companies along the value chain and whether stringent documentation and traceability are guaranteed (Figures 5.1a and 5.1b; e.g. Bingen and Busch, 2006). Depending on national regulations, certification bodies can be state operated or private, nongovernmental businesses.

Another issue to consider in this context is the lively debate revolving around a lack of mutual acceptance and recognition of different organic standards around the world. Until June 2012, for instance, the US organic standard was not accepted in the EU, and vice versa, hampering trade. Proponents of standards harmonization have argued that forcing producers, especially in developing countries, to become certified against multiple standards would exclude them from a larger pool of consumer markets due to the high cost involved with certification [eg, the Food and Agriculture Organization, International Federation of Organic Agriculture Movements (IFOAM) and United Nations Conference on Trade and Development under their Global Organic Market Access Project]. And, finally: even if an importer finds a new supplier, the question of whether an organic certificate provides them with enough security to rule out that the product may be, after all, a conventional one, remains unanswered.

5.3 Convention theory and agri-food value chains

The notion of 'conventions' is a central component of the broader new pragmatic social science that has evolved in French academia since the mid-1980s. This transdisciplinary school has its roots in the close collaboration of scholars from the areas of sociology (Luc Boltanski, Alain Desroisières), economics (François Eymard-Duvernay, Olivier Favereau, André Orléan, Robert Salais, and Laurent Thévenot), and political philosophy (Jean-Pierre Dupuy). Over time, the concept has been extended and refined to include many commodities (eg, Ponte and Gibbon, 2005; Raynolds, 2004) and to discuss general economic activities (eg, Boltanski and Thévenot, 1991). What makes CT so attractive and relevant to the analysis of economic action in value chains is that it has a strong focus on coordination (Ponte and Gibbon, 2005; Rosin, 2007), and can help explore how humans organize situations of uncertainty by drawing on different conventions (such as in Table 5.1, see below). In other words, CT shows that there are many different ways to justify the solution to a problem. Conventions can include "anything from unarticulated expectations of another's actions ... to the formalized rules of business contracts or international trade treaties" (Rosin, 2007, page 116). As such, they also help us to recognize the role of institutions. CT posits that different institutional settings can develop and be established over space and time as a result of the existing plurality of principles and values.

We will here focus on the conceptual strand of CT literature that works closely with this notion of multiple possible justifications or economic actions (Jagd, 2007), and employ CT as it has been developed by Boltanski and Thévenot (1991). Their 1991 publication De la justification (English translation published in 2006) was one of the first significant studies of the conventions school, and has also proven useful for studies in the agrifood sector (eg, Rosin and Campbell, 2009; Sage and Goldberger, 2012). The six 'worlds of justification' they elaborate in this work

are presented in Table 5.1 and show different perspectives or positions from which one can justify the 'right' kind of action. When applying a certain convention, actors refer to objects, people, and situations to which they assign value or worth [CT terminology 'orders of worth'; for an excellent overview of how 'organic' becomes incorporated into these worlds, see Rosin and Campbell (2009)]. Importantly, the coexistence of conventions is assumed. This means that, if an agent employs a certain convention in a given situation, all other conventions still virtually exist as possible alternative logics of action. For example, as we will see below, an importer may use measurable criteria like standards and certificates to justify that a product has the right quality (*industrial convention*); while at the same time insisting on trustful long-term relationships with his suppliers to ensure this (*domestic convention*) (Tables 5.1 and Table 5.4).

Table 5.1 — Worlds of Justification and Orders of Worth

World of Justification (Convention)	**Market**	**Industrial**	**Domestic**	**Civic/ Environmental**	**Opinion/ Fame**	**Inspired**
Mode of evaluation (Worth)	Price Competitiveness	Productivity Efficiency	Esteem Tradition Reputation	Collective interest	Public Opinion Renown	Grace Nonconformity Creativeness
Form of relevant information	Monetary	Measurable: criteria, statistics	Oral Exemplary Anecdotal	Formal Official	Semiotic	Emotional
Elementary relationship	Exchange Possession	Control Functional link	Trust Etiquette Respect Recommendation	Solidarity Membership	Recognition Identification	Passion Uniqueness

Sources: adapted from: Boltanksi and Thévenot, 1999; Rosin, 2007; Thévenot et al, 2000

Two main themes have become observable in agrifood network analyses employing CT [eg, Freidberg (2003), Murdoch et al (2000); for organics see eg, Hatanaka (2009), Sage and Goldberger (2012)]. A first strand of literature has focused on emerging market niches and the diversification of agricultural products based on quality designations such as 'sustainable' or 'fair trade' or geographic designations (eg, Marsden et al, 2000; Murdoch et al, 2000; Renard, 2005). These

works highlight that complex product designations call for an analytical framework such as CT which, unlike other conceptual approaches, is open to underlying value systems. For example, Marsden et al (2000) argue that CT is particularly useful to evaluate quality designations in food production in 'alternative food chains', such as organics, that stress their natural or local character. Work that explicitly links CT to GVC approaches is presented by Ponte and Gibbon (2005) who employ some of the basic CT concepts in global clothing and coffee chains to stress the importance of quality for lead-firm governance across larger distances. Similarly, Ponte (2009) looks at quality conventions in the value chain of South African wine sold in the UK. However, these works, by classifying the complete chain within one 'world of justification' (eg, 'organic' as a '*civic*' chain), neglect the heterogeneity of organic chain actors and the variation of conventions employed (see also Rosin, 2007).

Our work is positioned more closely within the second theme addressed in CT literature on agri-food analyses, which broadly aims to categorize firms operating within a given value chain and which strategically present themselves within given markets. Various studies have demonstrated how one firm can move between different conventions in different markets (Murdoch and Miele, 1999; Sage and Goldberger, 2012). For example, in a series of studies on yerba mate processors, Rosin (2007) has highlighted the way CT can help us understand how these firms argue about improving efficiency measures in collaboration with their suppliers (ie, producers). Morgan et al (2006) develop 'worlds of food' and argue that these must be embedded in particular ecologies and cultures and also consider institutional and economic logics. While criticizing these worlds as being relatively uniform, Rosin (2008), in his study on organic farming in New Zealand, agrees that an application of a broad range of justifications is needed to gain a more comprehensive understanding of the diversity of firms' approaches. In a later paper Rosin and Campbell (2009, page 46), argue that the CT lens can show how

> *[the active negotiation of the worth of the organic label] becomes the means to continually reassert the potential of beneficial aspects (social and environmental concerns embedded in civic/environmental justifications) to remain viable – and vital – features of organic food production.*

5.4 Research methods and data collection

We employ three distinct analytical dimensions in our organic food case study in Germany and Australia to explore the coordination of global trade in situations of uncertainty. First, there is a regional approach: that is, analyses on the transnational/national level in the two selected case countries. Second, there is an agent-oriented approach: that is, examining coordination of conflict and uncertainty above all from the perspective of decision makers in importing firms,

complemented by that of certifiers and other stakeholders. In doing so, we acknowledge the fact that, within the CT framework, actors are assumed to employ their capabilities to reflect and criticize situations in order to coordinate and 'tame' uncertainty (Thévenot and Jagd, 2004). Third, we follow an institutional, context-oriented approach: that is, acknowledging the different formal and informal institutional settings of regions and agents.

5.4.1 National case studies: Germany and Australia

As Sage and Goldberger (2012) suggest for organic producers, the variation in the choice of conventions applied by actors can be partly attributed to their geographic location. Following this thought, we wanted to examine different countries that represent a broader spectrum of Western consumer markets with high growth rates in the organic sector. Germany and Australia were selected as two examples. Germany is currently the second largest organic market worldwide with 2011 sales of US$9.33 billion, where retail sales have been growing by almost 10% annually (Table 5.2; BÖLW, 2012). Australia currently features the largest agricultural area under organic management worldwide with 12 million ha (Willer, 2012), in addition to an estimated 41% growth in retail sales between 2006/07 and 2008/09 (Kristiansen et al, 2010).

Key characteristics of these two countries regarding economic, geographical, and institutional aspects that are relevant to the organic context are provided in table 5.2. What should be highlighted at this point to understand and explain the following discussions is that Germany and Australia represent two different varieties of capitalism. This has a major impact on the way regulatory frameworks in trade are organized. For example, Australia takes the general approach of mandating standards only when obvious market failure can be observed. Consequently, the notable systemic differences in the regulation of organic quality standards in Germany and Australia are by no means arbitrary.

Germany and Australia both feature public government and private organic standards. In Germany the minimum standard to which certification is mandatory is the European Union's EC-Eco-regulation. On a global scale this is one of the most important supranational organic standards next to the United States Department of Agriculture National Organic Program and Japanese Agricultural Standard. Any business trading organics in Germany can voluntarily opt for an additional certification against one or more private organic standards (often with stricter criteria involved). In Australia, on the other hand, there is a coregulatory system, which lies somewhere between a mandated system (such as in the EU) and a selfregulatory system. Recent dynamics have resulted in a heterogeneous setting with two public (government) standards (Table 5.2) aand seven private ones. In contrast to the EC-Ecoregulation, certification against the domestic standard AS 6000 is voluntary for operators in Australia. Yet, it remains

quasi-mandatory for operators to certify against an organic standard to be able to maintain consumer trust. With regard to certifying bodies, in Germany they are mostly private, non-governmental businesses that are independent of standardsetting associations in Europe. This is not always the case in Australia. Here, many organic farmers associations are simultaneously standard developers/holders and certifiers of these standards (or have subsidiaries). All imported food—regardless whether it has been produced according to organic standards or not—is, on entering the country, subject to Australia's very strict quarantine and food safety requirements (see Table 5.2) which are monitored by the Australian Quarantine Inspection Service (AQIS). These determine whether the food product may be sold in Australia *at all*. It is Australian organic regulations that determine whether the product may be sold with an *organic label*. These latter regulations are generally less restrictive when it comes to the acceptance of (international) organic standards than those of the EU. To import an organic product for sale in Australia, the importer should be able to prove no more than that it comes from an 'equally reliable system'. These latter systems are determined by the government. This flexibility in terms of accepted standards limits the regional dispersion of Australian organic standards to the domestic market.

Table 5.2 — Key characteristics of case study countries Germany and Australia

Characteristics	**Germany**	**Australia**
Classification according to 'Varieties of Capitalism'-categories by (a) (Hall and Soskice, 2001) (b) (Amable, 2003)	(a) Coordinated market economy (b) Continental-European capitalism	(a) Liberal market economy (b) Market-based capitalism
Import and hygiene regulations	Harmonization through the General European Food Law: Regulation (EC) 178/2002 of 28th February 2002, effective since 2006. Free trade of goods across EU member states.	Very strict (AQIS): 1. Quarantine Act 1908. 2. Imported Food Control Act 1992.
Geographic integration (spatial)	Central Europe, borders with 8 EU countries, one non-EU country (Switzerland)	Australasia, geographical isolation (island)
Population	80.5 million (Dec 2013) (3)	23.1 million (June 2013) (1)
Retail sales of organic	USD 9.33 billion (2011) (2)	USD 831 million (2009) (4)

Continued on next page

Characteristics	Germany	Australia
Market share of organic	3,7% (2011) (2)	1% (5)
Organic standard and year of implementation	Council Regulation (EC) No 834/2007 on organic production and labeling of organic products (2007, replaces first version of 1991).	1. The Australian Standard for Organic and Biodynamic Products – AS 6000-2009 (domestic and import standard) (2009). 2. The National Standard for Organic and Bio-Dynamic Produce (export standard) (1992).
Number of organically certified operators (2010)	>200.000 (EU) (6)	Approx. 3.000 (5)
Regional dispersion of organic standard(s)	EU (legally effective) Globally (certification)	Australia
Key drivers of organic standard(s)	EU-Commission, EU member state Ministries of Agriculture, European organic farmers' associations	**AS 6000**: Organic industry, government, consumer groups in Australia. **National Standard**: Australian government and certification bodies in response to 1991 EU standard.

Sources: (1) ABS, 2013; (2) BÖLW, 2012; (3) Destatis Statistisches Bundesamt, 2013; (4) Mitchell and Wynen, 2012; (5) Kristiansen et al., 2010; (6) BÖLW, 2010; and as cited in text

5.4.2 Actor-centered perspective: Data collection among importers

For the purpose of our study we focused on qualitative research methods. Data were collected during semistructured, guided interviews of approximately 60 to 90 minutes each with selected relevant value chain actors, namely decision makers (buyers, quality managers) of firms based in Germany and Australia that import organic foodstuffs. Table 5.3 shows the type, size, and number of firms interviewed. All interviews were recorded and transcribed, then coded using MaxQDA software for qualitative data analysis.

Acknowledging the heterogeneity of firms that import organic food and that each may have different or specific uncertainties to overcome, the interviewed companies ranged from large retailers, supermarkets, processors, and wholesalers, to small traders and agents (Figures 5.1a and 5.1b). In terms of their product range, they included companies with seasonal and nonseasonal, fresh and dry, plant-based and animal-based products; some offered a wide product assortment

while others were very specialized: for example, trading tea or coffee only. Furthermore, we also considered the share of a firm's turnover that is generated by sales of organics, differentiating between those that commit their business close to 100% to organics, and those that do not.

While this qualitative approach clearly restricts representative results, it seemed the most viable method to explore and understand the situations of uncertainty among importers and explain how and why these situations were tackled. Also, to better understand the broader context of the importers' activities, we led complementary interviews with industry experts and stakeholders, such as certification bodies, independent research institutes, consumer boards, legal advisors, and government representatives.

Table 5.3 — Case study database: Interviews led in Germany and Australia between February and October 2010. Interviewed firms by share of organic business and number of employees, and interviewed experts

Interviewees	**Germany**	**Australia**
Importing firms	**26**	**19**
Of which 'organic' share of business is 90 to 100 per cent	12	9
Of which the no. of employees is:		
250 and more	2	0
50-249	4	1
49 and less	6	8
Of which 'organic' share of business is less than 90 per cent	14	10
Of which the no. of employees is:		
250 and more	5	2
50-249	4	4
49 and less	5	4
Experts	**7**	**10**
certification bodies, government representatives, specialized lawyer, independent researchers, consumer boards		
TOTAL	**33**	**29**

5.5 Tackling uncertainties on product and process quality across the distance

The aim of the following analysis is to assess how the CT framework can help us to understand which uncertainties exist in organic cross-border trade networks, and how these uncertainties can be reduced. Conventions are used to find temporary, ad hoc solutions to uncertainties: for example, regarding product quality (Rosin and Campbell, 2009). For our case the variations of possible conventions as listed in Table 5.1 can provide a basis to differentiate and categorize the arguments and justifications that our interviewees brought forward when speaking about their personal ways to find these solutions in the coordination of risk management.

The prevailing uncertainty among importers that our interview material revealed was that the product's (product and process) quality may not comply with their firm's requirements. The 'root' of this uncertainty can—from the importers' perspective—be found among their supplier(s) (ie, larger farms, farmers cooperatives or export agencies), but can also arise through the systemic external circumstances, such as (mandatory) certification and organic standards (see Figures 5.1a and 5.1b). Table 5.4 shows the most frequently mentioned supplier-related and system-related risks or reasons that our interviewees perceived to lead to the uncertainty of noncompliance with quality demands. These different 'levels' of uncertainty and variations in overcoming them will be discussed below.

Table 5.4 — Conventions importers employ to mitigate quality-related risks (+) and would like to see among exporters (+exp) or within the regulatory system incl. certifiers (+sys)

	"Root" of Uncertainty	Perceived risk or reasons for uncertainty	Conventions importers employ	Key argument/justification by importer
Uncertainty: non-compliance with required product and process quality	Supplier	New/unknown supplier	Industrial (+/+exp)	(1) An organic certificate is a formal indication that a supplier has produced according to the organic standard's criteria, and legal prerequisite to trade. (2) Samples provided by (potential) suppliers should be tested for aesthetic and sensory quality, and for (residues of) unwanted components.
			Opinion (+)	(1) A (new) supplier with a good reputation (among others) is more likely to deliver good product. (2) Unknown supplier could risk own company's reputation if product is bad.
			Domestic (+/+exp)	For reliable future deliveries, develop long-term personal trade relationship.
			Market (+exp)	Offering suppliers attractive financial incentives to produce will ensure reliable delivery and quality.
	Supplier	Lack of knowledge/ training	Domestic/civic (+/+exp)	Developing direct, personal, trustful, long-term partnerships with suppliers, providing training, know-how and financial support is a sustainable investment for high product and process quality.
			Industrial (+)	Self-conducted or privately commissioned audits in and for countries of origin that are termed 'high risk' e.g. due to frequent residues in tested product.

Continued on next page

	"Root" of Uncertainty	Perceived risk or reasons for uncertainty	Conventions importers employ	Key argument/justification by importer
Uncertainty: non-compliance with required product and process quality	Supplier	Different mentality/business culture (risk of fraud)	Domestic/civic (+/+exp)	See above; also: Farmers in developing countries should also acknowledge the social and environmental benefits of organic production methods rather than seeing purely the economic benefit.
			Opinion (+)	Certain countries have a bad reputation with regard to business ethics which is why we would rather not source from them.
			Industrial (+)	Self-conducted or privately commissioned audits in and for countries of origin that are termed 'high risk' e.g. due to frequent residues in tested product.
	Systemic/ institutional	Non-compliant product handling at customs or during transport	Industrial (+)	Knowing and acting according to legal food import criteria minimises risk of imported products being treated on entry and thus destroying organic status of product (relevant to Australia only).
			Domestic (+)	Developing an understanding and respectful relationship with Australian Quarantine Inspection Service customs officers and logistics firms helps to get organic product in without risking loss of organic status through mixing with conventional goods or noncompliant treatment.
	Systemic/ institutional	Public organic standards not strict enough	Civic (+/+sys)	Our firm demands stricter production standards for increased social and environmental benefits among suppliers and for their natural surroundings.

Continued on next page

"Root" of Uncertainty	Perceived risk or reasons for uncertainty	Conventions importers employ	Key argument/justification by importer
Systemic/ institutional	Certifiers not conducting appropriate audits/ loopholes in certified supply chain	Industrial (+/+sys)	In-house or commissioned private laboratory tests of random samples help to detect possible unwanted residues in the product (test product quality).
		Domestic/civic (+)	Developing direct, personal, trustful, long-term partnerships with suppliers, providing training, know-how and financial support is a sustainable investment for high product and process quality.
		Opinion (+)	Source only from suppliers that are certified against a reliable, well-known standard with a good reputation.

Source: Own data

5.5.1 Supplier-related risks and uncertainties

With increasing demand for organic products and lack of local supply, many importers are facing a situation in which they need to increase the volume of imported product. Delivery shortages also arise when established suppliers experience crop failures. Sourcing from a *new supplier* bears certain risks because experience with both product and business attitude is lacking. While this is true also for the conventional sector, reading our interviewees' justifications on the selection of a new *organic* supplier through a CT lens (Tables 5.1 and 5.4)shows that the various conventions employed are weighted and applied in a specific order, reflecting the specific character of uncertainty in organic networks. First, a supplier must provide a valid organic certificate (Table 5.4). If this criterion is fulfilled, other justifications come into play. Some firms hope to create incentives for producers in the shape of price and purchasing guarantees to increase production volumes of organics (thus echoing the *market conventions* some exporters draw on). Almost all companies in Australia and Germany carry out or commission additional tests to measure pesticide and heavy metal residues (*industrial convention*), and highlight the value of long-term (personal) supplier relationships to reduce transaction costs in communicating quality demands, as well as recommendations for a new potential supplier before initiating trade relations (*domestic convention*)::

> *The least is to get a certificate and certain documentation [...] That's the first prerequisite. And then I can ask them to send a sample. But having the right paperwork and a good sample are not enough. The story behind it has to be right, too. We will of course ask other Chinese if they know him and who he is, whether this is his seventh firm in a row and whether he's already had his organic certificate withdrawn three times in a row. If that's the case, you don't buy from this guy.*
>
> – German trader and manufacturer, 2010, translated from German original quote

Sourcing sufficient volumes can be particularly tedious for large manufacturers with own-brand products or supermarket chains, because they need extremely large volumes of product at consistent quality to stay in line with their high consumer orientation and strong aims to maintain a competitive advantage on the market. However, if consistent supply of a certain product cannot be guaranteed, one worst-case solution would be to accept temporarily empty shelves. More radically, as in the case of large supermarket chains, the product would be discontinued altogether to retain a good reputation (*opinion convention*, Table 5.4).

The other two main supplier-related causes of quality concerns among importers are lack of know-how and cultural/mentality differences among their suppliers (Table 5.4). First, *lack of know-how on organic farming and production* seems to exist at all levels of the value chain. Most often, though, importers were—partly through personal experience, partly due to rumors—concerned about a lack of know-how among farmers in countries of production, even where they do not source from them directly (Figures 5.1a and 5.1b). Our interviewees explained this weakness through a lack of ('Western') organic farming tradition in the respective countries, extrinsic (rather than intrinsic) motivation to farm crops that they have no experience with, and insufficient infrastructure for training the necessary skills. Here, the organic industry is, as one Australian manufacturer put it, disconnected between standard setters and those that have to use it.

Second, apart from pure ignorance, differences in business culture and mentality can also lead to faults in product and process quality. A frequent point of criticism mentioned by our interviewees regarding the farmers' motivation was that producers from certain countries are supposedly too driven by the financial advantages of selling organic produce at premium prices (*market convention*) and disregard the idea of sustainable long-term social welfare benefits and environmental advantages that many importers support (*civic/environmental convention*; see Tables 5.1 and 5.4, 'interworld conflict' in Figure 5.2 below). A second issue is seen in the culturally inherent different perceptions of how diligently and strictly formal food safety requirements (including residue values) should be monitored. For these reasons, China is overall perceived as a "high-risk supplier country" (German importer, supermarket chain), though more so by German than by Australian companies. But India and Turkey are also met with skepticism. Among Ger-

man firms, some believe Southern and Eastern European countries in particular to take EU regulations less seriously and interpret them in their favor. These latter examples show that a differentiation of importer responses according to the origin of exports paints a heterogeneous picture. It may, for instance, not always be right to assume that importing firms from highly developed countries have generally different concerns regarding the quality of products from other OECD countries as opposed to the quality from developing countries or newly industrializing countries.

Conventions applied by importers to reduce these uncertainties vary, and skepticism against certain countries does not necessarily lead to no-trade policies (Table 5.4). A supplier's reputation is often a decisive point of reference (*opinion convention*). *Industrial* measures are especially strict audits for suppliers and products sourced from so-called 'high-risk countries'. However, again the CT perspective makes evident that organic food importers follow principles which ensure not only measurable product qualities (eg, residues, taste), but also the process quality: that is, that production took place according to organic principles, something that is not observable ex post by examining the final product. In particular, where firms do not fully trust organic certificates, these organic principles are reflected in measures belonging to the *domestic* and *civic* worlds (Tables 5.1 and 5.4), where importers argue that trust, respect, established mutual learning processes, and social benefits stabilize the right production methods. Measures thus include more intensive personal contact and negotiations, sending (own) staff to the farms for training, hiring staff who have the appropriate cultural competencies and language skills, or even long-term investments in own farms and plantations in the areas where a certain crop (eg, tea in China) is traditional.

5.5.2 Systemic risks and uncertainties

If organic *product handling is noncompliant* with organic regulations during transport or at customs on entering a country (eg, through organic bulk goods being mixed with conventional food), this leads to the loss of the organic certificate. This in turn means a financial loss for the buyer because the goods can then only be sold at (generally lower) conventional prices. Australian companies face the particular situation of Australia's strict quarantine and food safety regulations (see Table 5.2), which can sometimes make it impossible to import certain products into Australia as certified organic at all. This is because the practice of methyl bromide fumigation, which is required by AQIS for certain products on entering the country (eg, from countries with khapra beetle or products that could germinate), is contradictory to organic principles. Approaches to mitigate these transport and customs-related risks prove once more the high-involvement character of organic trade coordination. Australian importers must not only be very attentive to meeting both AQIS and organic standards (*industrial convention*, Table

5.4). They also see the need to develop trustful relationships and share necessary know-how both with AQIS and with their suppliers abroad (*domestic convention*).

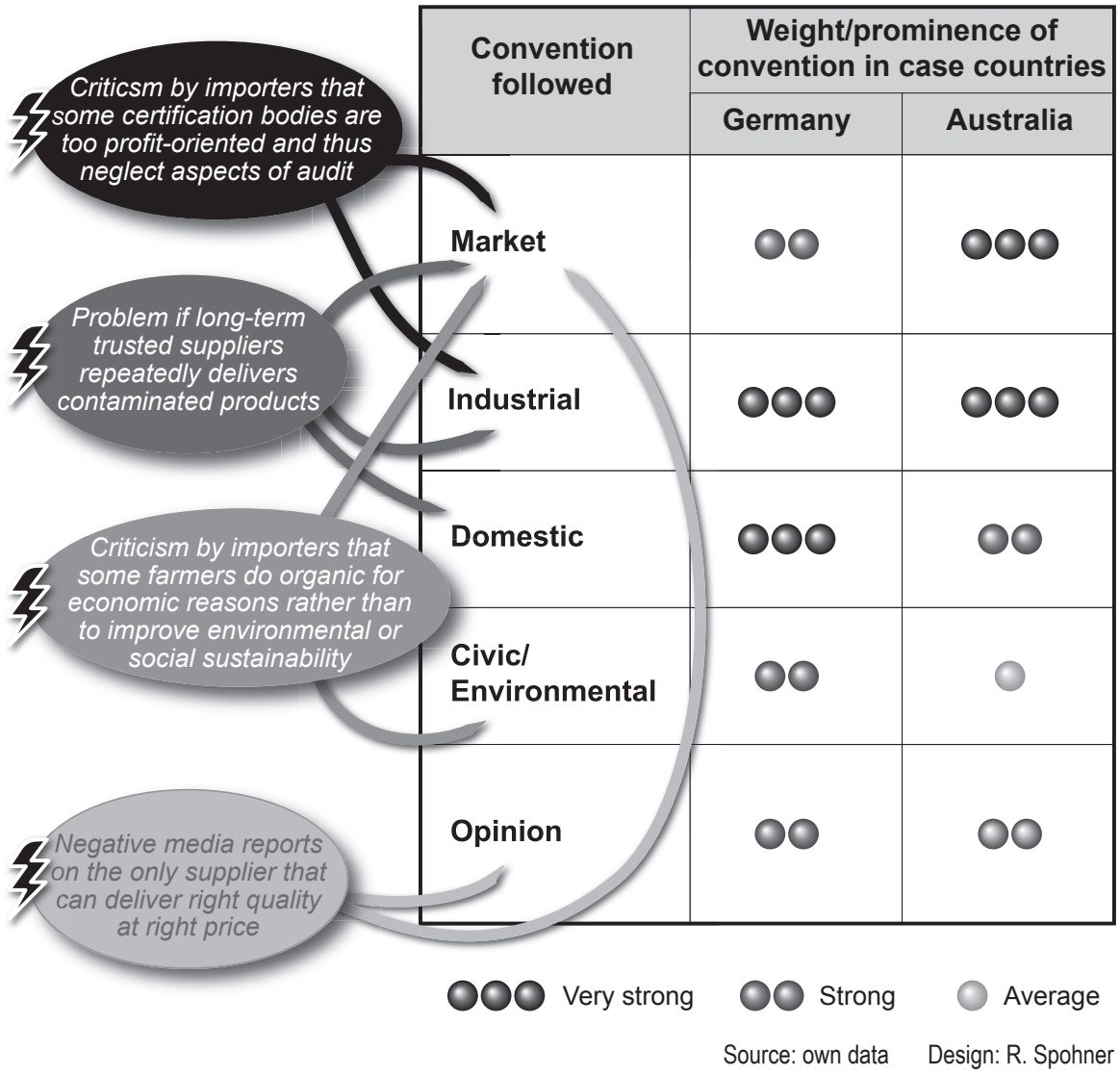
While AQIS measures are a strictly Australian phenomenon directed at the geographical uniqueness of the continent, uncertainties can also more generally be explained by importers' skepticism or even strong *criticism of existing government standards on organics* and the *certification system in place* (see Figure 5.1b). Here, our data suggest that the focus of criticism depends on the type and degree of government involvement in the two respective case countries. In Germany, companies which are especially dedicated to altruistic motives disagree with certain aspects of the EU definition of 'organic', demand stricter and product-specific regulations, or criticize existing loopholes and inconsistencies: for example, regarding product labeling (Table 5.4). The second major point of skepticism concerns the certification system, its control bodies, and its auditors (Figure 5.1b). Several firms seriously doubt the efficiency and adequacy of audits conducted around the EU organic standards. They accuse control bodies of being too profit oriented in the face of having to compete with other certifiers, thus neglecting thorough quality and process monitoring. Altruistic motives may thus serve as one explanation for the common approach for these 'dedicated' firms to thus pursue higher involvement strategies and implement their own stricter in-house quality requirements (see Figure 5.1a; link between processors and farmers; *civic* and *domestic conventions*). The argument that certification should not be conducted by the private sector to avoid vested interests is also prominent among the Australian companies interviewed. Many also feel insecure because fraud cannot be prosecuted sufficiently, demanding more involvement by the government, including mandatory certification and a neutral overarching authority for more transparency. At the same time, overcoming uncertainties regarding organic standards and certification of imported product is mostly solved by simply demanding certification against a standard that has a good reputation (*opinion convention*), notably those of the EU, the US, Japan, and the international organization IFOAM.

5.6 Plurality in trade coordination – Discussion and Conclusions

The above discussion has shown the multitude of (combinations of) conventions that firms employ in overcoming uncertainties in trade, and the complexity of possible relations between trading partners in cross-border contexts. Figure 5.2 now suggests some specific tendencies for the prominence and weight of each convention for the importers in the two case countries.

Our findings support those of other studies (eg, Freidberg, 2003) in the sense that the increasing number and international harmonization goals of organic standards encourage importers to reduce their (quality) coordination efforts to the degree that tasks of monitoring and controlling quality standards can be conducted by third parties, or as Guthman (2004b, page 512) puts it,

Figure 5.2 — Prominence of conventions among interviewed German and Australian companies; inter-world conflicts between importers and suppliers



use "institutional as opposed to personalized ways to (re)establish trust in a given chain of food provision." Thus, *industrial conventions* in the shape of measurable product and process qualities through organic certificates have become increasingly important to all participants of the value chain (Figure 5.1b). Today, organic certificates are necessary preconditions to commence and continue trading relationships with a supplier, and are usually complemented by certificates for standards such as ISO 9001, HACCP, or IFS. This is the case both in Germany, where certification is mandatory, and in Australia, where certification is perceived as quasi-mandatory. Furthermore, the case of AQIS not only demonstrates the power of government regulation, but

also clearly shows how closely related availability issues can be to quality issues, and how crucial the differentiation between product and process quality can be to trade coordination.

Yet, it is clear that standards and certificates have not (yet) succeeded at establishing a complete substitute for trust-based relationships, even though the increased geographical distance to the supplier may suggest otherwise. Proximity—spatial, institutional, and cultural—remains important. Standards do not necessarily lead to an elimination of differences in quality perceptions between suppliers and importers. Rather, looking at organic trading networks through a CT lens shows that, for products following specific quality principles, this increases the degree of involvement on the importers' behalf. *Industrial conventions* are not enough to overcome quality uncertainties in trade, with trust established through relationship management and reputation also being of significant value. *Industrial* and *domestic conventions*, for instance, are seen by many firms to be 'two sides of the same coin'. Furthermore, not only a company's ideological tradition, but individual people with altruistic motives within otherwise predominantly *market*-oriented companies can determine how 'dedicated' a firm is in pushing trade coordination according to *civic* and *domestic conventions*. *Market convention* seems logically important for commercially operating companies; though it is stressed more by Australian firms, reflecting the country's liberal market economy and low state subsidies especially in the area of agriculture.

However, plurality is not without conflict, which can occur when two (or more) ways of justifying the 'right' action clash. Figure 5.2 thus also shows four examples of the most frequently occurring conflicts between two or more conventions. Here, the importing firm is challenged to rank the importance of one convention over the other (eg, the bottom conflict in Figure 5.2: is reputation – *opinion* – more important than price – *market*?), or must it choose between its own preferred way of assigning worth, and that of its supplier or involved institution? It is here that there can be room for compromise.

By adapting a regional, agent, and context-oriented approach, the preceding analysis of tackling uncertainties in international trade of organic food has shown that CT is well suited to unravel some of the complex facets of value chain coordination. In particular, CT has demonstrated its value in examining not only measurable economic and industrial aspects, but also the perhaps less tangible dimensions of trust, culture, and ethics, which are crucial to the organic sector and are difficult to grasp in concepts like GCC or GVC. At the same time, it allows for the integration of value chain actors as well as the impact of its institutional environment. On the other hand, the GVC concept, for instance, has a clear advantage when it comes to capturing power relations along value chains, a factor not to be underestimated also in the negotiation of quality requirements where supermarkets are in a very strong position today. However, CT can offer a useful alternative or complementary framework to the analysis of trade coordination in global supply chains next to GCC, GVC, or GPN because it explicitly offers a conceptually

differentiated treatment of uncertainty rather than codifiability or complexity (as in GVC) within the context the chain is embedded into (GPN). Finally, the value of CT need not be restricted to case studies such as the organic food sector. It may well be transferred more generally to those kinds of products and services for which quality is of high significance and the buyer or consumer is only able to control and monitor it under increased or infeasible efforts.

Acknowledgements

The empirical work in Germany and Australia was made possible through funding by the German Research Foundation (DFG). The authors are grateful for the helpful comments of three anonymous reviewers on a previous version of this paper.

5.7 References

ABS, 2013, Australian Demographic Statistics 3101.0 Jun 2013, Australian Bureau of Statistics, http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0

Amable B, 2003, The diversity of modern capitalism (Oxford University Press, Oxford)

Bernzen A, 2012, "'Sustainable Standards?' How organic standards in the EU and Australia affect local and global agri-food production and value chains", in Food Security in Australia Eds Q Farmar-Bowers, V Higgins, J Millar (Springer, New York) pp 281-296

Bingen J, Busch L, 2006, "Introduction: a new world of standards", in Agricultural Standards: The Shape of the Global Food and Fiber System Eds J Bingen, L Busch (Springer, Dordrecht) pp 3-28

Boltanski L, Thévenot L, 1991, De la justification. Les économies de la grandeur (Gallimard, Paris)

Boltanski L, Thévenot L, 1999, "The Sociology of Critical Capacity" European Journal of Social Theory 2 359-377

BÖLW, 2010, Zahlen, Daten, Fakten: Die Bio-Branche 2010, Bund Ökologische Lebensmittelwirtschaft e.V., Berlin

BÖLW, 2012, Zahlen, Daten, Fakten. Die Bio-Branche 2012, Bund Ökologische Lebensmittelwirtschaft e.V., Berlin

Braun B, 2005, "Building global institutions: The diffusion of management standards in the world economy – an institutional perspective", in Linking industries across the world: Processes of global networking Eds C G Alvstam, E Schamp (Ashgate, Aldershot) pp 3-27

Busch L, Bain C, 2004, "New! Improved? The Transformation of the Global Agrifood System" Rural Sociology 69 321-346

Coe N M, Dicken P, Hess M, 2008, "Global production networks: realising the potential" Journal of Economic Geography 8 271-295

Dannenberg P, Nduru G M, 2013, "Practices in international value chains: The case of the kenyan fruit and vegetable Chain beyond the exclusion debate" Tijdschrift voor Economische en Sociale Geografie 104 (1), 41–56.

Destatis Statistisches Bundesamt, 2013, "Number of inhabitants: 80.5 million inhabitants at the end of 2012", https://www.destatis.de/EN/FactsFigures/SocietyState/Population/CurrentPopulation/Current.html

Dicken P, 2011, Global Shift: Mapping the Changing Contours of the World Economy 6th Ed. (Sage, London)

Franz M, Hassler M, 2010, "The value of commodity biographies: integrating tribal farmers in India into a global organic agro-food network" Area 42 25-34

Freidberg S E, 2003, "Culture, conventions and colonial constructs of rurality in south-north horticultural trades" Journal of Rural Studies 19 97-109

Gereffi G, Humphrey J, Sturgeon T, 2005, "The governance of global value chains" Review of International Political Economy 12 78-104

Gereffi G, Korzeniewicz M, 1994, Commodity chains and global capitalism (Praeger, Westport, CT)

Gibbon P, Bair J, Ponte S, 2008, "Governing global value chains: an introduction" Economy and Society 37 315-338

Gibbon P, Ponte S, 2008, "Global value chains: From governance to governmentality?" Economy and Society 37 365-392

Guthman J, 2004a, "The trouble with 'Organic Lite' in California: a rejoinder to the 'Conventionalisation' debate" Sociologia Ruralis 44 301-316

Guthman J, 2004b, "Back to the land: the paradox of organic food standards" Environment and Planning A 36 511-528

Hall P A, Soskice D, 2001, Varieties of capitalism: The institutional foundations of comparative advantage (Oxford University Press, Oxford)

Hamm U, Gronefeld F, Halpin D, 2002, Analysis of the European market for organic food (School of Management and Business, University of Wales, Aberystwyth)

Hatanaka M, 2009, "Certification, partnership, and morality in an organic shrimp network: rethinking transnational alternative agrifood networks" World Development 38 706-716

Henderson J, Dicken P, Hess M, Coe N, Yeung H W-C, 2002, "Global production networks and the analysis of economic development." Review of International Political Economy 9 436–464

Higgins V, Dibden J, Cocklin C, 2010, "Adapting standards: The case of environmental management systems in Australia", in Calculating the social: Standards and the reconfiguration of governing Eds V Higgins, W Larner (Palgrave Macmillan, New York City) pp 167-184

Jagd S, 2007, "Economics of convention and new economic sociology" Current Sociology 55 75-91

Kristiansen P, Mitchell A, Bez N, Monk A, 2010, "Australian organic market report", No. 10/01, Biological Farmers of Australia, Brisbane

Kristiansen P, Taji A, Reganold J, 2006, Organic agriculture. A global perspective (Comstock Publishing Associates, New York)

Mansfield B, 2003, "Spatializing globalization: A 'Geography of quality' in the seafood industry" Economic Geography 79 1-16

Marsden T K, Banks J, Bristow G, 2000, "Food supply chain approaches: exploring their role in rural development" Sociologia Ruralis 40 424-438

Mitchell A, Wynen E, 2012, "Organic Farming in Australia", in The world of organic agriculture - statistics and emerging trends Eds H Willer, L Kilcher (Research Institute of Organic Agriculture (FiBL), Frick, and International Federation of Organic Agriculture Movements (IFOAM), Bonn) pp 288-291

Morgan K, Marsden T, Murdoch J, 2006, "Worlds of food: place, power, and provenance in the food chain" Agriculture and Human Values 25 291-294

Murdoch J, Marsden T, Banks J, 2000, "Quality, Nature, and Embeddedness: Some Theoretical Considerations in the Context of the Food Sector" Economic Geography 76 107-125

Murdoch J, Miele M, 1999, "'Back to nature': changing 'Worlds of Production' in the food sector" Sociologia Ruralis 39 465-483

Nadvi K, Wältring F, 2002 Making sense of global standards (Gerhard-Mercator-Universität Duisburg, Duisburg)

Ouma S, 2010, "Global Standards, Local Realities: Private Agrifood Governance and the Restructuring of the Kenyan Horticulture Industry" Economic Geography 86 197-222

Ponte S, 2009, "Governing through Quality: Conventions and Supply Relations in the Value Chain for South African Wine" European Society for Rural Sociology 49 236-257

Ponte S, Gibbon P, 2005, "Quality standards, conventions and the governance of global value chains" Economy & Society 3 1-31

Pritchard B, Burch D, 2003, Agri-food globalization in perspective: International restructuring in the processing tomato industry (Ashgate, Aldershot)

Raynolds L T, 2004, "The globalization of organic agro-food networks" World Development 32 725-744

Renard M-C, 2005, "Quality certification, regulation and power in fair trade" Journal of Rural Studies 21 419-431

Rosin C, 2007, "Justyfing the 'Alternative': renegotiating conventions in the Yerba Mate Network, Brazil", in Alternative Food Geographies Eds D Maye, L Holloway, M Kneafsey (Elsevier Oxford) pp 115-132

Rosin C, 2008, "The conventions of agri-environmental practice in New Zealand: farmers, retail driven audit schemes and a new spirit of farming" Geojournal 73 45-54

Rosin C, Campbell H, 2009, "Beyond bifurcation: Examining the conventions of organic agriculture in New Zealand" Journal of Rural Studies 25 35-47

Sage J L, Goldberger J R, 2012, "Decisions to direct market: Geographic influences on conventions in organic production" Journal for Applied Geography 34 57-65

Sahota A, 2012, "The global market for organic food & drink", in The World of Organic Agriculture. Statistics and Emerging Trends 2012 Eds H Willer, L Kilcher (Research Institute of Organic Agriculture (FiBL), Frick, and International Federation of Organic Agriculture Movements (IFOAM), Bonn) pp 121-136

Sonnino R, 2009, "Quality food, public procurement, and sustainable development: the school meal revolution in Rome" Environment and Planning A 41 425-440

Thévenot L, Jagd S, 2004, "The French convention school and the coordination of economic action – Laurent Thevenot Interviewed By Søren Jagd at the EHESS Paris" Economic Sociology – European Electronic Newsletter 5 10-17

Thévenot L, Moody M, Lafaye C, 2000, "Forms of valuing nature: arguments and modes of justification in French and American environmental disputes", in Rethinking comparative cultural sociology: Repertoires of evaluation in France and the United States Ed M T Lamont, L Thévenot (The Press Syndicate of the University of Cambridge, Cambridge) pp 229-272

Wilkinson J, 1997, "A new paradigm for economic analysis?" Economy and Society 26 305-339.

Willer H, 2012, "The World of Organic Agriculture 2012: Summary", in The World of Organic Agriculture. Statistics and Emerging Trends 2012 Eds H Willer, L Kilcher (Research Institute of Organic Agriculture (FiBL), Frick, and International Federation of Organic Agriculture Movements (IFOAM), Bonn) pp 26-32

6 Australien als 'Global Food Superpower'? Landwirtschaft und Lebensmittelsektor Australiens im Wandel

BERNZEN, A. & B. PRITCHARD (2012): Australien als Global Food Superpower? Landwirtschaft und Lebensmittelsektor Australiens im Wandel. Geographische Rundschau 63(10), 20-28.

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Australien als *Global Food Superpower*?

Landwirtschaft und Lebensmittelsektor Australiens im Wandel

Australien habe das Potential zur „Nahrungsmittel-Supermacht" und zur „Futterschüssel" *(food bowl)* für Asien, verkündete Australiens Premierministerin *Julia Gillard* im Mai 2012. Australien sei bereits ein Bergbau-Gigant und könne dies auch im Lebensmittelsektor werden. Aber ist dieses Ziel realistisch?

Im letzten Jahrhundert konnte Australien die lokale Nachfrage nach Lebensmitteln noch größtenteils aus eigener Produktion decken, und landwirtschaftliche Exporte waren eine der wichtigsten Quellen des nationalen Wohlstands. Dies hat sich zu Beginn des 21. Jhs. stark verändert. So sind etwa die Lebensmittelimporte nach Australien rapide angestiegen. Dieser Beitrag beleuchtet die aktuellen Prozesse und Herausforderungen für Lebensmittelproduktion, -verarbeitung und -einzelhandel in Australien und argumentiert, dass sie kennzeichnend für eine umfassendere Umstrukturierung der globalen Lebensmittelproduktion und dessen institutioneller Rahmenbedingungen sind.

Zur historischen Perspektive

Historisch betrachtet hat Australien eine außergewöhnliche Position im globalen System der Lebensmittelproduktion. Im späten 18. Jh. von den Briten als Sträflingskolonie besiedelt, zogen erst einige Jahrzehnte später signifikante Zahlen freier Einwanderer in die neuen Siedlungsräume Australiens. Bis Mitte des 19. Jhs. hatte die Industrialisierung die britische Landschaft stark verändert. Die protektionistischen *Corn Laws* (Korngesetze) hatten bisher den Rückgang der britischen Getreideproduktion aufgehalten, aber die Aufhebung der Gesetze im Jahr 1846 änderte dies und führte bei parallel steigender Bevölkerung zu einer immer stärkeren Abhängigkeit von Lebensmittelimporten. So wurde die australische Landwirtschaft mithilfe von britischem Kapital zu einer weit abgelegenen, riesigen Farm auf der Südhalbkugel ausgebaut, um den wachsenden britischen Markt zu bedienen. Im Gegensatz dazu war die Bevölkerungszahl in den australischen Kolonien selbst nur sehr klein. Insgesamt führte dies dazu, dass sich im ländlichen Australien nie eine wirkliche Klein- und Kleinstbauernwirtschaft entwickelte. Da die Landrechte der indigenen Bevölkerung nicht anerkannt wurden, setzten die europäischen Einwan-

Fotos: A. Bernzen

Foto 1: Getreideanbau in Victoria. Im Hintergrund Farmgebäude mit Silos und Wassertanks

derer ihre landwirtschaftlichen Ansprüche mit der impliziten Zustimmung der Kolonialverwaltungen großflächig um (vgl. *McMichael* 1984).

Getreide und Wolle waren im 19. Jh. die dominanten landwirtschaftlichen Exportgüter Australiens (vgl. *McMichael* 1984). 1879 wurde zum ersten Mal erfolgreich gekühltes Fleisch nach Großbritannien auf dem Seeweg transportiert, was eine weitere wichtige neue Exportmöglichkeit eröffnete. Bis in die 1950er Jahre dominierte der Export landwirtschaftlicher Güter nach Großbritannien. Eine Reihe präferentieller Handelsabkommen mit dem britischen Königreich (bekannt als das *Ottawa Agreement of 1932*) stellten sicher, dass Australien (zusammen mit Neuseeland und Kanada) weiterhin privilegierten Zugang zum britischen Markt hatte.

In den 1950er Jahren kam es zu signifikanten Veränderungen in der Landwirtschaft und dem Lebensmittelsektor Australiens. Der rasche Bevölkerungsanstieg kurbelte den lokalen Markt an, vor allem für verarbeitete Lebensmittel. Die Produktionsanlagen zur Weiterverarbeitung von Lebensmitteln waren während des Zweiten Weltkrieges modernisiert worden, um US-amerikanische und australische Truppen im Pazifik zu versorgen. Diese Infrastruktur wurde in den 1950er Jahren dann für den lokalen Konsum genutzt. Unterstützt wurde diese Entwicklung durch die frühe Akzeptanz von Supermärkten als Betriebsform des Einzelhandels durch die australische Bevölkerung. Dennoch hielt Australiens Exportabhängigkeit von Großbritannien bis 1973 an.

Mit dem Beitritt des Vereinigten Königreichs zu den Europäischen Gemeinschaften verlor Australien dann plötzlich seinen privilegierten Marktzugang. Um die landwirtschaftlichen Exporte zu diversifizieren, initiierte die australische Regierung in den 1970er und 1980er Jahren eine größere Zahl bilateraler Handelsabkommen mit anderen Ländern. Diese umfassten signifikante Exportvolumina von Zucker und Milchprodukten nach Japan und Südkorea, Rindfleisch in die USA sowie erste Lebendtransporte von Schafen und Rindern für den Mittleren Osten und Indonesien, wo die Tiere nach vor Ort geltenden Halal-Richtlinien geschlachtet werden. Als Folge dieser geographischen Neuorientierung gingen um die Jahrtausendwende bereits etwa 50 % aller australischen landwirtschaftlichen Exporte in insgesamt neun ost- und südostasiatische Länder. In das Vereinigte Königreich, früher Hauptzielland der Exporte, flossen nur noch 3 % (vgl. *Abb. 1*). Auf Produktebene stellen Nutztiere/Fleisch (Rind, Lamm) und Getreide (Weizen, Gerste) zusammen fast die Hälfte aller landwirtschaftlichen Exportgüter (vgl. *Abb. 2* und *Foto 1*). Für den Großteil dieser Warengruppen gingen mehr als die Hälfte der gesamten Produktion in den Export (vgl. DAFF 2005).

Auch in den 1980er Jahren war die australische Landwirtschaft weiterhin stark vom Export abhängig. In Anbetracht der beschriebenen Marktdiversifizierung begann die australische Regierung sich im großen Stil für die Liberalisierung des globalen Welthandels bei landwirtschaftlichen Gütern einzusetzen. Australien war einer der Initiatoren der *Cairns Group* landwirtschaftlicher Exportnationen, die bei der WTO (Welthandelsorganisation) für eine Senkung von Agrarsubventionen – vor allem in der Europäischen Union – plädiert. Die australische Regierung vertritt dabei die Position, dass ein freier Weltmarkt Australien Vorteile bringt, die durch seine komparativen Vorteile in der landwirtschaftlichen Produktion entstehen. Diese Annahme wird jedoch zunehmend in Frage gestellt. Doch nicht nur die landwirtschaftlichen Betriebe (Farmen), sondern auch die (verarbeitende) Nahrungsmittelindustrie und der Lebensmitteleinzelhandel (vgl. *Abb. 3*) in Australien stehen aktuellen Herausforderungen und Umstrukturierungsprozessen

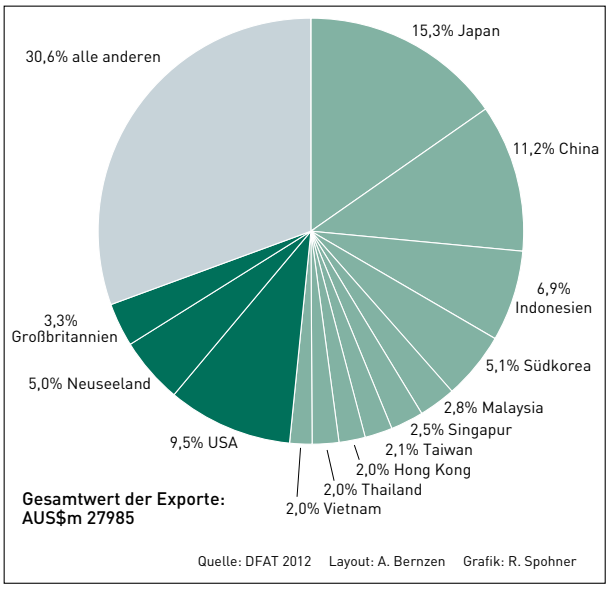

Abb. 1: Anteile landwirtschaftlicher Exporte Australiens nach Zielland in %, 2009

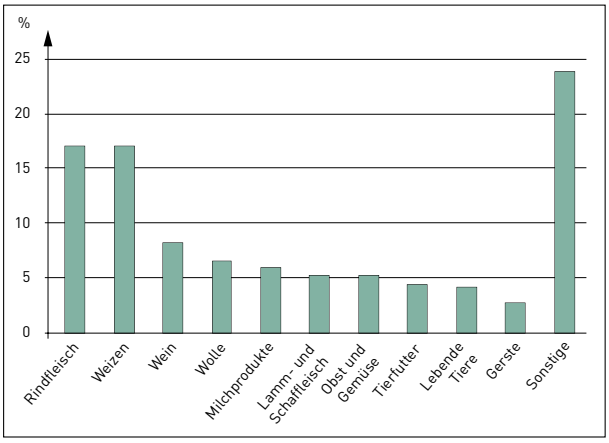

Abb. 2: Anteile landwirtschaftlicher Exporte Australiens nach Waren in %, 2009

Quelle: DFAT 2012; Grafik: U. Schwedler

6 *Australien als 'Global Food Superpower'? Landwirtschaft und Lebensmittelsektor Australiens im Wandel*

AMELIE BERNZEN, BILL PRITCHARD

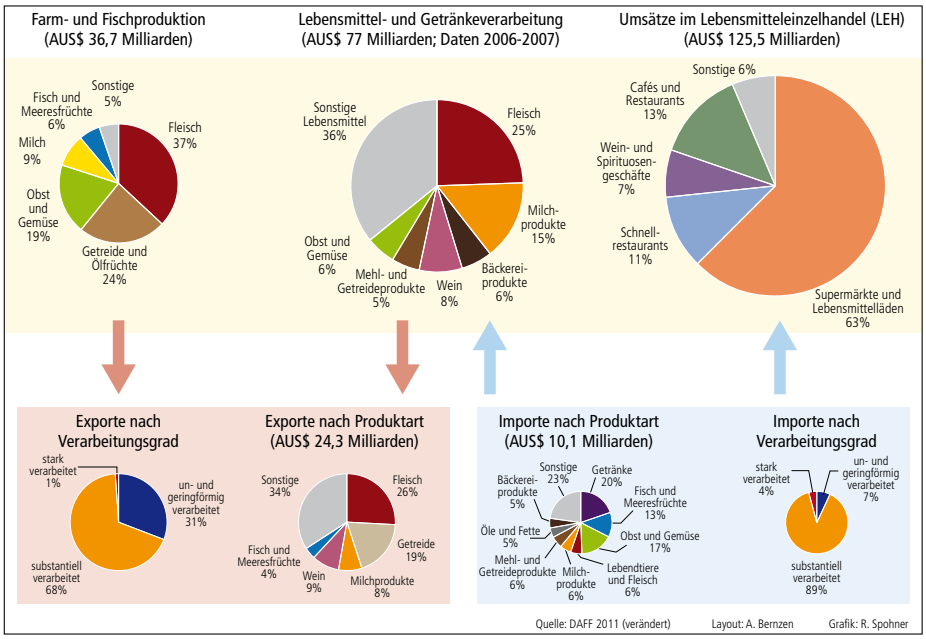

Abb. 3: Umsätze entlang der Wertschöpfungskette für Lebensmittel in Australien, inkl. Ex- und Importe, 2009–10

gegenüber. Zudem ist der gesamte Sektor immer stärker durch (globale) institutionelle Rahmenbedingungen, wie Lebensmittelstandards, reguliert. Auf diese vier Bereiche wird im Folgenden näher eingegangen.

Landwirtschaftliche Produktion in Australien

Australien ist das sechst-größte Land der Welt, aber die physisch-geographischen Gegebenheiten des Kontinents führen dazu, dass ein großer Teil der Landfläche keinen oder nur einen geringen Wert für die landwirtschaftliche Nutzung hat (vgl. *Abb. 4*). Aufgrund der Trockenheit und der klimatisch harschen Bedingungen des tropischen Nordens werden mehr als 30 % des Landes nicht agrarisch genutzt und weitere 50 % in der semi-ariden Zone nur als sehr extensiv bewirtschaftete Viehweiden. Die wichtigsten landwirtschaftlichen Nutzungen der verbleibenden Flächen sind der extensive (Trockenland-)Ackerbau und die Weidewirtschaft. Intensiver Ackerbau (vgl. *Foto 1*) und Bewässerungslandwirtschaft machen weniger als 1 % der Landfläche Australiens aus (vgl. ANRA 2009). Im vergangenen Jahrzehnt wurden signifikante Gebiete in der semi-ariden Zone Australiens von landwirtschaftlicher Nutzung in nicht-produktive Flächen und Nationalparks umgewandelt oder der indigenen Bevölkerung der Aborigines übertragen. Dadurch sinkt aktuell die gesamte landwirtschaftlich genutzte Fläche Australiens um 18,7 Mio. ha bzw. 2,2 % pro Jahr. Insgesamt werden derzeit 52 % der Gesamtfläche des Kontinents landwirtschaftlich genutzt (vgl. ABS 2011a).

Die produktivsten landwirtschaftlichen Gebiete Australiens befinden sich an der Ost- und Südwestküste, wo die höchsten Niederschläge zu verzeichnen sind, und im Murray-Darling-Becken im Südosten Australiens. Die Landwirtschaft in den schmalen Küstenstreifen wird durch die zunehmende Urbanisierung immer mehr eingeschränkt. Vor allem die steigende Zahl an Australiern im Rentenalter führt zu einer Binnenmigration zugunsten küstennaher Orte. Die Umwandlung von Farmgebieten in Wohngebiete ist zu einem wichtigen Bestandteil des Landschaftswandels in vielen naturräumlich und infrastrukturell begünstigten Gebieten geworden. Dies gilt vor allem für die Bundesstaaten New South Wales und Queensland.

Im Murray-Darling-Becken besteht die Herausforderung vor allem im Bedarf nach Reformen in der Bewässerungslandwirtschaft. Die bestehende Gesetzgebung hat zu einer Überbeanspruchung der Wasserressourcen geführt, was sich negativ auf die natürliche Umwelt im gesamten Becken auswirkte. Im letzten Jahrzehnt hat die australische Regierung deshalb versucht, die Zuteilung von Wassermengen besser zu regulieren, indem sie Farmern erlaubte, mit ihren Wasserzertifikaten zu handeln bzw. Zertifikate von anderen Farmern zu kaufen. Die bisherige Konsequenz dieser Reformen ist allerdings eine Gefährdung der traditionellen Bewässerungslandschaft. Anbauprodukte wie vor allem Baumwolle und Reis, die hohe Wasservolumina benötigen, haben somit eine ungewisse Zukunft.

Die Wasserreformen im Murray-Darling-Becken sind vor dem Hintergrund der langen Dürreperiode in Südostaustralien von 1996 bis 2009 zu sehen. Diese Zeitspanne war die trockenste seit der systematischen Aufzeichnung von Klimadaten in Australien (vgl.

Foto 2: Weinanbau im Barossa Valley, Südaustralien

CSIRO 2010). Alle zuverlässigen Modelle des Klimawandels weisen darauf hin, dass es im Becken in den nächsten Jahrzehnten heißer und trockener werden wird (vgl. *Chiew* et al. 2008). Schon die bisherigen landwirtschaftlichen Aktivitäten in den Hauptteilen des Beckens haben erhebliche Umweltschäden verursacht. Dazu gehören großflächige Bodenerosion, Flussversandung, Versalzungserscheinungen in Bewässerungsgebieten und beim Trockenfeldbau *(dryland salinity)*, Verlust von Lebensräumen für Flora und Fauna sowie die Invasion von schädlichen Neophyten und Neozoen (vgl. *Braun* 2011).

Diese Probleme treffen kleine Farmen besonders hart. Die australische Regierung sieht aber keine staatlichen Programme vor, um Kleinbauern zu schützen. Im Gegenteil, wirtschaftlich unrentable Farmer können vielmehr eine finanzielle Unterstützung zur Betriebsaufgabe erhalten. Dies hat in den letzten Jahren zu einer leicht steigenden Durchschnittsgröße der Farmen geführt. Das Volumen landwirtschaftlicher Produktion konzentriert sich immer mehr in den Händen weniger Betriebe, wobei die größten 10 % der Farmen heute mindestens die Hälfte allen landwirtschaftlichen Outputs erwirtschaften. Demgegenüber entfallen auf die kleinsten 50 % der Farmen nur zwischen 10 und 20 % der Produktionsleistung (vgl. ABS 2011b). Größeren Farmbetrieben ist es durch die Umstrukturierung der australischen Landwirtschaft möglich geworden, durch Skaleneffekte Effizienzsteigerungen zu erzielen. Dies steht jedoch im Zusammenhang mit Farmauflösungen und Abwanderungen aus ländlichen Räumen. Gleichzeitig nimmt die Beschäftigtenzahl in der Landwirtschaft immer weiter ab. Seit 2000/01 ist sie um ca. 12 % gefallen und lag 2010/11 bei 317 750, was knapp einem Fünftel der Gesamtbeschäftigung im Agrar- und Lebensmittelsektor entspricht (vgl. DAFF 2011 sowie *Abb. 5*). Dieser Rückgang ist nicht nur auf die höhere Produktivität durch den wissenschaftlich-technischen Fortschritt zurückzuführen, sondern bei Getreide, Schaf- und Rinderwirtschaft vor allem auch auf die lange Dürreperiode, zunehmende Konkurrenz um Arbeitskräfte durch den Bergbau und die fortschreitende Umstellung von der Schafzucht hin zum weniger arbeitsintensiven Getreideanbau (vgl. DAFF 2011).

In dem Maße wie die Zahl der Farmen und der Beschäftigten in der Landwirtschaft abnimmt, fallen auch die staatlichen Investitionen in vielen ländlichen Kleinstädten geringer aus. Bessere Straßen und die Konsolidierung vieler Servicebereiche in größeren Geschäften hat dazu geführt, dass kleinere ländliche Ortschaften Dienstleistungsfunktionen verlieren.

Australiens Nahrungsmittelindustrie

Australien exportiert hauptsächlich unverarbeitete bzw. frische sowie nur geringfügig verarbeitete landwirtschaftliche Güter (knapp ein Drittel der Exporte, z. B. Getreide, Ölfrüchte und Lebendtiere) und sogenannte substantiell verarbeitete Produkte (gut zwei Drittel der Exporte, z. B. Fleisch, Milchprodukte, Zucker). Nur 1 % der Exporte ist stark verarbeitet (z. B. Kekse oder Süßigkeiten; vgl. *Abb. 3*). Mit der bemerkenswerten Ausnahme von Wein (vgl. *Foto 2*) haben Australiens Agrarexporte also keine großen Auswirkungen auf die inländische Beschäftigung in den nachgelagerten Stufen der Produktionskette. Dennoch

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Abb. 4: Wirtschaft und Bodennutzung in Australien und Neuseeland

Quelle: Diercke Weltatlas 2008, S. 186 f

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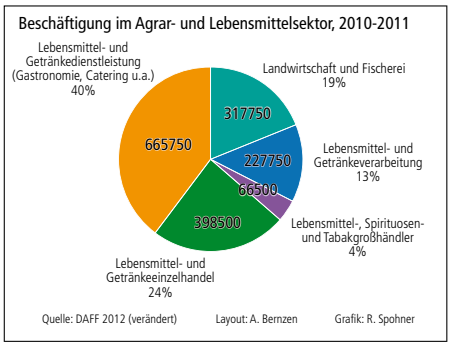

Abb. 5: Beschäftigungszahlen im australischen Agrar- und Lebensmittelsektor 2010–2011

ist die Lebensmittelverarbeitung mit etwa 22 % der Bruttowertschöpfung der größte Sektor in der verarbeitenden Industrie Australiens (vgl. DAFF 2012), und stellt zudem 13 % der Beschäftigten im Agrar- und Lebensmittelsektor (vgl. *Abb. 5*). Weiterverarbeitende Betriebe in Australien haben ihren Standort meist in stark kapitalintensiven Fabriken und Produktionsanlagen und sind traditionell auf den Binnenkonsum fokussiert. Die Branche war seit den 1950er Jahren dominiert durch eine Reihe inländischer (meist Familien-) Unternehmen sowie angloamerikanische multinationale Konzerne wie z. B. Kellogg, H. J. Heinz & Co. und Campbell Soup. In den folgenden Jahrzehnten konsolidierte die Branche zunehmend, wobei australische Firmen in der Regel durch multinationale Unternehmen übernommen wurden.

Die Töchter internationaler Unternehmen, die den Großteil der australischen Lebensmittelindustrie ausmachten, hatten wenig Interesse daran, von Australien aus andere Märkte zu beliefern oder in Forschung und Entwicklung zu investieren (vgl. *Pritchard* 1999). Vielmehr betrieben diese Firmen weitgehend unabhängige Tochterunternehmen, welche die etablierten Markennamen nutzten. Seit den 1990er Jahren jedoch integrieren sie vermehrt ihre australischen Außenstellen mit anderen Werken im asiatisch-pazifischen Raum. Durch Absenkung von Zöllen und die Harmonisierung von Lebensmittelstandards binden multinationale Lebensmittelkonzerne in Australien immer häufiger offshore-Produktion und -Weiterverarbeitung in ihre lokalen Operationen ein. Gleichzeitig werden zunehmend globale Markennamen bei lokaler Produktion eingeführt, die in Konkurrenz zu den lokalen australischen Marken stehen.

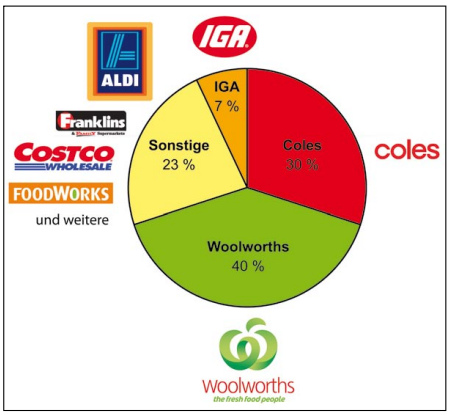

Abb. 6: Marktanteile am Gesamtumsatz der australischen Supermarkt- und Lebensmittelketten

Quelle: IBISWorld 2011; Grafik: U. Schwedler

Diese Entwicklungen sind vor dem Hintergrund von verstärktem Wettbewerb in der australischen Lebensmittelindustrie zu sehen. Im Zuge des Bergbaubooms hat der Australische Dollar bedeutend an Wert gewonnen: Zwischen 2002 und 2012 verdoppelte er seinen Wert von US$ 0,53 auf 1,06. Dies eröffnet vor allem für Niedriglohnländer wie China neue und bessere Möglichkeiten, verarbeitete Lebensmittel auf dem australischen Markt konkurrenzfähig – da kostengünstiger – zu positionieren. Gleichzeitig hat dies zur Folge, dass australische Agrargüter für den Export teurer geworden sind. Diese Entwicklungen, zusammen mit gesunkenen Getreidepreisen auf dem Weltmarkt, haben zwischen 2008/09 und 2009/10 zu einer Abnahme der Lebensmittelexporte um 13 % geführt (vgl. DAFF 2011).

Lebensmitteleinzelhandel in Australien

Fast zwei Drittel aller Umsätze im australischen Lebensmitteleinzelhandel werden in Supermärkten und Lebensmittelgeschäften erzielt (etwas weniger als in Deutschland); fast gleichauf an zweiter Stelle stehen Cafés/Restaurants und Schnellrestaurants (inkl. Fastfood-Ketten) mit 13 % bzw. 11 % Marktanteil (vgl. *Abb. 3*). Andere Einzelhandelsformate wie Wochenmärkte oder Discounter gewinnen erst seit kurzem an Bedeutung. Diese begrenzte Auswahl an Einzelhandelsformaten reflektiert den hohen Urbanisierungs- und Suburbanisierungsgrad Australiens, die kleine lokale Bevölkerung und die isolierte geographische Lage von anderen Märkten, die eine eher westlich/europäisch geprägte Nachfragestruktur bei Lebensmitteln aufweisen (vgl. *Griffith* und *Wright* 2009).

Große Supermärkte öffneten bereits seit den späten 1950er bzw. frühen 1960er Jahren in den Vororten der Großstädte ihre Türen (vgl. *Humphery* 1998). Dabei dominieren zwei große Ketten, Coles und Woolworths, die aktuell einen kumulierten Marktanteil von etwa 70 % erzielen (vgl. *Abb. 6*) und das Ergebnis mehrerer Übernahmen und Unternehmensfusionen sind. Etwas Konkurrenz bietet das australische Groß- und Einzelhandelsunternehmen Metcash durch seine Franchise-Supermärkte der Marke IGA *(Independent Grocers of Australia)*. Es ist vor allem in den letzten Jahren vermehrt Kritik gegenüber dem angeblichen Machtmissbrauch der großen Supermarktketten gegenüber ihren Zulieferanten geäußert worden. So sollen Farmer sich in Exklusivverträgen auf Produktionsmengen festlegen müssen, aber im Nachhinein geringere Abnahme-

preise erhalten (sog. *take it or leave it*-Mentalität der Supermarktketten beim Wareneinkauf; vgl. *Round* 2006). Des Weiteren konnten Coles und Woolworths vertraglich festlegen, dass in vielen Einkaufszentren keine Ladenfläche an Wettbewerber vermietet werden durfte. Dies ist allerdings seit einer gesetzlichen Neuregelung, die 2009 durch die Verbraucherschutzagentur *Australian Competition and Consumer Commission* (ACCC) forciert wurde, nicht mehr möglich (vgl. *Tadros* 2009).

Das dominante Duopol sowie die erst kürzlich gelockerten rechtlichen Rahmenbedingungen für ausländische Direktinvestitionen im Lebensmitteleinzelhandel erklären, warum internationale Supermarktketten erst seit etwa zehn Jahren in Australien Fuß fassen können. Hierzu gehören das südafrikanische Unternehmen Pick and Pay (2001: Übernahme der australischen Franklins-Kette), das US-amerikanische Unternehmen Costco (2009) und auch ALDI-Süd aus Deutschland (2001). Inzwischen entwickeln sich diese Supermarktketten als immer stärkere Konkurrenz zu Coles und Woolworths. IGA und ALDI werden sogar als neue dritte und vierte Marktmacht gehandelt, mit positiven Auswirkungen auf Lieferanten und Konsumenten (vgl. *Round* 2006). Discounter-Märkte sind ein relativ neues Phänomen in Australien. ALDI hat diese Marktnische erfolgreich gefüllt und erfreut sich großer Beliebtheit: Seit der Eröffnung des ersten Ladengeschäfts in Sydneys Westen ist die Zahl der ALDI-Märkte bis heute auf über 200 entlang der gesamten Ostküste angestiegen (siehe auch GR-Themenheft 5/2011: Globalisierung des Einzelhandels). Ein weiterer neuer Trend sind Wochen- bzw. Bauernmärkte *(farmers markets)*. Diese reflektieren ein sich änderndes Konsumentenbewusstsein in Bezug auf gesunde Ernährung und regionale Wertschöpfungskreisläufe. Hierdurch steigt die Nachfrage nach frischer, lokal produzierter Ware.

Eine Reaktion von Coles und Woolworths auf die zunehmende Konkurrenz ist der größere Fokus auf die Entwicklung von (Premium-)Hausmarken, die für den Konsumenten relativ preisgünstig sind, für das Unternehmen jedoch gleichzeitig höhere Margen erwirtschaften. Innerhalb der Wertschöpfungskette wird so die Kontrolle der Produktentwicklung zunehmend von weiterverarbeitenden Unternehmen hin zu den Supermarktkonzernen verlagert.

Regulierung von Nahrungsmittelsicherheit in Australien

Die gesamte Lebensmittelkette, vom Acker bis zum Supermarktregal, wird durch ein institutionelles Rahmenwerk geregelt, das sowohl staatliche Gesetze als auch wirtschaftsnahe Standards und Richtlinien umfasst. Die Notwendigkeit für Lebensmittelsicherheit und -qualität ist vor allem im Rahmen von Lebensmittelskandalen auch in Australien immer mehr ins Bewusstsein der Konsumenten gedrungen, die nun verstärkten (staatlichen) Einsatz in diesem Bereich fordern (vgl. *Bernzen* und *Dannenberg* 2012). Im Vergleich zu anderen hoch entwickelten Volkswirtschaften hat Australien einige besonders strenge Einfuhrgesetze und Standards eingeführt, z. B. die gesundheitspolizeilichen und pflanzenschutzrechtlichen Standards des *Australian Quarantine and Inspection Service* (AQIS). Diese Standards können eine Markteintrittsbarriere darstellen, vor allem für frische, unverarbeitete Agrarprodukte. Sie werden jedoch gerechtfertigt durch die Notwendigkeit, das geographisch isolierte Australien vor externen Gefahren zu schützen: Die letzten zwei Jahrhunderte europäischer Besiedlung haben bereits u. a. durch Einfuhr fremdartiger Flora und Fauna immensen ökologischen Schaden verursacht.

Sich verändernde Konsumentenansprüche, etwa nach „nachhaltigeren" und „gesünderen" Nahrungsmitteln, haben darüber hinaus zur Entwicklung diverser nicht-staatlicher Lebensmittelstandards geführt. Diese sollen durch entsprechende Zertifizierungs- und Kontrollsysteme entlang der Wertschöpfungskette und Verpackungslogos das Vertrauen der Verbraucher in z. B. „biologische" *(organic)* oder nach sozial nachhaltigen Kriterien produzierten *(fair trade)* Lebensmitteln sicherstellen. Die australische Regierung zeigt bisher jedoch nur geringes Interesse an der Unterstützung dieser Entwicklungen.

Fazit und Ausblick

Wird Australien also die nächste *Global Food Superpower*? Das Land ist ohne Zweifel noch einer der größten Nahrungsmittelexporteure der Welt. Doch die Zukunft scheint ungewiss. Neben den natürlichen Risiken, vor allem in Zusammenhang mit dem Klimawandel, knapper werdenden Wasserressourcen und der Degradation der Böden wirken auch wirtschaftliche und strukturelle Faktoren begrenzend auf Australiens Möglichkeiten, die Menge und den Wert seiner landwirtschaftlichen Exportprodukte signifikant zu steigern.

Für Landwirte wird es in Australien immer schwieriger und unattraktiver, rentabel zu wirtschaften. Es fehlt ihnen an staatlicher finanzieller Förderung und guter Infrastruktur in ländlichen Gebieten, und auf nationaler Ebene spürt man den Druck der großen Supermarktkonzerne, die kaum noch Preis- und Abnahmegarantien bieten. Auch der Anbau von alternativen Produkten mit höherer Marge, wie z. B. „Bio"-Produkten, ist oft mit hohen Ausfällen verbunden und kaum staatlich unterstützt. Hinzu kommen Flächennutzungskonflikte mit neuen Wohngebieten und dem konkurrierenden Bergbausektor, an die in manchen agrarisch nutzbaren Gebieten große Flächen verkauft werden. Für alle australischen Produkte werden Exportchancen aktuell durch den hohen Dollarkurs verringert. So wird die verarbeitende Industrie zunächst weiterhin vor allem für den lokalen Markt produzieren und sich dabei vermehrt nach der Produktentwicklung des großen Supermarkt-Duopols richten. Dieses besteht trotz neuer, ausländischer Supermarktketten wie etwa ALDI weiter und erschwert weitere Innovationen und einen grundlegenden Wandel in diesem Sektor.

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Wird das Potential des Sektors „verschenkt"? Oder etwa verkauft? Seit Kurzem zeigt sich nicht nur bei der verarbeitenden Lebensmittelindustrie und im Einzelhandel ein Interesse ausländischer Konzerne an Australien. Unter dem Schlagwort „land grab" werden zur Zeit kritisch die zunehmenden Investitionen ausländischer Agrarkonzerne diskutiert, die Farmen und fruchtbare Landstriche aufkaufen, die Erträge aber ins Heimatland abführen. Australien hat also auch in den Augen der Investoren Potential. Doch die Regierung sollte die (natürlichen) Grenzen des Landes erkennen und entsprechende Maßnahmen ergreifen, wenn dieses Potential nachhaltig für die Wirtschaft und Bevölkerung Australiens erhalten bleiben soll. III

LITERATUR

ABS, Australian Bureau of Statistics (2011a): Land Management and Farming in Australia, Catalogue 4627.0

ABS, Australian Bureau of Statistics (2011b): Agricultural Commodities, Australia 2009–10, Catalogue 7121.0

ANRA, Australian Natural Resources Atlas (2009): Land Use – Australia. www.anra.gov.au/topics/land/land use/index.html#diff. Zugriff 9.9.2011

Bernzen, A. und *P. Dannenberg* (2012): Ein "Visum" für Obst. Umwelt- und Sozialstandards im internationalen Lebensmittelhandel. Geographische Rundschau 64 (3), S. 44–52

Braun, B. (2011): Invasionen unter Wasser: Exotische Fischarten in den Binnengewässern Australiens. Geographische Rundschau 63 (3), S. 57–58

Chiew, F.H.S., J. Teng, D. Kirono et al. (2008): Climate data for hydrologic scenario modelling across the Murray-Darling Basin. A report to the Australian Government from the CSIRO Murray-Darling Basin Sustainable Yields Project. CSIRO, Australia. www.clw.csiro.au/publications/waterforahealthycountry/mdbsy/technical/B-ClimateDataHydrologicScenarioModelling.pdf (download 29.1.2012).

CSIRO (2010): Climate variability and change in south-eastern Australia: A synthesis of findings from Phase 1 of the South Eastern Australian Climate Initiative (SEACI). www.seaci.org/publications/documents/SEACI-1%20Reports/Phase1_SynthesisReport.pdf (download 29.1.2012)

DAFF, Department of Agriculture, Fisheries and Forestry (2005): Australian Agriculture and Food Sector Stocktake. Canberra

DAFF, Department of Agriculture, Fisheries and Forestry (2011): Australian Food Statistics 2009–10. Canberra

DAFF, Department of Agriculture, Fisheries and Forestry (2012): Australian Food Statistics 2010–11. Canberra

DFAT, Department of Foreign Affairs and Trade (2012): Agriculture and the WTO. www.dfat.gov.au/trade/negotiations/trade_in_agriculture.html (download 7.4.2012)

Griffith, G. und *V. Wright* (2009): The Case of Australia. In: *K.W. Stiegert* und *D.H. Kim* (Hrsg.): Structural Changes in Food Retailing: Six Country Case Studies. Food Systems Research Group Publication. www.aae.wisc.edu/fsrg/publications/Monographs/!food_retailingchapter2.pdf (download 14.2.2012)

Humphery, K. (1998): Shelf Life: Supermarkets and the Changing Cultures of Consumption. Melbourne

IBISWorld (2011): Supermarkets and Other Grocery Stores in Australia – Industry Market Research Report. www.marketresearch.com/IBISWorld-v2487/Supermarkets-Grocery-Stores-Australia-Research-6724866 (downlaod 15.2.2012)

McMichael, P. (1984): Settlers and the Agrarian Question: Foundations of Capitalism in Colonial Australia. Cambridge UK

Pritchard, B. (1999): Australia as the 'Supermarket to Asia?' Governance, territory and political economy in the Australian agri-food system. Rural Sociology 64 (2), S. 284–301

Round, D.K. (2006): The power of two: squaring off with Australia's large supermarket chains. Australian Journal of Agricultural and Resource Economics 50 (1), S. 51–64

Tadros, E. (2009): Coles, Woolworths must allow competitors in shopping centres. www.news.com.au/business/coles-woolworths-must-allow-competitors-in-shopping-centres/story-e6frfmbi-1225776670699#ixzz1mMRm9BUr (download 14.2.2012)

SUMMARY

Global food superpower? Changes and current challenges in Australia's food industry

by Amelie Bernzen, Bill Pritchard

Australia provides an interesting case of the changing global character of agricultural and food production and trade. For the past century, Australia has been largely self-sufficient in terms of domestic food consumption, and agricultural exports have been a major contributor to national wealth creation. However, in the early twenty-first century, these patterns have changed significantly. Food imports have grown rapidly and Australia's traditional agri-exporting sectors now face intensified challenges. This article uses a value chain perspective to outline these processes, and argues that they are illustrative of broader restructuring dynamics within the geographies of global food.

For farmers, it is becoming increasingly difficult and unattractive to viably operate their businesses. They not only face environmental restrictions in the context of climate change, but also lack financial support by the State. At the same time, pressure by the two largest supermarket chains is growing. Furthermore, land use conflicts of arable regions between farming and investments in new residential or mining areas are intensifying as the local population continues to grow. Given the significant increase in the value of the Australian Dollar against the US dollar, export opportunities of Australian agricultural produce have decreased. Australia's food manufacturing industry will thus continue to produce mainly for the domestic market, while largely meeting product specifications prescribed by the country's supermarket duopoly. The latter continues to exist despite new foreign supermarket chains that have entered the market over the past decade. Overall, it becomes apparent that both natural risks and structural factors currently question Australia's future as the next Global Food Superpower.

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7 Concluding Discussion

The present dissertation has followed the call to contribute further to analyses of institutions in global production and trade networks (e.g. Bair 2008; Coe et al. 2008; Henderson et al. 2002; Levy 2008). Particular attention was to be given not only to formal institutions such as legal requirements – which have been deemed important in extant literature – but also to informal and somewhat less tangible institutions such as norms, values or trust. The latter have, to date, received less attention in according debates.

To this aim, I have drawn on value chain literature and CT in a case study of German and Australian importers of organic food, analysing how they employ and assess conventions (and their related formal and informal institutions) to tackle cross-border relations with their suppliers. Importers were chosen as an example because firms at this position within a value chain perceive particularly high levels of uncertainty: not only the fact that they are liable in case imported products do not meet domestic legal requirements, but also they must operate in multiple institutional and cultural environments which requires high levels of know-how and may make them more prone to opportunistic behaviour. The organic food sector was chosen, first of all, because uncertainty is frequently related to quality, and organic quality designations are more intricate and complex than those of conventional foods, relating above all to process quality which is more difficult to monitor. Secondly, organic food has been the fastest growing food sector in the world over the past decade and it has been argued that it has long moved from being a niche phenomenon to being part of globalised mass market. Australia and Germany provided two examples of western consumer countries that have also experienced high market growth in organics, but feature different settings in terms of their political economic systems and geographic and environmental conditions.

Many types of firms import organic food products. In this study, they included retailers, processors and wholesalers as well as trading agencies, some of which operate multinationally. Also in terms of company size by number of employees, all categories from very small to large were represented. The type of products traded and/or processed by the companies included all categories (bulk food, animal products, fruit and vegetables) both processed and unprocessed or fresh. The share of organic produce of companies' total revenue ranged from 100 % to less than 5 %. This should not obscure the fact that large supermarket chains, with shares below 5 %, handle the largest volumes of distributed organic products in western consumer markets.

The majority of companies entered the organic market in the years after the implementation of the E.U. Standard / Australian National Standard in 1991/1992 respectively. Among German companies, two thirds entered the organic market after 1990; for Australia, this share was 80 %.

Before this general background, in the following I will present and discuss the major findings of the empirical material with reference to the research questions posed in Chapter 1.4. In some parts, additional empirical findings not included in the articles will be added (explicitly indicated). The questions in Chapter 1.4 focused on those institutions which have been deemed the most important according to existing literature on organics in agri-food trade networks. Formal institutions include governmental laws and regulations, such as food safety regulations applying to imports. Most notably, the role of AQIS can be mentioned here. Secondly, the role of governmental regulation and supervision of organic standards and corresponding certification procedures, which here include the E.U. Standard for Germany and the Australian Standard for Organic and Biodynamic Products – AS 6000-2009 (AS 6000) for Australia. Informal institutions looked at were trust, reputation (of e.g. firms, brands, products, countries), and other rules and norms prevalent in a given society, particularly the attention given to social and environmental welfare and business mentality.

1. **What is the type and the source of uncertainties that importers of organic produce face?**

   Articles 1 and 3 have highlighted that the primary uncertainty among importers is the non-compliance of an overseas supplier's delivered product with the required product quality (both product and process quality). Here, like in other studies CT helps identify how importers define 'organic' by placing particular emphasis on certain types of measures belonging, for instance, to the *industrial* world (such as the E.U. Standard or laboratory tests) or *civic* measures which stress the process character and the social and environmental welfare in production countries (compare e.g. Ponte & Gibbon 2005). The empirical data suggests that a large number of firms, especially new ones who entered the organic market from the early 2000s onwards, focus more on *industrial* conventions than e.g. *civic* ones, using the minimum standards as a reference point, with additional laboratory tests. Laboratory tests however are not able to test organic production methods and *processes*. It is thus debatable whether some of these importers have reduced organic quality to measurable parameters such as minimum toxic residue values. Other cases among the interviewed importers strongly support those studies who have shown how process standards even increase a firm's efforts to monitor their suppliers' adherence to standards (Dolan & Humphrey 2000). These generally adapt stricter understandings of organic designations and argue that one should not move away from the original values. These arguments underline those of authors who have discussed the process of 'conventionalisation' - i.e.

that producing organics for the mass market will ultimately lead to a watering down of production standards and organic farming becomes no more than a slightly modified type of conventional agriculture (Best 2008; Guptill 2009). Guthman (2004*b*) shows how large powerful buyer firms in California become more dominant in the organic market and challenge the ideal of a collection of small independent farms by demanding large volumes from fewer farms. In the cases of Germany and Australia it is large retailers who sell the largest share of organic food, and they are powerful players on local markets (see Article 4 for Australia). Yet, as I have shown, large firms – despite the fact that they require large volumes – do not necessarily support conventionalisation, and adapt stricter standards for a smaller assortment of products. The reason may differ though, and can be based on reputation enhancement as much as on altruistic motives.

The reasons for a possible mismatch between required quality and that of the delivered product are to be found first among suppliers themselves, i.e. larger farms, farmers cooperatives or export agencies. Importers are concerned in the case of new or unknown suppliers, about a lack of know-how regarding organic farming methods or training, or when suppliers have a (culturally based) different business mentality. Uncertainties regarding suppliers have been discussed by other scholars, both in the food sector as well as in other commodities. Dietsche (2011) for instance looks at a case study of imports of leather products from India and shrimps from Bangladesh into western consumer markets. In line with my findings, he argues that suppliers in countries of the Global South struggle to meet increased quality demands by the Global North. In his case, new quality definitions have come about as consumers become increasingly aware of the negative environmental impact caused by production processes for the Global North. As a consequence, importers face the challenge to implement the necessary skills and knowledge among suppliers to minimise risks such as bad media coverage or legal sanctioning. While the latter point is confirmed by the interviewees in my study, his point regarding uncertainties on the environmental impact in production countries is less prominent in my findings here and only mentioned by a few firms, namely those directly involved in own projects. It may be captured indirectly through the organic quality parameters which prescribe sustainable agricultural methods.

Second, uncertainties can be related to systemic external circumstances, which include the specific content of organic standards, auditing and certification processes along the value chain, or mishandling of products at customs. AQIS regulations in Australia are a good example of how essential the difference between product and process quality can be. They can present a serious issue to Australian importers as they try to ensure that imported certified organic product is not fumigated or otherwise treated which would lead to a loss of the organic certificate at customs. While 'dedicated' firms in particular criticise the public

minimum standards as being too lax, most firms refrain from relying solely on certificates and conduct additional tests in particular those which aim at product quality attributes.

An aspect that was not elaborated in the articles above concerns a further type of uncertainty, which relates to sufficient volumes of product. This point is, to some degree, related to quality uncertainties. For importing companies, consistent and reliable, on-time deliveries of goods are crucial to stay competitive on the market, especially where they have to fulfil strict contracts with powerful downstream firms in the supply chain. These findings are in line with those by e.g. Dannenberg (2012) and Singh (2002) who looked at food exports from Africa into European markets. Articles 1 and 4 here have shown, for Australia, the impact of extreme and volatile weather events but also the environmental damage through human agricultural (mis-)management which makes it increasingly difficult to source locally and increases the need to import certain commodities. The uncertainties importers face in ensuring sufficient volumes of product vary. On the supplier-side, they include bad harvests, different service and business mentality with suppliers leading to temporary supply shortages (often based on cultural differences), and insufficient availability of produce in the demanded quality – the latter again can result from e.g. a reluctance of producers to convert to certified organic, in a lack of know-how, regionally restricted growing areas for certain crops, or particularly high quality demands. Systemic issues can relate to expensive and time-consuming paperwork and bureaucracy required due to government regulation and certification procedures. The latter can even cause very long waiting periods until firms can include a (new) product in their range. Sourcing sufficient volumes can be particularly tedious for companies that place very high demands on quality attributes and who are not willing to lower their quality requirements in favour of a larger pool of possible suppliers. These firms often include large manufacturers with own brand products or supermarket chains with high consumer orientation and strong aims to maintain a competitive advantage on the market (Article 2).

Reflecting back on the three different 'obstacles' that Orléan (1994*b*) has identified for coordination processes (see Chapter 1.2.2), all uncertainties are reflected in the empirical material: "Uncertainty caused by the subject matter" is shown in product quality concerns that importers have regarding their ordered goods. "Socially caused uncertainties" are reflected in potential and actual differences in cultural norms and business mentality. Finally, "uncertainty related to the future" arises where there are concerns regarding sufficient volumes of product which depends on harvests, which again depend on (unforeseeable) climatic events.

2. What is the role of formal institutions like standards and certification processes in sourcing strategies and quality coordination? Are differences between German and Australian companies observable, and how can they be explained?

Generally speaking, the results have confirmed that organic certification is a must-have for firms who want to participate in global organic market transactions, including importers. Consequently, importers require a valid organic certificate from all their suppliers, irrespective of the supplier's country of origin, and irrespective of the fact whether certification is legally mandatory in a consumer market (like in Germany), or voluntary / quasi-mandatory (like in Australia). This result is in line with that of other scholars (Freidberg 2003; Guthman 2004*a*) who have pointed to the importance of formal institutions to create trust in AFNs. While few firms mentioned problems regarding a lack of equivalence or compliance with organic standards from overseas suppliers, the foci on certain standards and their assessment varied to some extent between German and Australian importers. German firms are first and foremost concerned with the E.U. Standard, the legally mandatory minimum standard within Europe; Australian firms on the other hand use any one of the larger international 'reputable' or 'equally reliable' standards for imports which are defined in the newly implemented AS 6000. These differences can be explained first by the two countries' different political systems with Germany as a coordinated and Australia as a liberal market economy who has historically been pro-free trade in the agricultural sector and tends to only mandate standards when obvious market failure can be observed. Second, the E.U. market is considerably larger than that of Australia and the according volumes of product combined with mandatory certification have led to a strong increase in overseas' CBs accredited against the E.U. Standard.

The initial assumption that importers would reduce their (quality) coordination efforts to TPC *alone* has not been confirmed by the firms in the present study. There is no doubt that global standards and TPC have led to improvements regarding traceability and quality monitoring across larger distances and across national borders. Yet, none of the interviewed firms relied solely on certificates to overcome quality uncertainties. Extra laboratory tests of random samples were the minimum additional effort firms took. One might argue that the organic industry and the TPC system could have become somewhat more efficient, precise and professionalised since the publication of these results over one decade ago. Yet, it has become clear here that there are still some major issues perceived for the TPC and its auditors. Here, it has become clear that also downstream actors can have some major concerns regarding the reliability and thoroughness of the system along the complete supply chain – they mistrust it. Thus, it is clear that chances and problems of standards and TPC exist at both ends of the value chain, among smallholder farmers as thematised in the so-called 'exclusion debate' (e.g. Dannenberg & Nduru 2013), and

among importers and retailers. Among the latter, the TPC critique was more observable among German firms; possibly due to the mandatory (legal) character of certification and the reference to one standard rather than a variety to 'choose' from.

The second assumption that global standards and TPC would result in reduced differences in product quality perceptions between suppliers and importers has only partially been confirmed. Here too, my data has shown that organic agriculture with its complex quality designations is a very knowledge-intense type of production, and many new producers have neither the means nor the tradition to find an easy access to the holistic concept of OA. Many importers in both Germany and Australia indicated and complained that the organic industry was largely disconnected between those who set the standards and those that have to use them.

A final unique formal institution relates to general Australian import regulations at customs and have by some Australian importers been deemed more crucial and troublesome than organic standards. AQIS requirements regulating whether a food product may enter the country at all (with or without further treatment) aim at protecting the domestic natural environment. However, further treatment is not compliant with organic standards and disqualifies formerly certified organic products. Ultimately, these restrictions are a trade barrier to certain types of foods available in organic quality in Australia .

Despite the critique that has also been echoed in this study, standards are expected to have a sustainable impact on global organic trade in the future. They provide not only an important point of reference for consumers who seek safe and trustworthy food products, but also one major mode of global value chain coordination across geographical, institutional and cultural distances.

3. How can norms and values regarding social and environmental welfare be observed in trade coordination? How can the actual contribution made through organic agriculture to these areas be rated?

According to interview and survey data, the two prominent reasons for trading with organics for the interviewed firms were altruistic motives: (1) a general support of the holistic ideology underlying organic production systems, and (2) the environmentally friendly approach taken in organic production. Yet, not *all* interviewed firms trade organic food because they believe in its social and environmental benefits. Proportionally, though, among the respondents more German firms seem to draw on these norms and values than Australian firms. Unlike German importers, several Australian firms even stressed the fact that OA posed major challenges due to the climatic and soil conditions in larger parts of Australia. Other reasons for Australians' less enthusiastic take on environmental benefits

could lay in historical developments as small scale farming, an original idea of organics, was much less prominent in Australia where large scale exports for Britain were on the governments' economic agendas at the time (Article 4).

With regard to the type of firms, analysis of the interview data revealed that *civic* conventions (i.e. holistic approach to trade coordination and supplier relations) do not necessarily dominate among companies who trade only organics. Where altruistic motives are not immediately anchored within the company's tradition, the use of these conventions in trade coordination is dependent on the personal convictions of the responsible manager, but also — and importantly — on how much power he has within the company's hierarchy to implement according measures, like close, long-term relationships, fair payment, higher environmental standards than required by law etc. I termed these companies 'dedicated' firms. These can range from traders, small manufacturers, and large brand holders even to large retailers whose product share of organics can be as low as 4 %. This suggests that a dual classification between 'conventional' and 'pioneer companies' as suggested by Wycherley (2002) may no longer be appropriate.

Organic standards explicitly prescribe more environmentally friendly, sustainable farming and production methods. Most studies on the environmental impact of organic farming to date suggest that it can, in fact, be a sustainable alternative to conventional land management (e.g. Andrée et al. 2010; Kristiansen et al. 2006). This opinion is shared by those interviewed firms who run their own and support overseas farming operations, while also arguing that it is highly cost- and labour intensive. Yet, there is no unified opinion on the unrestricted advantages of organics, particularly with regard to conventionalisation debates and issues like phosphorus management in soils, but also with regard to rising or decreasing yield volumes – here touching on the food security debate. While the potential of OA to food security has not been at the focus of this study, I argue that it is a topic that should be discussed further before the background of global food security debates which have become more and more urgent. Nonetheless, despite the fact that in Australia, the benefits of OA are not as broadly acknowledged and supported by government, it could be worth looking at intensifying this type of agriculture as research in arid/semi-arid developing countries has shown OA to be more drought resistant.

4. What is the general composition and prominence of individual conventions (and related formal and informal institutions) within the coordination mechanism of organic imports?

Here, the initial assumption that firms do not rely on formal institutions and market criteria *alone* has been confirmed. The analysis has shown that also trust, a good reputation, norms and values related to social and environmental welfare, and cultural proximity play a role

as decisive reference points for importers to reduce uncertainty. Through a CT lens, it was shown that firms each refer to a number of different conventions (rarely to all at once), highlighting the complexity which results from the large range of possible combinations and individual rankings of conventions. The *inspired* convention noted within the Boltanski & Thévenot (1991) framework was not referred to among our interviewees. A strict typology of firms regarding their preferred use of certain conventions over others did not seem viable due to the large heterogeneity of firms. Yet, the specific tendencies for the prominence and weight of each convention for the two case countries and company types can be summarised as follows (sorted by (1) market logics, (2) formal institution, (3-5) informal institutions):

(1) Market convention
Price issues and competitiveness are deemed important by all firms, as they operate commercially; though it is stressed more by Australian firms, reflecting the country's liberal market economy and low state subsidies especially in the area of agriculture. Firms who stress this convention most are large retailers, supermarket chains or discounters, firms who hold own branded products, and trade agencies.

(2) Industrial convention
Measures belonging to the industrial world are of very high importance to all types of firms in both countries and have taken on the shape of legal preconditions for trade. That the weight and significance of this convention has increased over the past 20 years can be explained first and foremost by the implementation of national (and supranational) institutional regulation with mandatory certification, as confirmed by interviewed firms that have been trading organics even before 1991. Certification can also serve as a first indicator in supplier assessment as the number of (international) actors in the organic supply chain grows far beyond the 'niche' circle of firms that have previously constituted a close network of 'pioneer companies', as Wycherley (2002) called them.

(3) Domestic convention
Trust and respect is very important to importing firms in business relations with their suppliers. Buying large volumes on the spot market from completely unknown sources is, unlike with conventional products – not an option. Recommendations for new suppliers, i.e. 'thick' and reliable networked reputation on a firm itself is a decisive reference point for all firms. Yet other measures taken to achieve trustful long-term relationships appeared somewhat more committed and intense among the German firms interviewed, reflected in more personal and financial investment in production sites and investments in overcoming cultural differences. The latter measures were taken especially by 'dedicated' firms.

(4) Civic/environmental convention
Justifications which referred to general social and environmental welfare were not mentioned as frequently by interviewees as the above named conventions, despite the fact that these values are imminent to the original 'organic' ideas. German firms placed more emphasis on it than Australian ones. Overall, 'dedicated' firms referred most to this convention.

(5) Opinion convention
Public reputation is important to both German and Australian importers in supplier selection. Not only reputation of firms counts, but also that of standards, certification bodies and a supplier's and product's country of origin. Especially firms with high public exposure emphasise the worth of reputation, such as supermarket chains, discounters, or brand holders.

Overall, these findings support those by e.g. Stamm (2004) who has observed a shift towards *industrial* conventions in the organic sector. In fact, if we compare the relative importance of formal vs. informal institutions as a *precondition to trade* at all, clearly the formal ones are more important. An importer may trust a supplier as much as he wants – if he is not certified, he does not qualify as a supplier to western consumer markets with according regulatory systems. Yet, when it comes to *overcoming uncertainties in trade*, successful trade coordination by importers here is not achieved purely by rational actions; rather only the combination of conventions underlying formal institutions and informal institutions can ensure this. For example, many firms saw certification and trust as 'two sides of the same coin'. The examples of Germany and Australia have also provided some empirical evidence for the assumption by Morgan et al. (2006) that there are regional variances of the application and emphases on conventions. Importantly, it has become clear that the simple dichotomy between 'alternative' and 'conventional' types of firms is not as clear as it may have been a few decades ago. The data here underscores critiques made by e.g. Rosin (2007). Apart from the 'dedicated' firms explored here, other examples of this argument may be the 'organic' supermarkets and discounters that have emerged in growing numbers – though more so in Germany, which is likely to be related to the larger size of the market. It has also been shown that through 'dedicated' firms, organic items sold in mainstream markets need not generally be sourced via conventional distribution chains, as posited by Dimitri & Richman (2000). Finally, the discussion indicates that consumers may influence the choice for a certain country of production, as Kulke (2007) has suggested. For instance, China's reputation as a supplier of food may be contested and food from local producers preferred; on the other hand, China is able to sell at very competitive prices. There will thus be importing firms to cater for customers with both of these preferences.

The data has also highlighted some of the conflicts that can occur between conventions and internally within a single convention, i.e. where not the appropriateness of the convention in a given situation is questioned, but the way it is carried out. In this study, the only prominent internal conflict is related to the *industrial* world. It occurs especially among German importers who do not criticize certification as such, but frequently disapprove of the way audits are carried out. More frequently have appeared conflicts between two or more conventions. Some of these confirm the existing conflicts between *market/industrial* and *civic/domestic* worlds that have been prominent in recent CT work on organic food (e.g. Rosin 2007. For example, in relations with suppliers, importers have criticised that some farmers focus above all on economic motivations to produce organically (*market*), rather than stressing the benefits for social and environmental welfare (*civic*). But also less 'prominent' conflicts are possible, for instance when an importer's only supplier with good price deals (*market*) has recently been in a media scandal for damaging the environment or selling problematic qualities (*opinion*). How these conflicts are resolved depends on external pressure (e.g. if a supplier's certificate is withdrawn, he is disqualified as he no longer meets legal requirements), on the firm's internal evaluation of certain conventions, weighing one above the other, and on the degree of risk perceived if one or the other action is taken. In the first case here, for instance, an importer may accept that farmers do not support civic conventions as long as their product is immaculate. In the second case, compromise may not seem possible as sourcing from the supplier whose reputation has been damaged has a risk of buying contaminated product.

5. Which factors influence the degree of direct coordination (or vertical integration) between an importer and his suppliers?

As indicated above, results have overall confirmed findings that the complex (process) quality characteristics of organics require more involvement on the importers' side than simply requesting certificates from their suppliers (Dietsche 2011; Dolan & Humphrey 2000; Nadvi 2008). Like Dannenberg (2012), I suggest that concerns regarding the adherence to standards can be reduced by high geographical and institutional proximity. Where this is not given, Nadvi (2008) has further argued that coordination efforts increase above all where non-adherence to standards bears particularly high risks for firms. This point was confirmed in this study, especially in the context of company reputation. Supermarkets and discounters displayed a relatively low hands-on coordination in countries of production, but have some of the strictest and most professional tracking systems for their products. However, it is those firms selling to supermarkets whose financial investment and 'hands-on' commitment in production countries was high. Other factors which determined a high hands-on coordination in countries of production included the importers' own public exposure, their firm's dedication to organic value systems, and a critical minimum business

profit i.e. the size and available capital of the firm. These findings, underscored by the preceding discussion of 'dedicated' firms, question somewhat those by Ponte & Gibbon (2005, 20-21), who argue that "[f]irms with a 'financialist-network' set of values tend to be more 'hands-off' with their immediate suppliers, [while] [f]irms that are not exposed to the same extent to the dictates of financial markets may have more 'hands-on' forms of co-ordination with their immediate suppliers". Article 2 has further shown that the German firms interviewed tended to invest more financial and personal resources than Australian firms; which may be related to the Australian firms' overall higher trust of overseas' certificates, as discussed above.

In the context of reducing opportunistic behaviour (and hence the perceived need for hands-on coordination), an aspect which would be interesting to elaborate further on is that of so-called reputational effects (e.g. Schauwecker 2009). The question here would be whether the risk of opportunistic behaviour is reduced where networked importers source from the same supplier, *and* the supplier is aware of the fact that his suppliers communicate with each other. This may certainly have been the case in former 'niche' markets of organics, where there was only a handful of participating players. However, it is assumable that the direct contacts between importers of organic food whose business has been damaged through opportunistic behaviour by the *same* firm will have been reduced today– particularly in the face of globalised organic markets with a large number of new suppliers and producers supplying different countries.

By adapting a regional, agent and context-oriented approach, the contribution this dissertation has made to the overarching question of the impact of institutions in value chain coordination in cross-border trade relations can be concluded as follows. I have highlighted the general importance not only of formal institutions, but also of informal institutions that influence actors within a production network. I argue that an institutional perspective, as Schamp (2003) has posited earlier, is still an important area of research for economic geographers today. In the case study here, I have looked at specific 'institutional arrangements' in organic AFNs from a German and Australian perspective, and gone beyond the GPN's understanding of institutions as actors or organisations, and unpacked and specified some of the rules, values, norms and 'embeddedness' aspects included in the GPN framework that have remained somewhat fuzzy in literature so far. It has been shown that the development, interpretation and application of institutions can vary depending on the location of a given actor.

I argue that CT is one suitable framework with which not only market logics and institutions based on industrial values, but also less tangible aspects of trust, reputation, altruistic values and business mentality can be captured. While the analytical focus is on the individual actor, here analysed through information given by representatives of individual firms (micro perspec-

tive), highlighting intersubjective processes of negotiation and evaluation, it also manages to include broader economic and regulatory settings. This view shows that more than one type of coordination – along a complete value chain, within an individual segment or firm – is possible, depending on the supplier and product a firm directs its attention to. Other strengths of CT are further to paint a differentiated picture of uncertainty as well as quality designations. While these qualities have been increasingly codified and captured in standards (*industrial* conventions), it has been argued that process quality, like in organics, requires increased coordination efforts (Dietsche 2011). This study confirms these developments, but also shows that particularly some of the newer players in the organic market seem to neglect – perhaps unknowingly – the process character in favour of measurable criteria. On the other hand, it is no longer only firms that are traditionally rooted within the organic values who 'dedicate' themselves to the cause. It will be interesting to see how the organic designations and its original underlying anthroposophical value systems will be (re-)negotiated in the future. I suggest this will largely depend on how persistent the 'old' values will be in societal debates on food safety and quality differentiations.

What has been presented here is the perspective of two western consumer markets, and it is likely that similar findings may be produced in other highly developed countries with large and growing markets for organic food. Within these countries, it is also likely that these findings are not only applicable to global transactions, but also within smaller geographical reaches; though the weight of each institution may vary from those presented here. Interesting further aisles of research with CT could explore which uncertainties prevail in those markets in which organic is a small yet upcoming segment for the growing middle classes, as can be observed for example in India or China. Here, reputation of the label and the image of organics as an originally 'western' consumer product may be more important than civic measures or uncertainties regarding the reliability of audits. Other possible research questions could concern upgrading processes among producers, by observing how quality criteria (and specific parameters), and reference to certain conventions change over time: It would, for instance, be compelling to observe those regions and farmers in regions without a culturally embedded tradition of organic farming (in the 'western' understanding of certified organic, not in the de-facto-sense), and who have had long-standing contact and cooperations with firms in western consumer markets. Another aspect that could be further examined is that of the 'drivers' of certain institutions, namely are they on the buyer or the supplier side? While for formal institutions, in the present case, drivers are obviously in consumer markets of the Global North, more empirical attention would need to be given to the supplier side to identify their perception, evaluation and support to informal institutions. What, for instance would suppliers do to gain trust and improve their reputation? That said, one should however consider that CT has certain disadvantages when it comes to capturing

power relations within the value chain. Here, a combination of approaches, such as with GCC or GVC may be fruitful.

Finally, the results of this dissertation may offer insights on the coordination of uncertainties not only in the organic industry or the food sector more generally, but may also be transferable to other services and products which feature complex quality and service functions that have, to date, been tedious to monitor across large geographical, institutional and cultural distance. It may also prove useful in unpacking other situations of conflict in economic activity, for instance among different types of stakeholders involved in developing and implementing new technologies that have societal relevance, such as genetic modification or environmentally friendly buildings. The need for these kinds of studies may increase further as consumer preferences become more differentiated and environmental aspects of production become more urgent across the globe.

References for Chapters 1, 2 and 7

Aakkula, J., Forsman-Hugg, S., Jakosuo, K., Kottila, M.-R., Rönni, P. & Sarkkinen, E. (2006), Views of consumers and other food chain actors on organic food and its production, *in* 'Joint Organic Congress: Organic Farming and Rural Development, Odense 30.-31.5.2006'.

ABS Australian Bureau of Statistics (2013), 'Australian Demographic Statistics 3101.0 Jun 2013'.
URL: *http://www.abs.gov.au/ausstats/abs.nsf/mf/3101.0*

Allaire, G. & Boyer, R. (1995), Regulation et conventions dans l'agriculture et les IAA, *in* G. Allaire & R. Boyer, eds., 'La Grande Transformation de l'agriculture: lectures conventionnalistes et regulationnistes', INRA-Economica, Paris, pp. 9–32.

Amable, B. (2003), *The Diversity of Modern Capitalism*, Oxford University Press, Oxford.

Andrée, P., Dibden, J., Higgins, V. & Cocklin, C. (2010), 'Competitive Productivism and Australia's Emerging "Alternative" Agri-food Networks: producing for farmers' markets in Victoria and beyond', *Australian Geographer* **41**(3), 307–322.

Bacon, C. (2005), 'Confronting the Coffee Crisis: Can Fair Trade, Organic, and Specialty Coffees Reduce Small-Scale Farmer Vulnerability in Northern Nicaragua?', *World Development* **33**(3), 497–511.

Bair, J. (2005), 'Global capitalism and commodity chains: Looking back, going forward.', *Competition and Change* **9**(2), 153–180.

Bair, J. (2008), 'Analysing global economic organization: Embedded networks and global chains compared', *Economy and Society* **37**(3), 339 –364.

Bair, J. & Dussel Peters, E. (2006), 'Global commodity chains and endogenous growth: Export dynamism and development in Mexico and Honduras', *World Development* **34**(2), 203 – 221.

Baksi, S. & Bose, P. (2006), 'Credence goods, efficient labelling policies, and regulatory enforcement', *Environmental and Resource Economics* **37**(2), 411–430.

Bathelt, H. (2006), 'Geographies of Production: Growth Regimes in Spatial Perspective 3 - Toward a Relational View of Economic Action and Policy', *Progress in Human Geography* **30**(2), 223–236.

Bernzen, A. (2008), Australia's Food Trade with East Asia. Overcoming Political and Culture Barriers, *in* B. Braun & A. Schüttemeyer, eds., 'Australia Global. Australien im Prozess der Globalisierung.', Stauffenburg Verlag, Tübingen, chapter 6, pp. 99–118.

Bernzen, A. (2013*a*), Staatliche Regulierung von Bio-Standards – Fluch oder Segen für Handel und Vermarktung? Ein deutsch-australischer Vergleich, *in* M. Franz, ed., 'Liefernetzwerke im Einzelhandel', Reihe Geographische Handelsforschung 18. Metagis Verlag, Mannheim, pp. 37–60.

Bernzen, A. (2013*b*), 'Ökologische Landwirtschaft und globale Ernährungssicherheit: Potentiale und Limitationen', *Geographische Rundschau* **65**(12), 54–57.

Bessy, C. (2012), 'Institutions and Conventions of Quality', *Historical Social Research* **37**(4), 15–21.

Best, H. (2008), 'Organic agriculture and the conventionalization hypothesis: A case study from West Germany', *Agriculture and Human Values* **25**(1), 95–106.

Beuchelt, T. D. & Zeller, M. (2011), 'Profits and poverty: Certification's troubled link for Nicaragua's organic and fairtrade coffee producers', *Ecological Economics* **70**(7), 1316–1324.

Bien, B. & Schaack, D. (2007), 'Mehr Bio-Frische gekauft', *MafoBriefe* **2007**(8), 3.

Biggart, N. & Beamish, T. D. (2003), 'The Economic Sociology of Conventions: Habit, Custom, Practice, and Routine in Market Order', *Annual Review of Sociology* **29**, 443–464.

BLE Bundesanstalt für Landwirtschaft und Ernährung (2007), Bio-Markt 2006: Hohes Marktpotential steht gegen stagnierendes Wachstum im Ökolandbau. Verbraucherinteresse an Bio-Produkten ist ungebrochen groß, Technical report, Bundesanstalt für Landwirtschaft und Ernährung BLE, Bonn.

BÖLW Bund Ökologische Lebensmittelwirtschaft (2012), Zahlen, Daten, Fakten. Die Bio-Branche 2012, Technical report, Bund Ökologische Lebensmittelwirtschaft e.V., Bonn.

Boltanski, L. & Chiapello, E. (2005), *The New Spirit of Capitalism*, Verso, London-New York.

Boltanski, L. & Thévenot, L. (1991), *De la justification. Les économies de la grandeur.*, Gallimard, Paris.

Boltanski, L. & Thévenot, L. (1999), 'The sociology of critical capacity', *European Journal of Social Theory* **2**(3), 359–377.

Boltanski, L. & Thévenot, L. (2006), *On Justification. The Economies of Worth*, Princeton University Press, Princeton.

Boltanski, L. & Thévenot, L. (2007), *Über die Rechtfertigung. Eine Soziologie der kritischen Urteilskraft*, Hamburger Edition, Hamburg.

Bolwig, S., Gibbon, P. & Jones, S. (2009), 'The economics of organic contract farming in tropical Africa', *World Development.* **37**(6), 1094–1104.

Braun, B. (2005), Building global institutions: The diffusion of management standards in the world economy – an institutional perspective, *in* C. Alvstam & E. Schamp, eds., 'Linking Industries Across the World: Processes of Global Networking.', Ashgate, Aldershot, pp. 3–27.

Braun, B. (2007), Zwischen Asien und dem Westen: Australiens Wirtschaftsbeziehungen im Wandel, *in* B. Mächtle, H. Gebhardt, H. Schmid & A. Siegmund, eds., 'Der zirkumpazifische Raum - Risiken und Sicherheit in einer globalisierten Welt', Vol. 21, Heidelberger Geographische Arbeiten, Heidelberg, pp. 5–19.

Braun, B. (2010), Australien - ein verwundbarer Kontinent, *in* U. Altendorf & L. Hermes, eds., 'Australien - Facetten eines Kontinents', KOALAS, Stauffenberg Verlag, Tübingen, pp. 11–31.

Bruhn, M. (2002), 'Warum kaufen Verbraucher Bioprodukte (nicht)?', *Ökologie & Landbau* **121**(1/2002), 15–18.

Busch, L. & Bain, C. (2004), 'New! Improved? The Transformation of the Global Agrifood System', *Rural Sociology* **69**(5), 321–346.

BVL Bundesamt für Verbraucherschutz und Lebensmittelsicherheit (20.08.2008), 'Food'.
URL: *http://www.bvl.bund.de/EN/01_Food/lm_food_node.html*

Cairns Group (19.07.2013), 'The Cairns Group. An Introduction'.
URL: *http://cairnsgroup.org/Pages/Introduction.aspx*

Castree, N. (2004), 'Economy and culture are dead! Long live economy and culture!', *Progress in Human Geography* **28**(2), 204–226.

Clancy, M. (1998), 'Commodity chains, services and development: Theory and preliminary evidence from the tourism industry', *Review of International Political Economy* **5**(1), 122–148.

Claro, D. & Oliviera Claro, P. d. (2004), 'Coordinating B2B cross-border supply chains: the case study of the organic coffee industry', *Journal of Business & Industrial Marketing* **19**(6), 405–414.

Coe, N., Dicken, P. & Hess, M. (2008), 'Global production networks: realising the potential', *Journal of Economic Geography* **8**(3), 271–295.

Coe, N., Hess, M., Yeung, H., Dicken, P. & Henderson, J. (2004), ''Globalizing' regional development: a global production networks perspective', *Transactions of the Institute of British Geographers, New Series* **29**(4), 468–484.

Commonwealth of Nations (1971), *Declaration of Commonwealth Principles*, Singapore.
URL: *http://www.commonwealthofnations.org/*

Crang, M., Hughes, A., Gregson, N., Norris, L. & Ahamed, F. (2013), 'Rethinking governance and value in commodity chains through global recycling networks', *Transactions of the Institute of British Geographers* **38**(1), 12–24.

Crang, P. (1997), Cultural Turns and the (Re)Constitution of Economic Geography, *in* R. Lee & J. Wills, eds., 'Geographies of Economics', Arnold, London, pp. 3–15.

Dannenberg, P. (2012), *Standards in internationalen Wertschöpfungsketten*, Vol. 53 of *Wirtschaftsgeographie*, LIT Verlag, Berlin.

Dannenberg, P. & Nduru, G. M. (2013), 'New Challenges and Realities in International Value Chains – Analysing the Proliferation of Standards beyond the Exclusion Debate', **104**(1), 41–56.

Daviron, B. & Gibbon, P. (2002), 'Global commodity chains and African export agriculture', *Journal of Agrarian Change* **2**(2), 137–161.

DeLind, L. (2000), 'Transforming Organic Agriculture into Industrial Organic Products: Reconsidering National Organic Standards', *Human Organization* **59**(2), 198–208.

Delmas, M. (2002), 'The diffusion of environmental management standards in Europe and in the United States: an institutional perspective', *Policy Sciences* **35**(1), 91–119.

Demmeler, M. (2003), Bio-Vermarktung zwischen Region und Weltmarkt - Ökobilanzierung und ressourcenökonomische Analyse verschiedener Absatzwege, *in* B. Freyer, ed., '7. Wissenschaftstagung zum Ökologischen Landbau "Ökologischer Landbau der Zukunft", Wien 24.-26.2.2003', Universität für Bodenkultur Wien - Institut für ökologischen Landbau, Wien, pp. 357–360.

Destatis Statistisches Bundesamt (2013), 'Number of inhabitants: 80.5 million inhabitants at the end of 2012'.
URL: *https://www.destatis.de/EN/FactsFigures/SocietyState/Population/CurrentPopulation-/Current.html*

Diamond, J. M. (2005), *Collapse. How societies choose to fail or succeed*, Viking Press, New York.

Diaz-Bone, R. (2009), 'Konvention, Organisation und Institution. Der institutionentheoretische Beitrag der 'Èconomie des conventions'', *Historical Social Research* **34**(2), 235–264.

Diaz-Bone, R. (2011), Einführung in die Soziologie der Konventionen, *in* R. Diaz-Bone, ed., 'Soziologie der Konventionen', Theorie und Gesellschaft, Campus Verlag, Frankfurt/New York, pp. 9–41.

Dicken, P., Kelly, P., Olds, K. & Yeung, H. W. (2001), 'Chains and networks, territories and scales: towards an analytical framework for the global economy', *Global Networks* **1**(2), 89–112.

Dietsche, C. (2011), *Umweltgovernance in globalen Wertschöpfungsketten. Umweltschutz und Qualitätssicherung im Handel mit tropischen Garnelen und Ledererzeugnissen*, Vol. 48 of *Wirtschaftsgeographie*, LIT Verlag, Münster.

DiMaggio, P. & Powell, W. (1983), 'The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields', *American Sociology Review* **48**, 147–160.

Dimitri, C. & Richman, N. (2000), *Organic food markets in transition*, Winrock International, Greenbelt.

Dünckmann, F. (2006), Von Kaffeetrinkern und Zugvögeln. Konkurrenz und Kooperation im ökologischen Kaffeehandel, *in* B. Ratter, ed., 'Hombre y Naturaleza - Mensch/Naturbeziehun-

gen in Lateinamerika', Vol. 11 of *Mainzer Kontaktstudium Geographie*, Geographisches Institut der Univesität Mainz, Mainz, pp. 71–81.

Dünckmann, F. & Mayer, C. (2002), Den Markt für eine nachhaltige Exportlandwirtschaft nutzen. Umweltstandards im Kaffeesektor, *in* D. Soyez & C. Schulz, eds., 'Wirtschaftsgeographie und Umweltproblematik', Vol. 76 of *Kölner Geographische Arbeiten*, Geographisches Institut der Universität zu Köln, Köln, pp. 57–68.

Dolan, C. & Humphrey, J. (2000), 'Governance and trade in fresh vegetables: The impact of UK supermarkets on the African horticulture industry', *Journal of Development Studies* **37**(2), 147–176.

Dorfer, T. (16.01.2008), 'Bio boomt - und das Ausland verdient'.
URL: *http://www.spiegel.de/wirtschaft/oeko-lebensmittel-bio-boomt-und-das-ausland-verdient-a-529008.html*

Dow Jones & Co. (28.11.2007), 'Öko-Produktion bleibt hinter Umsatz zurück'.
URL: *http://www.raiffeisen.com/hgen/news/artikel/30206692*

Dörry, S. (2008), *Globale Wertschöpfungsketten im Tourismus. Ohnmächtige Unternehmen in mächtiger Position? Relational Governance bei der Organisation deutscher Pauschalreisen nach Jordanien*, Vol. 45 of *Wirtschaftsgeographie*, LIT Verlag, Münster.

Erlei, M., Leschke, M. & Sauerland, D. (1999), *Neue Institutionenökonomik*, Schäffer-Poeschel, Stuttgart.

Ermann, U. (2005), *Regionalprodukte. Vernetzungen und Grenzziehungen bei der Regionalisierung von Nahrungsmitteln*, Steiner, Stuttgart.

E.U. European Union (2007), 'Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91', *Official Journal of the European Union* **50**(L189).

Eymard-Duvernay, F. (1989), 'Conventions de qualité et formes de coordination', *Revue économique* **40**(2), 329–360.

Eymard-Duvernay, F., Favereau, O., Orléan, A., Salais, R. & Thévenot, L. (2006), Valeurs, coordination et rationalité: Trois thèmes mis en relation par l'économie des conventions, *in* F. Eymard-Duvernay, ed., 'L'économie des conventions. Méthodes et résultats. Book 1: Débats.', La Découverte, Paris, pp. 23–44.

FiBL Forschungsinstitut für biologischen Landbau & IFOAM International Foundation for Organic Agriculture, eds. (2013), *The World of Organic Agriculture. Statistics and Emerging Trends 2013*, FiBL and IFOAM, Frick and Bonn.

Firth, C. & Green, N. (2006), Maintaining the balance between national demand and supply of organic food-example of organic vegetables in the UK, *in* 'Joint Organic Congress: Organic Farming and Rural Development, Odense 30.-31.5.2006'.

Fischer, C. (2013), 'Trust and communication in European agri-food chains', *Supply Chain Management: An International Journal* **18**(2), 208–218.

Fitch Haumann, B. (2011), United States: Country Report, *in* H. Willer & L. Kilcher, eds., 'The World of Organic Agriculture. Statistics and Emerging Trends 2012', Research Institute of Organic Agriculture (FiBL), Frick, and International Federation of Organic Agriculture Movements (IFOAM), Bonn, pp. 205–210.

Flick, U. (2004), *Triangulation: Eine Einführung*, VS Verlag, Wiesbaden.

Fold, N. & Pritchard, B. (2005), *Cross-continental Food Chains*, Routledge, London.

Franz, M. (2011), 'Prozesse der Globalisierung im Einzelhandel - die Akteure und ihre Machtbeziehungen', *Geographische Rundschau* **63**(5), 4–10.

Franz, M. & Hassler, M. (2008), 'Globale Produktionsnetzwerke in der Biobranche. Indischer Pfeffer für schwäbisches Biofleisch', *Geographische Rundschau* **60**(9), 28–34.

Franz, M. & Hassler, M. (2010), 'The value of commodity biographies: integrating tribal farmers in India into a global organic agro-food network', *Area* **42**(1), 25–34.

Freidberg, S. E. (2003), 'Culture, conventions and colonial constructs of rurality in south-north horticultural trades', *Journal of Rural Studies* **19**(1), 97–109.

Fuchshofen, W. & Fuchshofen, S. (2000), Organic Trade Association's Export Study for U.S. Organic Products to Asia and Europe, Technical report, Organic Trade Association OTA, Greenfield.

Gereffi, G. (1994), The organization of buyer-driven global commodity chains, *in* G. Gereffi & M. Korzeniewicz, eds., 'Commodity Chains and global capitalism', Praeger, Westport, pp. 95–122.

Gereffi, G. (1995), Global production systems and third world development, *in* B. Stallings, ed., 'Global change, regional response: the new international context of development', Cambridge University Press, Cambridge, pp. 100–141.

Gereffi, G., Garcia-Johnson, R. & Sasser, E. (2001), 'The NGO-Industrial Complex', *Foreign Relations* **125**, 56–65.

Gereffi, G., Humphrey, J. & Sturgeon, T. (2005), 'The governance of global value chains', *Review of International Political Economy* **12**(1), 78–104.

Gereffi, G. & Korzeniewicz, M., eds. (1994), *Commodity chains and global capitalism*, Praeger, Westport, CT.

Gereffi, G. & Lee, J. (2012), 'Why the World Suddenly Cares About Global Supply Chains', *Journal of Supply Chain Management* **48**(3), 24–32.

Gerlach, S., Kennerknecht, R. & Spiller, A. (2005), Die Zukunft des Großhandels in der Bio-Wertschöpfungskette, Technical report, Institut für Agrarökonomie, Georg-August-Universität Göttingen.

Gibbon, P. (2001), 'Upgrading Primary Production: A Global Commodity Chain Approach', *World Development* **29**(2), 345–363.

Gibbon, P., Bair, J. & Ponte, S. (2008), 'Governing global value chains: an introduction', *Economy and Society* **37**(3), 315–338.

Gibbon, P. & Bolwig, S. (2007), The Economic Impact of a Ban on Imports of Air Freighted Organic Products to the UK, DIIS Working Paper no 2007/23, Technical report, Danish Institute for International Studies, Copenhagen.

Glaser, B. G. & Strauss, A. L. (1998), *Grounded Theory. Strategien qualitativer Forschung*, Huber, Bern.

Glückler, J. (2005), 'Making embeddedness work: social practice institutions in foreign consulting markets', *Environment and Planning A* **37**(10), 1727–1750.

Gleirscher, N. (2003), Erfolgsfaktoren für regionale Biovermarkter - Eine Analyse ausgewählter Vermarktungsinitiativen in Österreich, Master's thesis, Wien.

Gregory, D., Johnston, R. & Pratt, G., eds. (2009), *Dictionary of Human Geography*, 5th edn, Wiley-Blackwell, Hoboken.

Guptill, A. (2009), 'Exploring the conventionalization of organic dairy: trends and countertrends in upstate New York', *Agriculture and Human Values* **26**(1-2), 29–42.

Guthman, J. (2004*a*), 'Back to the land: the paradox of organic food standards', *Environment and Planning A* **36**(3), 511–528.

Guthman, J. (2004*b*), 'The Trouble with 'Organic Lite' in California: a Rejoinder to the 'Conventionalisation' Debate', *Sociologia Ruralis* **44**(3), 301–316.

Hall, P. A. & Soskice, D. (2001), An Introduction to Varieties of Capitalism, *in* P. A. Hall & D. Soskice, eds., 'Varieties of Capitalism: The Institutional Foundations of Comparative Advantage', Oxford University Press, Oxford, pp. 1–70.

Halpin, D. (2004), The Australian Organic Industry. A Profile., Technical report, DAFF Department of Agriculture, Fisheries and Forestry, Canberra.

Hamm, U., Gronefeld, F. & Halpin, D. (2002), *Analysis of the European Market for Organic Food*, Organic Marketing Initiatives and Rural Development 1, School of Management and Business, University of Wales, Aberystwyth.

Hamm, U. & Rippin, M. (2007), Zwingt der Bio-Boom den Lebensmitteleinzelhandel zum Umdenken?, Technical Report 5.12.2007.
URL: *http://oekolandbau.de/haendler/marktinformationen/biomarkt-deutschland/aktuelle-marktdaten/bio-boom-und-lebensmitteleinzelhandel*

Hatanaka, M. (2010), 'Certification, Partnership, and Morality in an Organic Shrimp Network: Rethinking Transnational Alternative Agrifood Networks', *World Development* **38**(5), 706–716.

Hatanaka, M., Bain, C. & Busch, L. (2005), 'Third-party certification in the global agrifood system', *Food Policy* **30**(3), 354–369.

Henderson, J., Dicken, P., Hess, M., Coe, N. & Yeung, H. W.-C. (2002), 'Global production networks and the analysis of economic development', *Review of International Political Economy* **9**(3), 436–464.

Henryks, J. & Pearson, D. (2010), Marketing communications create confusion: Perception versus reality for Australian organic food consumers, *in* 'Australian and New Zealand Communications Association Annual Conference; 07.2010', Canberra.

Hess, M. (1998), *Glokalisierung, industrieller Wandel und Standortstruktur. Das Beispiel der EU-Schienenfahrzeugindustrie*, VVF, München.

Hess, M. (2004), ''Spatial' relationships? Towards a reconceptualization of embeddedness', *Progress in Human Geography* **28**(2), 165–186.

Hess, M. & Coe, N. (2006), 'Making connections: Global production networks, standards, and embeddedness in the mobile-telecommunications industry', *Environment and Planning A* **38**, 1205–1227.

Hess, M. & Yeung, H. (2006), 'Whither Global Production Networks in Economic Geography? Past, present and future', *Environment and Planning A, Special Issue on 'Global Production Networks'* **38**(7), 1193–1204.

Higgins, V., Dibden, J. & Cocklin, C. (2010), Adapting Standards: The Case of Environmental Management Systems in Australia, *in* V. Higgins & W. Larner, eds., 'Calculating the Social: Standards and the Reconfiguration of Governing', 1 edn, Palgrave Macmillan, New York City, pp. 167–184.

Håkansson, H. & Snehota, I., eds. (1995), *Developing Relations in Business Networks*, Routledge, London.

Hodgson, G. (2006), 'What are institutions?', *Journal of Economic Issues* **XL**(1), 1–25.

Hofstede, G., Fritz, M., Canavari, M., Oosterkamp, E. & van Sprundel, G.-J. (2010), 'Towards a cross-cultural typology of trust in B2B food trade', *British Food Journal* **112**(7), 671–687.

Höpner, M. (2009), ''Spielarten des Kapitalismus' als Schule der vergleichenden Staatstätigkeitsforschung', *Zeitschrift für Vergleichende Politikwissenschaft* **3**(2), 303–327.

Hudson, R. (2004), 'Conceptualizing economies and their geographies: spaces, flows and circuits', *Progress in Human Geography* **28**(4), 447–471.

Humphrey, J. & Schmitz, H. (2000), Governance and upgrading: linking industrial cluster and global value chain research, Technical report, Institute of Development Studies, University of Sussex.

IFOAM International Foundation for Organic Agriculture (2008, 02.08.2013), 'Definition of organic agriculture'.
URL: *http://www.ifoam.org/en/organic-landmarks/definition-organic-agriculture*

Jaffee, S. & Masakure, O. (2005), 'Strategic use of private standards to enhance international competitiveness: Vegetable exports from Kenya and elsewhere', *Food Policy* **30**(3), 316–333.

Jagd, S. (2007), 'Economics of convention and new economic sociology', *Current Sociology* **55**(1), 75–91.

Jörges-Süß, K. & Süß, S. (2004), 'Neo-Institutionalistische Ansätze der Organisationstheorie', *Das Wirtschaftsstudium* **33**, 316–318.

Kaplinsky, R. & Morris, M. (1999), 'Trade policy reform and the competitive response in kwazulu natal province, south africa.', *World Development* **27**(4), 717 – 737.

Kaplinsky, R. & Morris, M. (2001), *A handbook for value chain research*, number 02.05.08, IDS-Sussex, Brighton.

Kirwan, J. (2006), 'The interpersonal world of direct marketing: examining conventions of quality at UK farmers' markets', *Journal of Rural Studies* **22**(3), 301–312.

Klein, A. (2012), 'Chain reaction: Neoliberal exceptions to global commodity chains in Dominican baseball', *International Review for the Sociology of Sport* **47**(1), 27–42.

Knickel, K., Schaer, B. & Strauch, C. (2006), Sustainable Food Supply Chains in Europe, *in* 'Joint Organic Congress: Organic Farming and Rural Development, Odense 30.-31.5.2006'.

Knight, F. H. (1921), *Risk, Uncertainty and Profit*, Houghton Mifflin, Boston.

Korneliussen, T. & Grønhaug, K. (2003), 'Quality perceptions in international distribution: an empirical investigation in a complete distribution chain', *Supply Chain Management: An International Journal* **8**(5), 467–475.

Kottila, M.-R. P. R. (2006), Consumption of organic products: Challenge for performance of supply chain, *in* 'Joint Organic Congress: Organic Farming and Rural Development, Odense 30.-31.5.2006'.

Kottila, M.-R. & Rönni, P. (2008), 'Collaboration and trust in two organic food chains', *British Food Journal* **110**(4/5), 376–394.

Köpke, U. & Küpper, P. M. (2013), Marktanteile im Segment Bio-Lebensmittel. Folgen und Folgerungen, Technical report, Institut für Organischen Landbau, Rheinische Friedrich-Wilhelms-Universität Bonn.

Kristiansen, P., Mitchell, A., Bez, N. & Monk, A., eds. (2010), Australian Organic Market Report, Technical report, BFA Biological Farmers of Australia, Chermside.

Kristiansen, P., Taji, A. & Reganold, J., eds. (2006), *Organic Agriculture. A Global Perspective.*, Comstock Publishing Associates, New York.

Kulke, E. (2005), 'Globaler Welthandel. Gründe, Merkmale und räumliche Wirkungen', *Praxis Geographie* **35**(7/8), 4–9.

Kulke, E. (2007), 'The Commodity Chain Approach in Economic Geography', *Erde* **138**(2), 117–126.

Lash, S. & Urry, J. (1994), *Economies of signs and space*, Sage, London.

Lazega, E. & Favereau, O. (2002), Introduction, *in* O. Favereau & E. Lazega, eds., 'Conventions and Structures in Economic Organization: Markets, Networks and Hierarchies', Edward Elgar, Cheltenham, UK Northampton, MA, USA, pp. 1–28.

Levy, D. L. (2008), 'Political Contestation in Global Production Networks', *Academy of Management Review* **33**(4), 943–963.

Lewis, D. (1969), *Convention: A philosophical study*, Harvard University Press, Cambridge.

Liebrich, S. & Kuhr, D. (17.10.2010), 'Bioprodukte. Das Fünf-Milliarden-Wunder'. **URL:** *http://www.sueddeutsche.de/leben/bioprodukte-das-fuenf-milliarden-wunder-1.278360*

Lockie, S., Lyons, K., Lawrence, G. & Halpin, D. (2006), *Going Organic - Mobilizing networks for environmentally responsible food production*, CAB International, Wallingford.

Marsden, T. K., Banks, J. & Bristow, G. (2000), 'Food supply chain approaches: exploring their role in rural development', *Sociologia Ruralis* **40**(4), 424–438.

Martin, R. (2000), Institutional approaches in economic geography, *in* E. Sheppard & T. Barnes, eds., 'A companion to economic geography', Blackwell, Oxford, pp. 77–94.

Mattsson, L.-G. (2003), 'Reorganization of distribution in globalization of markets: the dynamic context of supply chain management', *Supply Chain Management: An International Journal* **8**(5), 416–426.

Mayer, C. (2003*a*), 'Können Öko-Siegel einen neuen Handlungsspielraum für kleinbäuerliche Kaffeeproduzenten schaffen? Das Beispiel Costa Rica', *Geographica Helvetica* **58**(1), 56–65.

Mayer, C. (2003*b*), 'Nachhaltige Exportwirtschaft durch Umweltstandards? Potenziale und Barrieren bei der Anpassung in der Kaffeeproduktion Costa Ricas', *Erdkunde* **57**(1), 33–39.

Mayer, C. (2003*c*), *Umweltsiegel im Welthandel. Eine institutionenökonomische Analyse am Beispiel der globalen Warenkette von Kaffee*, Vol. 139 of *Marburger Geographische Schriften*, Selbstverlag des Geographischen Instituts der Universität Marburg, Marburg.

Mayring, P. (2010), *Qualitative Inhaltsanalyse: Grundlagen und Techniken*, 11th edn, Beltz Verlag, Weinheim.

Mitchell, A. & Wynen, E. (2012), Organic Farming in Australia, *in* H. Willer & L. Kilcher, eds., 'The World of Organic Agriculture - Statistics and Emerging Trends', FiBL Research Institute of Organic Agriculture, and IFOAM International Federation of Organic Agriculture Movements, Bonn, pp. 288–291.

Ménard, C. (1995), 'Markets as institutions vs. organizations as markets? Disentangling some fundamental concepts', *Journal of Economic Behavior and Organization* **28**(2), 161–182.

Morgan, K., Marsden, T. & Murdoch, J. (2006), *Worlds of Food: Place, Power, and Provenance in the Food Chain*, Oxford University Press, Oxford.

Morgan, K. & Murdoch, J. (2000), 'Organic vs. conventional agriculture: knowledge, power and innovation in the food chain', *Geoforum* **31**(2), 159–173.

Murdoch, J., Marsden, T. & Banks, J. (2000), 'Quality, nature, and embeddedness: Some theoretical considerations in the context of the food sector', *Economic Geography* **76**(2), 107–125.

Murdoch, J. & Miele, M. (1999), ''Back to nature': Changing 'Worlds of Production' in the food sector', *Sociologia Ruralis* **39**(4), 465–483.

Murdoch, J. & Miele, M. (2004), Culinary networks and cultural connections: a conventions perspective, *in* A. Hughes & S. Reimer, eds., 'Geographies of Commodity Chains', Routledge, London, pp. 102–119.

Mutersbaugh, T. (2002), 'The number is the beast: A political economy of Organic coffee certification and producer unionism', *Environment and Planning A* **34**(7), 1165–1184.

Myloni, B., Harzing, A. & Mirza, H. (2004), 'Host country specific factors and the transfer of human resource management practices in multinational companies.', *International Journal of Manpower* **25**(6), 518–534.

Nadvi, K. (2008), 'Global standards, global governance and the organisation of global value chains', *Journal of Economic Geography* **8**(3), 323–343.

Neilson, J. & Pritchard, B. (2009), *Value Chain Struggles: Institutions and Governance in the Plantation Districts of South India*, Blackwell, Oxford.

Neumayer, E. & Perkins, R. (2004), 'What explains the uneven take-up of ISO 14001 at the global level? A panel-data analysis', *Environment and Planning A* **36**(5), 823–839.

Nieberg, H., Kuhnert, H. & Sanders, J. (2011), Förderung des ökologischen Landbaus in Deutschland: Stand, Entwicklung und internationale Perpektive, Technical report, Johann Heinrich von Thünen Institut, Braunschweig.

Nigh, R. (1997), 'Organic agriculture and globalization: A Maya associative corporation in Chiapas, Mexico', *Human Organization* **56**(4), 427–436.

North, D. C. (1990), *Institutions, Institutional Change and Economic Performance*, The Political Economy of Institutions and Decisions, Cambridge University Press, New York.

Orléan, A., ed. (1994*a*), *Analyse économique des conventions.*, Presses Universitaires de France, Paris.

Orléan, A. (1994*b*), Vers un modèle général de la coordination économique par les conventions, *in* A. Orléan, ed., 'Analyse économique des conventions', Presses Universitaires de France, Paris, pp. 9–40.

Osswald, N. & Dittrich, C. (2009), The Market for Organic Food in Hyderabad, India: Consumer Attitudes and Marketing Opportunities. Research Reports for Analysis and Action for Sustainable Development of Hyderabad, Technical report, Humboldt Universität Berlin.

Ouma, S. (2010), 'Global Standards, Local Realities: Private Agrifood Governance and the Restructuring of the Kenyan Horticulture Industry', *Economic Geography* **86**(2), 197–222.

Patel-Campillo, A. (2011), 'Transforming Global Commodity Chains: Actor Strategies, Regulation, and Competitive Relations in the Dutch Cut Flower Sector', *Economic Geography* **87**(1), 79 – 99.

Paull, J. (2007*a*), Organics olympiad 2007 - perspectives on the global state of organic agriculture, *in* 'AGRI-FOOD XIV', Brisbane.

Paull, J. (2007*b*), Our organic future - cottage, corporate, commodified or containerized?, *in* 'National Conference of Organics Aotearoa New Zealand', Lincoln (NZ).

Pimbert, M. P., Thompson, J., Vorley, B., Fox, T., Kanji, N. & Tacoli, C. (2001), *Global Restructuring, Agri-food Systems and Livelihoods*, Gatekeeper Series, International Institute for Environment and Development (IIED), London.

Ponte, S. (2002*a*), 'Brewing a bitter cup? Deregulation, quality and the re-organization of coffee marketing in East Africa', *Journal of Agrarian Change* **2**(2), 248–272.

Ponte, S. (2002*b*), 'The 'latte revolution'? Regulation, markets and consumption in the global coffee chain', *World Development* **30**(7), 1099–1122.

Ponte, S. (2007), 'Bans, Tests and Alchemy: Food Safety Regulation and the Uganda Fish Export Industry', *Agriculture and Human Values* **27**(2), 179–193.

Ponte, S. (2009), 'Governing through Quality: Conventions and Supply Relations in the Value Chain for South African Wine', *European Society for Rural Sociology* **49**(3), 236–257.

Ponte, S. & Gibbon, P. (2005), 'Quality standards, conventions and the governance of global value chains', *Economy & Society* **34**(1), 1–31.

Pritchard, B. & Burch, D. (2003), *Agri-food Globalization in Perspective: International Restructuring in the Processing Tomato Industry*, Ashgate, Aldershot.

Raikes, P., Jensen, M. F. & Ponte, S. (2000), Global Commodity Chain Analysis and the French Filière Approach: Comparison and Critique, Technical report, Copenhagen.

Ransom, E. (2011), 'Botswana's beef global commodity chain: Explaining the resistance to change', *Journal of Rural Studies* **27**(4), 431–439.

Raynolds, L. T. (2002), 'Consumer/producer links in Fair Trade coffee networks', *Sociologia Ruralis* **42**(4), 404–424.

Raynolds, L. T. (2004), 'The globalization of organic agro-food networks', *World Development* **32**(5), 725–744.

Reardon, T., Codron, J.-M., Busch, L., Bingen, J. & Harris, C. (2001), 'Global change in agrifood grades and standards: Agribusiness strategic responses in developing countries', *International Food and Agribusiness Management Review* **2**(3/4), 421–435.

Reardon, T. & Farina, E. M. M. Q. (2001), 'The Rise Of Private Food Quality And Safety Standards: Illustrations From Brazil', *International Food and Agribusiness Management Review* **4**(04), 413–421.

Renard, M.-C. (2003), 'Fair trade: quality, market and conventions', *Journal of Rural Studies* **19**(1), 87–96.

Renard, M.-C. (2005), 'Quality certification, regulation and power in fair trade', *Journal of Rural Studies* **21**(4), 419–431.

Reps, N. & Braun, B. (2012), 'Going green : ökologische Aufwertungsprozesse und Koordinationsstrukturen in den Wertschöpfungsketten der indischen Kraftfahrzeugindustrie', *Zeitschrift für Wirtschaftsgeographie* **56**(4), 226–243.

Rice, R. (2001), 'Noble goals and challenging terrain: organic and fair trade coffee movements in the global marketplace', *Journal of Agricultural and Environmental Ethics* **14**(1), 39–66.

RIRDC Rural Industries Research and Development Corporation (2006), Organic Industry Research and Development Plan 2006 to 2011, Technical report, Australian Government, Canberra.

Rosin, C. (2007), Justyfing the 'Alternative': Renegotiating conventions in the Yerba Mate Network, Brazil, *in* D. Maye, L. Holloway & M. Kneafsey, eds., 'Alternative Food Geographies', Elsevier, Oxford, pp. 115–132.

Rosin, C. (2008), 'The conventions of agri-environmental practice in New Zealand: farmers, retail driven audit schemes and a new spirit of farming', *Geojournal* **73**(1), 45–54.

Rosin, C. & Campbell, H. (2009), 'Beyond bifurcation: Examining the conventions of organic agriculture in New Zealand', *Journal of Rural Studies* **25**, 35–47.

Sage, J. L. & Goldberger, J. R. (2012), 'Decisions to direct market: Geographic influences on conventions in organic production', *Journal for Applied Geography* **34**, 57–65.

Sahota, A. (2011), The Global Market for Organic Food & Drink, *in* H. Willer & L. Kilcher, eds., 'The World of Organic Agriculture. Statistics and Emerging Trends 2012', Research Institute of Organic Agriculture (FiBL), Frick, and International Federation of Organic Agriculture Movements (IFOAM), Bonn, pp. 62–66.

Sahota, A. (2013), The Global Market for Organic Food & Drink, *in* FiBL Forschungsinstitut für biologischen Landbau & IFOAM International Foundation for Organic Agriculture, eds., 'The World of Organic Agriculture. Statistics and Emerging Trends 2013', Research Institute of Organic Agriculture (FiBL), Frick, and International Federation of Organic Agriculture Movements (IFOAM), Bonn, pp. 132–137.

Salais, R. & Diaz-Bone, R. (2008), 'Robert Salais answers five questions about economic sociology. Robert Salais interviewed by Rainer Diaz-Bone', *Economic Sociology - European Electronic Newsletter* **9**(2), 16–23.

Salais, R. & Thèvenot, L. (1986), *Le travail, marché, règles, conventions*, INSEE-Economica, Paris.

Sanders, J. (2004), The future policy environment of organic farming and ist impact on the economic performance against the background of the ongoing trade liberalisation, *in* '4th European Summer Academy on Organic Farming', Lednice, p. 62.

Sayer, A. (1997), The Dialectic of Culture and Economy, *in* R. Lee & J. Wills, eds., 'Geographies of Economics', Arnold, London, pp. 16–25.

Sayer, A. (2000), *Realism and Social Science*, Sage, London.

Schamp, E. (2003), 'Raum, Interaktion und Institution. Anmerkungen zu drei Grundperspektiven der deutschen Wirtschaftsgeographie', *Zeitschrift für Wirtschaftsgeographie* **47**(3-4), 145–158.

Schauwecker, P. (2009), Opportunismus in transnationalen Unternehmensnetzwerken, *in* T. M. Kühlmann & H.-D. Haas, eds., 'Internationales Risikomanagement. Auslandserfolg durch grenzüberschreitende Netzwerke', Oldenbourg Wissenschaftsverlag, München, pp. 303–326.

Scheffer, J. (2007), *Den Kulturen Raum geben. - Das Konzept selektiver Kulturräume am Beispiel des deutsch-tschechisch-österreichischen Dreiländerecks*, Passauer Schriften zur Geographie 24, Geographie Uni Passau, Passau.

Scholl, G., Nowak, A., Schulz, L., Wimmer, M. & Lösch, S. (2007), Nachhaltige Metropolenregion - Entwicklung einer nachhaltigen Land- und Ernährungswirtschaft am Beispiel des Großraums Berlin-Brandenburg, Technical report, Institut für ökologische Wirtschaftsforschung (IÖW) gGmbH, Berlin.

Scott, W. (1995), *Institutions and Organizations. Theories and Research*, Thousand Oaks, London and New Delhi.

Singh, B. (2002), Nontraditional Crop Production in Africa for Export, *in* J. Janick & A. Whipkey, eds., 'Trends in new crop and new uses', ASHS Press, Alexandria, pp. 86–92.

SÖL Stiftung Ökologie und Landbau (4.12.2007), 'Öko-Landbau in Deutschland'.
URL: *http://www.soel.de/oekolandbau/deutschland_ueber.html*

Smith, S. & Barrientos, S. (2005), 'Fair trade and ethical trade: Are there moves towards convergence?', *Sustainable Development* **13**(3), 190–198.

Stamm, A. (2004), Wertschöpfungsketten entwicklungspolitisch gestalten. Anforderungen and Handelspolitik und Wirtschaftsförderung, Technical report, Deutsche Gesellschaft für Technische Zusammenarbeit GTZ GmbH, Bonn.

Storper, M. (1997), *The regional world*, Guilford Press, London.

Storper, M. & Salais, R. (1997), *Worlds of Production. The Action Frameworks of the Economy*, Harvard University Press, Cambridge/Mass.

Stræte, E. P. (2004), 'Innovation and Changing 'Worlds of Production': Case-Studies of Norwegian Dairies', *European Urban and Regional Studies* **11**(3), 227–241.

Sylvander, B. (1995), Convention de qualité, concurrence et coopération: cas du label rouge dans la filière volaille, *in* G. Allaire & R. Boyer, eds., 'La Grande Transformation de l'agriculture', INRA-Economica, Paris, pp. 73–96.

Thiers, P. (2006), China and global organic food standards, *in* J. Bingen & L. Busch, eds., 'Agricultural Standards: The Shape of the Global Food and Fiber System', Springer, Dordrecht, pp. 193–217.

Thévenot, L. & Jagd, S. (2004), 'The French Convention School and the Coordination of Economic Action - Laurent Thevenot Interviewed By Søren Jagd at the EHESS Paris', *Economic Sociology - European Electronic Newsletter* **5**(3), 10–17.

Trebbin, A. (2012), Smallholder farmers market integration through Producer Organizations. An analysis of the Producer Company model in the context of India's emerging modern food retail sector, PhD thesis, Philipps-Universität Marburg.

Truninger, M. (2008), 'The organic food market in Portugal: contested meanings, competing conventions', *International Journal of Agricultural Resources, Governance and Ecology* **7**(1/2), 279–306.

Tsing, A. L. (2005), *Friction: An Ethnography of Global Connection*, Princeton University Press, Princeton, NJ.

Wallerstein, I. (1974), 'The Rise and Future Demise of the World Capitalist System: Concepts for Comparative Analysis', *Comparative Studies in Society and History* **16**(4), 387–415.

Whitley, R. (1999), *Divergent capitalisms. The social structuring and change of business systems.*, Oxford University Press, Oxford.

Widmann, M. (2008), 'Deutschlands Bauern verpassen den Bio-Trend'.
URL: *http://www.sueddeutsche.de/wirtschaft/nahrungsmittelmarkt-deutschlands-bauern-verpassen-den-bio-trend-1.581316*

Wilkinson, J. (1997), 'A new paradigm for economic analysis?', *Economy and Society* **26**(3), 305–339.

Willer, H. (2012), The World of Organic Agriculture 2012: Summary, *in* H. Willer & L. Kilcher, eds., 'The World of Organic Agriculture. Statistics and Emerging Trends 2012', FiBL Research Institute of Organic Agriculture, and IFOAM International Federation of Organic Agriculture Movements, pp. 26–32.

Wycherley, I. (2002), 'Managing Relationships in the UK Organic Food Sector', *Journal of Marketing Management* **18**(7-8), 673–692.

Wynen, E., Mitchell, A. & Kristiansen, P. (2011), Organic Farming in Australia, *in* H. Willer & L. Kilcher, eds., 'The World of Organic Agriculture - Statistics and Emerging Trends', FiBL Research Institute of Organic Agriculture, and IFOAM International Federation of Organic Agriculture Movements, Bonn, pp. 219–223.

Yeung, H. W.-C. (1998), 'The Social-Spatial Constitution of Business Organizations: A Geographical Perspective', *Organization* **5**(1), 101–128.

Yussefi, M. & Zerger, U. (2007), 'Bio-Boom in Deutschland. Wo bleiben die Bauern?', *Ökologie und Landbau* **141**(1), 14–15.

ZMP Zentrale Markt- und Preisberichtstelle für Erzeugnisse der Land-, Forst- und Ernährungswirtschaft GmbH (2007, 23.08.2013), 'Strukturdaten der nach der Verordnung (EWG) Nr.2092/91 des Rates vom 24. Juni 1991 wirtschaftenden Unternehmen in Deutschland nach Unternehmensformen sowie der bewirtschafteten Fläche'.
URL: *http://www.organic-world.net/fileadmin/documents/country_information/germany/ble-2008-strukturdaten-bio-2007.pdf*

Zukin, S. & DiMaggio, P. (1990), *Structures of Capital: The Social Organization of the Economy*, Cambridge University Press, Cambridge.

Zundel, C. & Kilcher, L. (2007), Organic agriculture and food availability, *in* 'International Conference on Organic Agriculture and Food Security, Rome 3.-5.5.2007'.

Summary / Zusammenfassung

Summary

More and more products in western consumer markets today are imported, increasingly from developing countries. Yet, as distances to suppliers increase, monitoring and tracing product and process qualities along global supply chains back to the source have become increasingly challenging tasks for companies at the downstream end of the chain. Particularly importers risk legal sanctions or negative media coverage in case products are non-compliant with local requirements. The problem of uncertainty becomes even more urgent as highly specific quality designations come into play. The aim of this dissertation is to contribute to this discussion by providing an improved understanding of how formal and informal institutions –analysed in particular through a Convention Theory (CT) lens - are employed by importers of highly sensitive products in mitigating uncertainties in cross-border relations with their suppliers. This is achieved through a comparative empirical case study of firms importing certified organic food into Germany and Australia.

Article 1 in this collection, *"'Sustainable Standards'? How Organic Standards in the EU and Australia Affect Local and Global Agrifood Production and Value Chains"*, contributes to literature on food and environmental standards and discusses the impact of (supra-)national organic standards effective in Germany and Australia on different actors along the value chain. Article 2, *"Reassessing Supplier Reputation in International Trade Coordination. A German and Australian perspective of Global Organic Food Networks"*, deals with the multiple facets of reputation in international trade relations and how it can help to mitigate uncertainties across large distances. Article 3, *"Conventions in Cross-Border Trade Coordination. The Case of Organic Food Imports to Germany and Australia"*, provides a comprehensive discussion of which conventions within the CT framework are employed by Australian and German importers to overcome quality-related uncertainties in cross-border trade. The final Article 4, *"Australien als 'Global Food Superpower'? Landwirtschaft und Lebensmittelsektor Australiens im Wandel"* (Global food superpower? Changes and current challenges in Australia's food industry), looks at Australia as a case of the changing global character of agricultural and food production and trade, using a value chain perspective to outline these processes. Furthermore, it discusses how the unique Australian environmental situation, related natural risks, and political as well as structural factors currently question Australia's future as the next Global Food Superpower.

Overall, the empirical results affirm that formal institutions such as standards and third-party certification have gained increasing significance over the past two decades. Simultaneously, however, this study argues that these are not enough to overcome uncertainties in trade. Informal institutions like trust, reputation, values related to social and environmental welfare as well as business mentality and culture are likewise approaches that are employed. It is further shown that standards do not necessarily lead to reduced differences in product quality perceptions between suppliers and importers. Also, there seem to be changes in the interpretation of the organic designation, as particularly newer firms reduce the process standard more and more to product quality characteristics. At the same time, 'dedicated' companies with intensive holistic supplier relation management, unlike some decades ago, are not restricted to those that focus only on organic products. Conceptually, it is concluded that CT is a useful complementary approach to other frameworks for value chain and production network analyses, particularly due to its strengths to paint a differentiated picture of uncertainty as well as quality designations.

Zusammenfassung

Immer mehr Produkte in westlichen Konsumländern werden importiert, zunehmend aus Ländern des Globalen Südens. Doch mit zunehmender Distanz zu den Lieferanten wird es dadurch vor allem für Unternehmen am Ende einer Wertschöpfungskette immer schwieriger, Produkt- und Prozessqualitäten bis zum Ursprung zurück zu verfolgen und zu kontrollieren. Das Unsicherheitsproblem verschärft sich vor allem dort, wo hochspezifische und komplexe Qualitätsmerkmale bei den gehandelten Gütern gegeben sind. Besonders für Importeure und Händler von Markenprodukten können sich geschäftliche Risiken wie gesetzliche Sanktionen oder negative Medienberichterstattung ergeben, falls die gelieferte Ware nicht den lokalen (gesetzlichen) Anforderungen entspricht. Das Ziel dieser Dissertation ist es, zu dieser Diskussion beizutragen, und ein besseres Verständnis darüber zu vermitteln, wie Importeure formelle und informelle Institutionen einsetzen, um Unsicherheiten im transnationalen Handel mit ihren Lieferanten abzumildern. Konzeptionell wird dabei v. a. auf die Convention Theory (CT) sowie auf Wertschöpfungskettenliteratur zurück gegriffen. Die empirische Untersuchung erfolgt anhand des Beispiels von Importen biologischer Nahrungsmittel von Deutschland und Australien.

Artikel 1 dieser Dissertation, *"'Sustainable Standards'? How Organic Standards in the EU and Australia Affect Local and Global Agrifood Production and Value Chains"*, trägt zur Diskussion um Umwelt- und Sozialstandards bei, indem es den Einfluss (supra-)nationaler Bio-Standards in Deutschland und Australien auf einzelne Akteure entlang der Wertschöpfungskette untersucht. Artikel 2, *"Reassessing Supplier Reputation in International Trade Coordination. A German and Australian Perspective of Global Organic Food Networks"* analysiert die multiplen Einflussebenen von Reputation in internationalen Handelsbeziehungen, und welchen Beitrag

sie zur Reduzierung von Unsicherheiten über große räumliche Distanzen leisten kann. Artikel 3, *"Conventions in Cross-Border Trade Coordination. The Case of Organic Food Imports to Germany and Australia"*, liefert eine umfassende Analyse aller Konventionen der CT und zeigt auf, wie sie von deutschen und australischen Importeuren eingesetzt werden, um qualitätsbezogene Unsicherheiten mit ihren ausländischen Lieferanten zu minimieren. Der letzte Artikel, *"Australien als 'Global Food Superpower'? Landwirtschaft und Lebensmittelsektor Australiens im Wandel"*, beleuchtet die aktuellen Prozesse und Herausforderungen für Lebensmittelproduktion, -verarbeitung und -einzelhandel in Australien und argumentiert, dass sie kennzeichnend für eine umfassendere Umstrukturierung der globalen Lebensmittelproduktion und dessen institutioneller Rahmenbedingungen sind. Es wird zudem das Potential Australiens als 'Global Food Superpower' in Frage gestellt, v. a. bedingt durch seine einzigartigen physisch-geographischen und klimatischen Bedingungen, Naturgefahren sowie politische und strukturelle Faktoren.

Insgesamt bestätigen die empirischen Ergebnisse, dass formelle Institutionen wie Standards und Zertifizierungssysteme in den letzten zwanzig Jahren zunehmend an Bedeutung gewonnen haben. Allerdings zeigt diese Studie auch, dass dies nicht ausreicht, um Unsicherheiten im Handel zu überwinden. Informelle Institutionen wie Vertrauen, Reputation, Normen und Werte bezogen auf auf soziales und ökologisches Wohl, sowie Geschäftsmentalität und -kultur können gleichermaßen hilfreiche Ansätze sein. Es wird zudem gezeigt, dass Standards nicht notwendigerweise zum gleichen Verständnis von Qualität bei Importeuren und Lieferanten führen. Hinzu kommt, dass es Veränderungen in der Interpretation des Qualitätsbegriffs von 'biologisch' zu geben scheint, da v. a. neuere Unternehmen auf dem Bio-Markt den Prozess-Standard immer mehr auf messbare Produkt-Parameter reduzieren. Gleichzeitig sind heute, im Gegensatz zu früher, 'engagierte' Unternehmen mit ganzheitlichem Ansatz im Unternehmensmanagement nicht mehr nur solche Firmen, die sich rein auf Bio-Produkte spezialisieren. Konzeptionell wird argumentiert, dass CT einen sinnvollen ergänzenden Ansatz zu bestehenden Wertschöpfungsketten- und Netzwerkansätzen bieten kann. Die Stärke der CT liegt dabei vor allem in einer differenzierteren Auffassung von Unsicherheit und Qualität.

Appendix CT Literature

Table A.1 — Case studies on agri-food networks employing CT (selection; sorted alphabetically by first author)

Author	Year	Conventions / applied framework(s)	Case study focus	Major findings / argument
Freidberg	2003	Sylvander 1995	Anglophone vs. Francophone fresh vegetable trade between Africa and Europe	Standards represent corporate efforts to ensure and benefit from increasingly complex notions of quality in the food sector. They also impact changes in international retailer chains.
Kirwan	2006	Boltanski & Thévenot 1991	Farmers markets in the UK	Motivations and conventions among buyers and sellers can oppose each other. Uses conventions as normative values which are used as individual rationalisations of action.
Marsden, Banks and Bristow	2000	Storper 1997 as basis	Short supply chains in Europe, 12 case studies in different countries	CT is employed to assess quality designations in food production, especially 'alternative' food chains.
Morgan, Marsden and Murdoch	2006	Worlds of Food developed on the basis of Storper 1997	Tuscany, California, Wales	Address the economic bias of the Worlds of Production concept. Regionalisation that is inherent in agri-food production results in Worlds of Food that recognise not only the economic, but also the cultural, ecological and political/institutional logics.
Murdoch and Miele	1999	Storper & Salais 1997	Egg processors in Italy; organic food retailers	Firms can move between worlds of production.

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Author	Year	Conventions / applied framework(s)	Case study focus	Major findings / argument
Murdoch and Miele	2004	Boltanski & Thévenot 1991, all conventions	McDonald's vs. Slow Food Movement	Descriptive analysis of strategies adopted by two types of firms.
Murdoch, Marsden and Banks	2000	Storper & Salais 1997, ANT	Cheese production in Wales	Nature should be addressed more in political economy analyses of food systems. CT can better address 'natural' aspects within food quality designations. Develop a systematic overview of differing quality chains.
Ponte	2009	Eymard-Duvernay 1989, Boltanski & Thévenot 1991	Wine value chain between South Africa and the UK	Lead firms are able to drive a chain only in the case of dominating market and industrial conventions. Different qualties result in different governance structures or conventions.
Ponte and Gibbon	2005	Boltanski & Thévenot 1991, Eymard-Duvernay 1989	GVCs for clothing and coffee	CT is used to explain the dominance of buyer and producer-driven chains in a given sector. The type of coordination between a lead firm and their first tier supplier depends on knowledge transmission and information on quality, and the conventions dominating a firm's strategy.
Raynolds	2002, 2004	Boltanski & Thévenot 1991, civic, domestic, industrial, market	Fair Trade (2002) and organic (2004) trade in global markets	Fair trade/organic products are successful due to their appeal to consumers who follow civic/green conventions. Study demonstrates the utility of CT in analysing quality norms, rules and institutional arrangements.
Renard	2003, 2005	Sylvander 1995; civic, domestic, industrial, market	Fair Trade	Coordination of economic actors is not only based on free competition in markets, nor on paradigms of classical economic theory. Fair trade is one of the best examples of civic conventions, but absorbed more and more by market logics.
Rosin	2007	Boltanski & Thévenot 1991, all conventions	Yerba mate network in Brazil	Process oriented application of CT. CT used to explain the variety of justifications employed to enhance producer collaboration. CT shows the manifold ways in which a range of actors in the chain can act strategically.

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Author	Year	Conventions / applied framework(s)	Case study focus	Major findings / argument
Rosin and Campbell	2009	Boltanski & Thévenot 1991	Organic agriculture in New Zealand	CT is used to address the emerging complexity of organic production. The insufficiency of recent (political economy) ideas of conventionalisation and bifurcation are exposed.
Sage and Goldberger	2012	Boltanski & Thévenot 1991	Organic producers in Washington State, USA	The willingness to participate in direct consumer markets depends on the conventions employed by farmers. Use of conventions influenced by location and 'spatiality'
Straete	2004	Storper & Salais 1997	Dairy processing in Norway	Using CT to compare firms and their competitive adaption to markets.
Sylvander	1995	Institutional and transactional conventions	Agriculture in France	CT shows how quality differentiations can empower farms and firms to survive in competitive environments.
Truninger	2008	Boltanski & Thévenot 1991	Organic farming movement in Portugal	Polarisation of market between market/industrial-actors and civic/domestic/green-actors. Meanings of organic are disputed and contested.
Wilkinson	1997	ANT, CT (various authors)	agri-food sector in general	ANT, CT and neo-Schumpeterian economic theory are seen as new improved perspectives on economic action in the agri-food sector.

Source: Own compilation; cited references

Appendix 1

Lists of interviewees

Table A.2 — Interviews with importing firms in Australia and Germany

Country	Interview code	State	Position in company	Date of interview	Business type	Share of organics	Number of employees	Type of organic products	Food processed?
Australia	AUS-IMP01	NSW	General Manager	26 Sept 2010	Processor	1	15	Jam, gluten free, dairy food, dressing, sauces	Fresh and processed
Australia	AUS-IMP02	NSW	Buyer	09 Sept 2010	Import (trade)	0,25	6	Flour, seeds, food ingredients	Yes
Australia	AUS-IMP03	VIC	Account Executive	16 Sept 2010	Processor	0,01	2100	Animal products	Fresh and processed
Australia	AUS-IMP04	NSW	General Manager	21 Sept 2010	Im-/Export	0,055	30	Coffee, syrups, tea, instant coffee, drinking chocolates	Yes
Australia	AUS-IMP05	NSW	Account Manager	21 Sept 2010	Wholesaler	0,999	75	Fresh fruits, vegetables, chips, soups, oils, noodles, dairy goods, rice, grains, honey, tea, dried fruit etc	Fresh and processed
Australia	AUS-IMP06	QLD	Managing Director	28 Sept 2010	Import (trade)	0,9	2	Rice, spices, fruits, nuts, flour, seeds, cereals, sugar	Fresh and processed
Australia	AUS-IMP07	QLD	General Manager	30 Sept 2010	(Online) organic retailer	1	1	All	Fresh and processed
Australia	AUS-IMP08	QLD	National Retail Sales Manager	04 Oct 2010	Wholesaler	0,05	100	Nuts, figs, apricots	Fresh and processed
Australia	AUS-IMP09	QLD	National Grain Buyer	05 Oct 2010	Processor	1	30	Flour	Yes
Australia	AUS-IMP10	QLD	Managing Director	06 Oct 2010	Wholesaler	1	30	Most categories	Fresh and processed

Continued on next page

Country	Interview code	State	Position in company	Date of interview	Business type	Share of organics	Number of employees	Type of organic products	Food processed?
Australia	AUS-IMP11	NSW	Director	09 Nov 2010	Im-/Export (trade)	0,15	17	Rice, nuts, juice, coconut mixes	Fresh and processed
Australia	AUS-IMP12	NSW	General Manager	10 Nov 2010	Processor/ Wholesaler	1	4	Herbs, spicery	Fresh and processed
Australia	AUS-IMP13	NSW	General Manager	15 Nov 2010	Im-/Export	0,5	2	Oil, vegetable oil, protein meals	No
Australia	AUS-IMP14	NSW	Managing Director	16 Nov 2010	Importer/ Wholesaler	1	5	Fruit, vegetables, palm oil	Fresh and processed
Australia	AUS-IMP15	VIC	Project Manager Organics and Exports	17 Nov 2010	Processor	0,5	70	Soy, rice, oat, milk, rice, corn cakes, fruit juices, soy sauces	Yes
Australia	AUS-IMP16	VIC	General Manager	18 Nov 2010	Specialized retailer/import	0,9	20	Most categories	Fresh and processed
Australia	AUS-IMP17	VIC	Director	24 Nov 2010	Wholesaler	0,2	100	Most categories	Yes
Australia	AUS-IMP18	VIC	Policy and Brand Standards Manager	25 Nov 2010	Supermarket chain	0,01	100000	Most categories	Fresh and processed
Australia	AUS-IMP19	VIC	Technical Manager	19 Nov 2010	Processor	0,005	225	Nuts, fruits, vegetables, coconut, grains, seeds, rice, herbs, starches, snack products, dehydrated meat	Fresh and processed
Germany	DE-IMP01	Bayern	Quality Manager	17 Feb 2010	Wholesaler	1	100	Fruits, vegetables	No
Germany	DE-IMP02	Bayern	Purchasing Manager	19 Feb 2010	Processor/ Wholesaler	0,2	70	Dry goods	Fresh and processed
Germany	DE-IMP03	Bayern	Quality Manager	20 Feb 2010	Processor/ Wholesaler	1	35	Grain, flour, baking ingredients, dry goods	Fresh and processed
Germany	DE-IMP04	NRW	Purchasing Manager	18 Mar 2010	Wholesaler	0,125	350	Potatos, onion	Fresh and processed
Germany	DE-IMP05	NRW	General Manager	26 Mar 2010	Processor	0,15	8	Dry goods (tomatoes, fruits)	Fresh and processed
Germany	DE-IMP06	Bremen	Purchasing Manager	01 April 2010	Wholesaler	0,07	1000	Fruit, vegetables	Fresh and processed
Germany	DE-IMP07	Bremen	Category Manager Organics	01 April 2010	Importer/ Processor	0,2	15	Tea	Yes
Germany	DE-IMP08	Bayern	Quality Manager	11 May 2010	Wholesaler	1	20	Fruits, vegetables, coffee, sugar, noodles	No
Germany	DE-IMP09	NRW	Purchasing Manager	13 April 2010	Processor	1	90	Cereals, sugar, rice, nuts, seeds, beans, sweetener	Fresh and processed

Continued on next page

Country	Interview code	State	Position in company	Date of interview	Business type	Share of organics	Number of employees	Type of organic products	Food processed?
Germany	DE-IMP10	Hamburg	Quality Manager	19 April 2010	Processor/ Wholesaler	0,2	20	Dried fruit, nuts	Fresh and processed
Germany	DE-IMP11	Hamburg	Category Manager Organics	19 April 2010	Processor	0,09	1700	Seafood. Fish	Fresh and processed
Germany	DE-IMP12	Hamburg	Purchasing and Quality Manager	19 April 2010	Processor	0,3	150	Dry goods (spicery, vegetables, mushroom)	Fresh and processed
Germany	DE-IMP13	Rheinland-Pfalz	Quality Manager, General Manager	07 May 2010	Processor	1	20	Dry goods, mangos, dates, oil	Yes
Germany	DE-IMP14	NRW	General Manager	09 April 2010	Processor/ Wholesaler	1	100	Sauces, delikatessen, salami	Fresh and processed
Germany	DE-IMP15	Bayern	Quality Manager, Purchasing Manager Dry and Fresh Goods	11 May 2010	Wholesaler	1	25	Fruits, vegetables, seeds, tea, spicery, grain	Fresh and processed
Germany	DE-IMP16	Bayern	Quality Manager	12 May 2010	Processor	1	5	Fruits (concentrate, juices, mash, preserves)	Fresh and processed
Germany	DE-IMP17	NRW	Quality Manager	18 May 2010	Processor	0,04	150	Cocoa, nuts, butter, eggs, oil, spices, flour, sugar, sirup etc.	Fresh and processed
Germany	DE-IMP18	Hamburg	Purchasing Manager	20 May 2010	Importer	0,02	44	Bananas	No
Germany	DE-IMP19	Thüringen	Purchasing Manager	21 May 2010	Processor/ Wholesaler	1	40	Dry goods	Yes
Germany	DE-IMP20	Bayern	Quality Manager	27 May 2010	Processor	tea 100 per cent, other goods 40-70 per cent	260	Tea, spices, fruit concentrate	Fresh and processed
Germany	DE-IMP21	Bayern	Senior Buyer Raw Materials	08 June 2010	Processor	1	2000	Baby food (e.g. fruits, meat, vegetables, dairy products)	Fresh and processed
Germany	DE-IMP22	NRW	Quality Manager	06 July 2010	Importer	0,75	166	Coffee, tea, honey, nuts, candies, rice, vine	Fresh and processed
Germany	DE-IMP23	Niedersachsen	General Manager	16 July 2010	Wholesaler	1	9	Sweetener, palm fat, cocoa products, grain, seeds	Fresh and processed
Germany	DE-IMP24	NRW	Category Manager Organics, Quality Manager	17 Feb 2011	Supermarket chain	0,04	335992	Most categories	Fresh and processed
Germany	DE-IMP25	Hamburg	Executive Director,Purchasing and Sales	31 Mar 2010	Import agency	0,73	5	Nuts, dry goods, fruits, sugar, oil, vegetables, grain, seeds	No
Germany	DE-IMP26	Bayern	(former) Quality Manager	10 May 2010	Supermarket chain	0,01	26193	Most categories	Fresh and processed

Table A.3 — Interviews with experts on the organic sector in Australia and Germany

Country	Interview Code	State	Name of Organisation	Type of Organisation	Interviewee	Position/-Function	Date of Interview	Website
Australia	AUS-EXP01	QLD	Organic Federation of Australia (OFA); International Federation of Organic Agriculture Movements (IFOAM)	Umbrella organisation for organics in Australia; Worldwide umbrella organisation for organic agriculture	André Leu	Chair; President	17 Feb 2010	www.ofa.org.au www.ifoam.org
Australia	AUS-EXP02	NSW	Standards Australia: Technical Committee T-032	Government Committee for the Development of the new domestic Australian organic standard	Craig Sahlin	Chair of Technical Committee T-032	10 Sept 2010	www.standards.org.au
Australia	AUS-EXP03	VIC	Australian Organic (formerly Biological Farmers of Australia (BFA))	Organic Certification Body	Andrew Monk	CEO	15 Sept 2010	www.bfa.com.au
Australia	AUS-EXP04	ACT	Joint Accreditation System of Australia and New Zealand (JAS-ANZ)	Australian accreditation body	Brett Abraham	FT 32 on Organics; Manager Business Development and Technical Services	17 Sept 2010	www.jas-anz.org
Australia	AUS-EXP05	ACT	Eco Landuse Systems	Consultancy Organisation	Els Wynen	Researcher/-Consultant	17 Sept 2010	www.elspl.com.au
Australia	AUS-EXP06	ACT	Australian Quarantine and Inspection Service (AQIS), as part of DAFF	Australian government agency	Ian Lyall	Negotiation of Certified Organic Export conditions	17 Sept 2010	www.daff.gov.au/biosecurity
Australia	AUS-EXP07	QLD	Australian Certified Organic (ACO)	Organic Certification Body	Akiko Nicholls	Manager	07 Oct 2010	www.aco.net.au
Australia	AUS-EXP08	TAS	Agricultural Policy Group, Department of Primary Industries, Parks, Water and Environment	Australian State government	Alexandra Mitchell	Organic industry development officer	03 Dec 2010	www.dpiw.tas.gov.au
Australia	AUS-EXP09	VIC	Australian Competition and Consumer Commission (ACCC)	Consumer Protection Service	Sarah Proudfoot	General Manager Retail Markets Branch	24 Nov 2010	www.accc.gov.au
Germany	AUS-EXP10	ACT	Department of Agriculture, Fisheries and Forestry (DAFF)	Australian Government Department	Ryan Wilson	Manager, National Food Plan Unit, Agricultural Productivity Division	14 Sept 2010	www.daff.gov.au

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Country	Interview Code	State	Name of Organisation	Type of Organisation	Interviewee	Position/-Function	Date of Interview	Website
Germany	DE-EXP01	NRW	Bundesministerium für Landwirtschaft und Ernährung (BLE)	Federal Office for Agriculture and Food	Margit Backes	Head of Division 312 Federal Programm for organic agriculture and other forms of sustainable agriculture	12 Mar 2010	www.ble.de www.boeln.de
Germany	DE-EXP02	HH	Landeskontrollstelle, Behörde für Wirtschaft, Verkehr und Innovation	Government Control Agency (State level)	Michael Gertz	Officer for EC-Eco Regulation and certification system	31 Mar 2010	www.hamburg.de/bwvi
Germany	DE-EXP03	Bayern	BCS Öko Garantie GmbH	Organic Certification Body	Reiner Claus	General Manager Germany, Certification	10 May 2010	www.bcs-oeko.de
Germany	DE-EXP04	NRW	Gesellschaft für Ressourcenschutz (GfRS)	Organic Certification Body	Jochen Neuendorff	General Manager, Consultant	21 May 2010	www.gfrs.de
Germany	DE-EXP05	BW	Rechtsanwaltskanzlei H. Schmidt	Legal Consultancy	Hanspeter Schmidt	Lawyer, Specialisation in Administrative Law	31 May 2010	www.hpslex.de
Germany/-CH	DE-EXP06	CH	Forschungsinstitut für biologischen Landbau (FiBL)	Research Institute	Beate Huber	Senior Researcher Organic Regulation Systems	30 Mar 2010	www.fibl.org
Germany	DE-EXP07	NRW	Verbraucherzentrale NRW	Consumer Protection Service	Frank Waskow	Food Quality and Trade, Sustainability	31 Mar 2011	www.vz-nrw.de

Appendix 1

Interview guidelines for Germany and Australia

Interviewleitfaden: Bio-Importeure/Deutschland

Datum:
Befragter/Position:
Unternehmen:
Jahre bzw. Erfahrung im Geschäft:

Wertschöpfungskette

1. Geschäft allgemein?
   - Anzahl Mitarbeiter?
   - Einbindung in Konzernstruktur/ Unabhängiges Unternehmen
   - Jahresumsatz?
2. Mit welcher Art von Nahrungsmitteln handeln Sie?
   - Welche Nahrungsmittel beziehen sie?
   - Welche davon Bio, auch konventionell?
   - Anteil Bio am Gesamtgeschäft?
   - Warum handeln Sie mit Bioprodukten?
3. Woher kommen die Bio-Nahrungsmittel? Zulieferer?
   - Einkauf von... Produzenten, Exporteuren im Drittland, Agenten?
   - Welcher Anteil aus welchen Ländern? Produktabhängig?
   - Seit wann beziehen Sie jeweils aus den verschiedenen Ländern?
   - Wie viele Lieferanten? (in bestimmten Ländern/insgesamt)
   - Wie erfolgt die Auswahl der Lieferanten? Wie entsteht der Kontakt zu Lieferanten (Messe, Agenten...)
   - Kontakt über Agenten oder direkt?
   - Wie viel neue Lieferanten jährlich? Dauer der Beziehung mit bestehenden Lieferanten?
   - Informationen zu Lieferanten der Lieferanten? Rückverfolgbarkeit?
4. An wen verkaufen Sie die Bio-Nahrungsmittel?
   - Großhandel? EH?

- Kunden in Deutschland oder auch andere Länder? Welche?
- Langfristige Beziehung zu Kunden? Einzelne Bestellungen oder längerfristige Abnahmeverträge?

Qualität und Qualitätskontrolle

1. Warum Import aus jeweiligen Ländern?
   - Vor- und Nachteile gegenüber anderen Ländern?
   - Welche Änderungen in dieser Hinsicht in der Vergangenheit, wann, warum?
2. Was zeichnet *Produkte* aus Lieferländern jeweils aus? (Vergleich zu anderen Ländern)
   - Welches Image hat Bio in Deutschland?
   - Preis, Qualität etc.
   - Bestehen Unsicherheiten bzgl. der Qualität? Welche?
   - Wie stellen Sie sicher, dass Sie adäquate Liefermengen erhalten?
   - Image der Bioprodukte aus Land x in Deutschland, relevant?
   - Veränderung in den letzten Jahren, warum, welche Auswirkung auf Unternehmen?
3. Was zeichnet *Unternehmen* aus Lieferländern aus? (Vergleich zu anderen Ländern)
   - Geschäftspraktiken: Zuverlässigkeit, Kommunikationsprobleme? Lieferschwierigkeiten, persönliche Beziehungen wichtig (Vertrauen)?
   - Sprachbarrieren? Kulturelle Schwierigkeiten, Verhalten der Unternehmen?
   - Gemeinsame Wertvorstellungen, gleiche Bewertung und Einstellung bzgl. der Qualität von „Bio“?
   - Vor- und Nachteile
   - Veränderungen in den letzten Jahren? Auswirkung auf Zulieferbeziehungen?
4. Standards und Siegel
   - Welche (Bio-)Standards müssen die Nahrungsmittel erfüllen? (Lebensmittelsicherheit / Bio / FairTrade?)
   - Wer zertifiziert?
   - Besondere Probleme mit Standards (Verständlichkeit)? Internationale Vergleichbarkeit?
   - Besondere Probleme mit der Implementierung der Standards? Verstehen die Exporteure und die Drittlandsproduzenten die internationalen Bio-Standards? Gibt es national adaptierte, gleichwertige Bio-Standards?

- Gibt es Beratungsstrukturen für die Produzenten im Exportland, die unabhängig von den Öko-Zertifizierungsstellen (die ja nicht beraten dürfen) sind?
- Verlangen die Zertifizierungsstellen im Drittland einen ausreichenden Kenntnisstand vor einer Bio-Zertifizierung? Wie wird dies nachgewiesen?
- Zusätzliche Kontrolle über Zertifizierung durch Dritte hinaus? (z.B. eigenes Personal) falls möglich)
- Wie wird sich die Situation bzgl. neuer Importregelungen verändern (z.B. neue EU-Importregelung, neues kanadisches Gesetz für den Öko-Landbau), welche Auswirkungen auf Handelsstrategie?

5. Kooperationen und Informationsbeschaffung

- Mitgliedschaft in allgemeinen Handels- oder Sektor spezifischen Verbänden oder Organisationen? Hilfe/Nutzen bei der Qualitätskontrolle? Seit wann?
- Einkaufskooperationen mit anderen Importeuren?
- Woher bekommen Sie Informationen zum Marktgeschehen, Trends, Qualitätskontrolle,. . . ? (Verbände, Behörden, Kollegen, Lieferanten, . . .)
- Wer kann konkret Hilfe bei Geschäftstätigkeit bieten (Beratung o.ä.)?

Bewertung der institutionellen Rahmenbedingungen / Netzwerkakteure

Wie bewerten Sie den Einfluss der folgenden Gruppen und Faktoren auf ihr Unternehmen beim Import von Bio-Nahrungsmitteln?

Drei Stufen (keine Bedeutung, geringe Bedeutung, hohe Bedeutung; falls hohe Bedeutung: positiv oder negativ?)

- Staat/Behörden (z.B BLE)
- EU-Rechtsvorschriften zum Öko-Landbau
- Deutsche Anbauverbände
- Internationale Organisationen (z.B. IFOAM)
- Zertifizierungsstellen in Deutschland
- Zertifizierungsstellen im Ausland
- Unternehmensverbände
- Gewerkschaften
- Lieferanten allg.
- Käufer
- Konsumenten

- Arbeiter/Angestellte Ihres Unternehmens
- Wettbewerber
- Medien (Fernsehen, Radio, Presse)
- Umweltorganisationen
- Sprache des Lieferlandes
- Kommunikation/Informationsaustausch mit Lieferanten
- Langfristige Beziehung mit Lieferanten
- Persönliche Beziehung zu Lieferanten
- Andere:

Appendix 1

Interview guide: Importers of organic food products/Australia

Date:
Interviewee: Name / Position:
Company:

Supply chain

1. Business/company in general
   - Number of employees?
   - Chain/independent business
   - Procurement centralised?
2. Which kind of food products do you trade?
   - Which food products do you import?
   - Which of these are organic? Fresh produce, processed?
   - Organic food share of total business?
3. Where do the organic products come from? Suppliers?
   - Procure from wholesalers, agents, producers?
   - Which share from which country? Dependent on product?
   - Since when do you source from the respective supplying countries?
   - How many suppliers in certain countries/in total)?
   - How do you choose your suppliers? How is the first contact initiated (trade fairs, agents. . .)?
   - Are you directly in touch with your suppliers or via agents?
   - Do you have long-term or permanent relationships with your suppliers?
   - Information on suppliers of suppliers (if applicable)? Traceability?
4. Who do you sell the imported organic goods to?
   - Direct marketing to end consumers? Intermediary traders? Retailers?
   - Customers in Australia only or also other countries? If yes, which ones?
   - Long-term business relationships with customers? Individual orders or long-term supply contracts?

Appendix 1

Quality and quality control

1. Why import from certain countries?

   - Advantages and disadvantages compared to other counties?
   - Have there been changes regarding the supplier countries? If yes, when, and why?

2. What characterises the products from the respective supplier countries? (in comparison with other countries that deliver the same products)

   - Price, quality etc.
   - Do insecurities exist regarding product quality? If yes, which ones?
   - Image of organic food from certain countries (e.g. China) in Australia; relevant?
   - What is the image of „organic“ food in Australia? Relevance on business?
   - Have there been changes regarding these issues over the past years; when, why, which relevance for business?

3. What characterises companies/businesses from your supplier countries (compared to other countries)

   - Advantages / Disadvantages
   - Business practices / culture: reliability, communication problems? Supply difficulties, personal relationship important (trust)?
   - Language barriers? Cultural differences an issue?
   - Common values, same attitude and assessment of „organic“ quality?
   - Changes over the past, influence on supplier relationships?

4. Standards and labels

   - Which standards do the products you import have to fulfil?
   - Who certifies?
   - Specific problems with standards? International recognition?
   - Additional quality control or monitoring exceeding third party certification (if necessary)
   - Which role do certain organic brands or labels play?
   - Has the situation regarding standards changed, when, which impact does this have on your trade strategy or choice of supplier countries?

5. Cooperations and information flow

   - Are you member of general or sector specific (trade) associations or organisations? Since when? How do they assist you in monitoring product quality?

- Are you member of sourcing /purchasing cooperations with other importers?
- Who or where from do you get information on market trends, quality control... (Associations, certifiers, (inter-/national) authorities, colleagues, suppliers, customers...)
- Who can offer concrete help with optimising your business coordination and performance (consultation etc.)?

Assessment of the institutional framework / network actors

1. How do you rate the impact of the following groups and factors on import coordination of organic food products?

Three levels (no impact, little impact, high impact; if high impact, positive or negative?)

- State/Authorities (e.g. ...)
- Australian Organic Standard
- Private Australian Organic Standards
- International Organic Standards (e.g. IFOAM)
- Certification bodies in Australia
- Certification bodies in supplier countries
- Industry associations (e.g. OFA)
- Trade Unions
- Suppliers (in general)
- Buyers (in general)
- End consumers
- Workers/employees
- Competitors
- Media channels (TV, Radio, Press)
- Environmental organisations
- Language in supplier countries
- Communication /Information exchange with suppliers
- Long-term business relations with suppliers
- Personal relationships with suppliers
- Other:

Appendix 1

Online Questionnaire

Appendix 1

University of New England

Organic Trade
Company Survey

University of Cologne

For inquiries, please contact:
Amelie Bernzen, M.A.
UNE / University of Cologne
Ph. 0488 26 83 22 (mobile, until 22/7/11)
Ph. +49 (0) 221 470 7426
Email: a.bernzen@uni-koeln.de

To return by mail, send to:
Reply Paid 61883
Organic Research Group
Agronomy Department
University of New England
Armidale 2351 NSW

We kindly ask you to fill out the following questionnaire. It will take you approx. 15 minutes. We guarantee strict confidentiality in dealing with the collected data.

1. What are the main reasons for your company to trade/produce organics (max. 3 answers)?
☐ company philosophy supports "wholistic" organic ideology
☐ organic production is environmentally sustainable
☐ our customer demanded products in organic quality
☐ (personal) health benefits
☐ attractive margin
☐ improve company image / reputation in public opinion
☐ other reason(s):

2. Which organic products does your company <u>trade</u>? (check all applicable categories)
☐ unprocessed bulk foods (e.g. grains, pulses, beans…) ☐ processed bulk foods
☐ unprocessed animal products (e.g. meat, dairy, eggs…) ☐ processed animal products
☐ fresh fruit and vegetables ☐ processed/ frozen/dried fruit &vegetables
☐ prepackaged and -labeled, ready-for-shelf products
☐ other

3. Which organic products does your company <u>manufacture</u>? (check all applicable categories)
☐ unprocessed bulk foods (e.g. grains, pulses, beans…) ☐ processed bulk foods
☐ unprocessed animal products (e.g. meat, dairy, eggs…) ☐ processed animal products
☐ fresh fruit and vegetables ☐ processed/ frozen/dried fruit & vegetables
☐ prepackaged and -labeled, ready-for-shelf products ☐ we do not manufacture
☐ other

4. Which are your major retail brands?

5. Who do you sell your organic products to? (check all applicable categories)
☐ (specialized organic) retailers ☐ wholesalers
☐ other retailers (e.g. health food shops) ☐ direct sale to consumers (e.g. internet shop)
☐ supermarket chains ☐ farmers markets
☐ manufacturers and processors ☐ other

6. Is Australia your most important market, in terms of total number of customers?
☐ yes ☐ no → list max 3 main countries:

7. Which region(s) you export to? (check all applicable answers)
☐ Europe ☐ Asia ☐ Central and South America
☐ North America (incl. Mexico) ☐ Oceania ☐ we don't export → go to Q.9

8. Which organic products do you export? (check all applicable categories)

☐ unprocessed bulk foods (e.g. grains, pulses, beans…) ☐ processed bulk foods
☐ unprocessed animal products (e.g. meat, dairy, eggs…) ☐ processed animal products
☐ fresh fruit and vegetables ☐ processed/ frozen/dried fruit &vegetables
☐ prepackaged and -labeled, ready-for-shelf products
☐ other

9. Who do you import from? (check all applicable categories)

☐ producers ☐ wholesalers ☐ distributors
☐ agents ☐ manufacturers and processors
☐ own company headquarters or subsidiary(-ies) abroad
☐ own cultivation areas (or in close cooperation with growers)

10. Which region(s) does the majority of your organic imports come from, in terms of number of suppliers? (check all applicable answers)

☐ Europe ☐ Asia ☐ Central and South America
☐ North America (incl. Mexico) ☐ Oceania

11. Please specify your most important supplier countries (max 3) in order of relevance:

1. 2. 3.

12. Are there any countries from which you would rather *not* source your organic products?

☐ no ☐ yes, which countries **Why?**

13. Are there countries from which you would preferably source organics?

☐ no ☐ yes, which countries **Why?**

14. How important are the following criteria to you when choosing a supplier for organic products?

	not important at all --	-	+/-	+	very important ++	do not know/ no opinion
High aesthetic quality of product (appearance)	☐	☐	☐	☐	☐	☐
High sensorial quality of product (odor, taste)	☐	☐	☐	☐	☐	☐
Source country of product	☐	☐	☐	☐	☐	☐
Previous business with supplier	☐	☐	☐	☐	☐	☐
Good personal relationship with supplier	☐	☐	☐	☐	☐	☐
Low price	☐	☐	☐	☐	☐	☐
Low pesticide etc. residues in product	☐	☐	☐	☐	☐	☐
Organic certification provided	☐	☐	☐	☐	☐	☐
References provided by supplier	☐	☐	☐	☐	☐	☐
Fair social (working) conditions from farmer to fork	☐	☐	☐	☐	☐	☐
Reliability of delivery	☐	☐	☐	☐	☐	☐
Similar cultural/business mentality	☐	☐	☐	☐	☐	☐
Supplier's product meets my customers' preferences	☐	☐	☐	☐	☐	☐
Time zone location of supplier	☐	☐	☐	☐	☐	☐
Product meets AQIS import requirements	☐	☐	☐	☐	☐	☐

15. Please rate the likelihood of following events in business relationships with suppliers in China, Europe, South-East Asia, Central and South America, and the USA. Please answer these questions even if you do not have any business relations to these countries.

		very unlikely --	-	+/-	+	very likely ++	do not know/ no opinion
Delivered goods have quality issues	China	☐	☐	☐	☐	☐	☐
	Europe (EU)	☐	☐	☐	☐	☐	☐
	South-East Asia	☐	☐	☐	☐	☐	☐

	Central and South America	☐	☐	☐	☐	☐	☐
	USA and Canada	☐	☐	☐	☐	☐	☐
Delivered goods have excessive/increased level of pollutants	China	☐	☐	☐	☐	☐	☐
	Europe (EU)	☐	☐	☐	☐	☐	☐
	South-East Asia	☐	☐	☐	☐	☐	☐
	Central and South America	☐	☐	☐	☐	☐	☐
	USA and Canada	☐	☐	☐	☐	☐	☐
Goods are not delivered on time	China	☐	☐	☐	☐	☐	☐
	Europe (EU)	☐	☐	☐	☐	☐	☐
	South-East Asia	☐	☐	☐	☐	☐	☐
	Central and South America	☐	☐	☐	☐	☐	☐
	USA and Canada	☐	☐	☐	☐	☐	☐
Relationships are complicated because of cultural differences	China	☐	☐	☐	☐	☐	☐
	Europe (EU)	☐	☐	☐	☐	☐	☐
	South-East Asia	☐	☐	☐	☐	☐	☐
	Central and South America	☐	☐	☐	☐	☐	☐
	USA and Canada	☐	☐	☐	☐	☐	☐

16. Do you feel well informed about the legal requirements regarding organic food products in Australia (i.e. standards, certification, AQIS requirements etc.)

☐ yes ☐ no ☐ don't know/ no opinion

17. Is your company certified against any of the following organic and other food safety standards?

☐ yes, the following (check all applicable standards**)**:

- ☐ AS 6000-2009
- ☐ Australian National Standard for organic produce intended for export (AQIS)
- ☐ Australian Certified Organic (ACO)
- ☐ NASAA
- ☐ AUS-Qual
- ☐ Organic Growers of Australia (OGA)
- ☐ Tasmanian Organic-Dynamic Production
- ☐ Safe Food Production Queensland (SFPQ)
- ☐ Bio-Dynamic Research Institute (BDRI)

- ☐ USDA NOP (US-American organic Standard)
- ☐ JAS (Japanese organic standard)
- ☐ EU-Eco-Standard
- ☐ IFOAM
- ☐ HACCP
- ☐ IFS (International Food Standard)
- ☐ GlobalGAP
- ☐ other standard(s):

☐ no

18. Do you require your overseas suppliers to meet specific organic or other food standards?

☐ yes, the following (check all applicable standards):

- ☐ AS 6000-2009
- ☐ Australian National Standard for organic produce intended for export (AQIS)
- ☐ USDA NOP (US-American organic Standard)
- ☐ JAS (Japanese organic standard)
- ☐ EU-Eco-Standard
- ☐ IFOAM
- ☐ HACCP
- ☐ IFS (International Food Standard)
- ☐ GlobalGAP
- ☐ our company's own standard(s)
- ☐ our Australian certifier checks whether our supplier's organic certificate is acceptable
- ☐ other standard(s):

☐ no

19. Do you monitor whether the standards you require (question above) have in fact been met by your suppliers?

☐ yes, in the following manner (check all applicable answers):
- ☐ our company conducts own tests and audits
- ☐ our company commissions external control bodies to conduct tests and audits
- ☐ we request certificates from our suppliers which guarantee that standard requirements have been fulfilled
- ☐ other:

☐ no

20. In your opinion, how important is it for Australian Government to mandate organic certification for the domestic market?

not important at all --	-	+/-	+	very important ++	do not know/ no opinion
☐	☐	☐	☐	☐	☐

21. In your opinion, how important is it for the Australian organic market to have one single logo?

not important at all --	-	+/-	+	very important ++	do not know/ no opinion
☐	☐	☐	☐	☐	☐

22. Do you support your suppliers with regard to organic production and marketing methods?

☐ no

☐ yes, in the following areas (check all applicable areas):
- ☐ financially during conversion period of agricultural land
- ☐ financially in shape of covering certification fees
- ☐ training and advice regarding organic agricultural farming practices
- ☐ training and advice regarding marketing processes
- ☐ in long-term partnership projects

23. How likely is it for your company to discontinue sourcing organics from a particular supplier in the case of following events?

The supplier…	**very unlikely** to quit business relationship --	-	+/-	+	would **definitely quit** business relationship ++	do not know / no opinion
...does not sell at competitive prices.	☐	☐	☐	☐	☐	☐
… repeatedly delivers products with unacceptable quality flaws.	☐	☐	☐	☐	☐	☐
…does not reliably deliver on time.	☐	☐	☐	☐	☐	☐
… has had negative references (in media, by other trading partners, industry representatives).	☐	☐	☐	☐	☐	☐
…cannot provide required organic certificate.	☐	☐	☐	☐	☐	☐
Supplier's or farmer's working conditions socially inacceptable (e.g. not compliant with GlobalGAP or Fair Trade requirements)	☐	☐	☐	☐	☐	☐
Difficult personal relationship with supplier's main contact person/staff.	☐	☐	☐	☐	☐	☐

24. Over the past 5 years, how often have you permanently terminated trade relations with a supplier for one (or more) of the above mentioned reasons?

times

25. Over the past 5 years, how many times have you or other company staff members personally visited your suppliers abroad? (please refer to the most important supplier countries)

times

26. Some companies prefer close and personal relationships to their overseas suppliers; others insist that relations should remain professional. To which extent do you agree with the following statements?

Close personal relationships with suppliers…	strongly disagree --	-	+/-	+	strongly agree ++	do not know / no opinion
...stabilize buisness relations.	☐	☐	☐	☐	☐	☐
… are not really essential.	☐	☐	☐	☐	☐	☐
…are useful to secure product quality.	☐	☐	☐	☐	☐	☐
… are risky, because of the increased dependence on suppliers.	☐	☐	☐	☐	☐	☐
… increase the chances to be delivered within the agreed time.	☐	☐	☐	☐	☐	☐

27. How do you rate the influence of the following organizations and/or stakeholders on your company when it comes to questions regarding organic product quality or meeting the standards?

	no influence --	-	+/-	+	very strong influence ++	do not know/ no opinion
Environmental organisations	☐	☐	☐	☐	☐	☐
Agricultural associations	☐	☐	☐	☐	☐	☐
Media (TV, press, radio, internet)	☐	☐	☐	☐	☐	☐
Suppliers	☐	☐	☐	☐	☐	☐
Consumers	☐	☐	☐	☐	☐	☐
Customers	☐	☐	☐	☐	☐	☐
AQIS	☐	☐	☐	☐	☐	☐
Private organic certification bodies	☐	☐	☐	☐	☐	☐

28. How many direct overseas suppliers does your company have (approx.)?

29. How many employees does your company have (approx.)…?

… in Australia:

… worldwide (for multinational/transnational companies):

30. In which year did your company start doing business?

31. In which year did you start doing business *in organics*?

32. What is the share of organics of your company's total annual turnover?

33. What was your company's annual turnover in the last financial year (in AUD)? AUD

Thank you very much for taking the time to complete this form. Your participation is much appreciated! Please return the completed questionnaire to the Reply Paid address on the top of page 1, or by email to a.bernzen@uni-koeln.de

If you are interested in the results of our study, please provide your email or postal address in the field below. We will then send you a summary report of our findings after evaluation has been completed.

Address:
Email:

Appendix 2

Own contributions made to publications in Chapters 3 to 6

Articles 1 and 2 of this dissertation were authored by the PhD candidate alone. Article 3 was co-authored by Boris Braun, Article 4 was co-authored by Bill Pritchard.

Articles 1 through 3 are based on empirical material that was collected within the research project *ImPOrt* which was funded by the German Research Foundation (Deutsche Forschungsgesellschaft). PI of the project was Boris Braun.

To these three articles, the PhD candidate contributed in the following ways:

Preparation of DFG project application
Literature review, project conception and writing, approaching possible project partners; all with assistance by and in collaboration with Boris Braun.

Literature sighting and analysis
Identification, sighting and analysis of literature relevant to the respective foci of the articles.

Development of the theoretical and conceptual framework
Evaluation of possible theoretical approaches under supervision of Boris Braun, further independent conceptualisation of final theoretical framework.

Empirical field work and primary data analysis
Indentification and acquisition of interview partners, preparation, organisation and carrying out of 62 interviews (8 of which together with Boris Braun, in Germany and Australia), independent analysis of the primary data using MaxQDA software. Conception of standardised (online) questionnaire, evaluation of data using SPSS software.

Secondary data analysis
Analysis of secondary data such as trade statistics on the organic food sector, legal documents, industry reports etc.

Articles 1 and 2 were conceptualised and written by the PhD candidate alone. The first draft of the co-authored paper with Boris Braun (Article 3 of this collection) was also written by the

PhD candidate, and edited under supervision of Boris Braun. The revised paper was accepted by the journal *Environment and Planning A* on 10 September 2013.

Article 4 was co-authored by Bill Pritchard (Assoc. Professor of Economic Geography, University of Sydney). The article is based above all on literature review and secondary data. Writing the individual sections of the article was divided between the two co-authors in the following way:

Amely (Amelie) Bernzen:
- Title and short introduction
- Section "Lebensmitteleinzelhandel in Australien"
- Section "Regulierung von Nahrungsmittelsicherheit in Australien"
- Section "Fazit und Ausblick"
- Individual paragraphs of the sections "Landwirtschaftliche Produktion in Australien" and "Australiens Nahrungsmittelindustrie"

Bill Pritchard:
- Section "Zur historischen Perspektive"
- Majority of section "Landwirtschaftliche Produktion in Australien"
- Majority of section "Australiens Nahrungsmittelindustrie"

The PhD candidate was also solely responsible for the translation of Bill Pritchard's sections from English into German, as well as the final editing of the German article.

For all articles 1 through 4 in this dissertation, the PhD candidate designed and/or was responsible for choosing figures, graphs, tables and photos.

Appendix 2

Eigenständigkeitserklärung gem. §4(1)9

Ich versichere, dass ich die von mir vorgelegte Dissertation

Global Food Trade Beyond the 'Standards' Debate
Conventions, Institutions and Uncertainties in Organic Food Imports to Germany and Australia

selbständig angefertigt, die benutzten Quellen und Hilfsmittel vollständig angegeben und die Stellen der Arbeit – einschließlich Tabellen, Karten und Abbildungen –, die anderen Werken im Wortlaut oder dem Sinn nach entnommen sind, in jedem Einzelfall als Entlehnung kenntlich gemacht habe; dass diese Dissertation noch keiner anderen Fakultät oder Universität zur Prüfung vorgelegen hat; dass sie – abgesehen von unten angegebenen Teilpublikationen – noch nicht veröffentlicht worden ist sowie, dass ich eine solche Veröffentlichung vor Abschluss des Promotionsverfahrens nicht vornehmen werde. Die Bestimmungen der Promotionsordnung sind mir bekannt. Die von mir vorgelegte Dissertation ist von Prof. Dr. Boris Braun betreut worden.

Köln, im Februar 2014

Amely Bernzen M.A.

Appendix 2

CV Amely Bernzen

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Web	http://www.geographie.uni-koeln.de/bernzen-amelie.462.en.html
Academic positions	
Since 11.2008	**University of Cologne, Institute of Geography** **Research fellow / Lecturer** (Economic Geography)
03.2010 – 12.2012	**Coordinator and main researcher** within the DFG-funded project „*The impact of institutional conventions on product quality management in global supply chains. The example of organic food imports in Germany and Australia (ImPOrt)*“ (funding period: 2010-2012; PI: Boris Braun)
11.2007 – 03.2009	**University of Bamberg, Institute of Geography** **Research fellow / Lecturer** (Human Geography)
Other professional positions	
Since 11.2007	**PIPER Publishers**, Munich (freelance) **Book reviewer for the non-fiction sector** (Dutch and English books, commission basis)
Since 07.2006	**Translator (German-English) (freelance)** e.g. for Prof. Dr. Torsten Fritzlar, Institute for Didactics of Mathematics, Martin-Luther-University in Halle-Wittenberg
09.2006 – 10.2007	**Nigor Net BV**, Amsterdam, The Netherlands **Full time position as Marketing and Distribution Manager** in Europe for the outdoor sports equipment brand Eureka!

Appendix 2

Tertiary education	
10.2013	**University of Cologne, Institute of Geography**
	PhD in Economic Geography
10.2000 – 03.2007	**University of Lüneburg, Faculty of Applied Cultural Sciences**
	Degree: M.A. of Applied Cultural Sciences
	Majors: Human Geography, Business Administration
02.2005 – 07.2005	**Christelijke Hogeschool Nederland (CHN)**, Leeuwarden, The Netherlands
	ERASMUS-Study abroad programme
	Majors: Conference and Tourism Management
Secondary Education	
08.1992 – 06.2000	**Gymnasium St. Mauritz**, Münster (Westfalen)
01.1998 – 07.1998	**Leeming Senior High School**, Perth, Australia
01.1989 – 07.1992	**German School Johannes Gutenberg**, Sydney, Australia
Language proficiency	
German	Fluent (native)
English	Fluent (native)
Dutch	Fluent
French	Good (reading, writing), intermediate (speaking)
IT/Software skills	
	Windows-Office-Programmes (PC and Macintosh)
	Data analysis software: SPSS (quantitative), MAXQDA (qualitative)
	EndNote, LaTeX

Appendix 2

Publications

BERNZEN, A. (in review): Reassessing Supplier Reputation in International Trade Coordination. A German and Australian perspective of Global Organic Food Networks. ERDE (Special Issue on International Agri-Food Networks).

BERNZEN, A. & B. BRAUN (2014): Conventions in Cross-Border Trade Coordination. The Case of Organic Food Imports to Germany and Australia. Environment and Planning A, volume 46, doi:10.1068/a46275.

BERNZEN, A. (2013): Ökologische Landwirtschaft und globale Ernährungssicherheit: Potentiale und Limitationen. Geographische Rundschau 65(12), 54-57.

BERNZEN, A. (2013): Staatliche Regulierung von Bio-Standards – Fluch oder Segen für Handel und Vermarktung? Ein deutsch-australischer Vergleich. In: FRANZ, M. (ed.): Liefernetzwerke im Einzelhandel. Reihe Geographische Handelsforschung 18. Mannheim (Metagis Verlag): 37-60.

BERNZEN, A. & B. PRITCHARD (2012): Australien als „Global Food Superpower"? Landwirtschaft und Lebensmittelsektor Australiens im Wandel. Geographische Rundschau 64(10), 20-28.

BERNZEN, A. (2012): 'Sustainable Standards'? How Organic Standards in the EU and Australia Affect Local and Global Agrifood Production and Value Chains. In: FARMAR-BOWERS, Q., HIGGINS, V. and J. MILLAR (eds.): Food Security in Australia. New York (Springer): 281-296.

BERNZEN, A. & A. FOLLMANN (2012): Green Economy. Neue Leitidee für Nachhaltiges Wirtschaften. In: KLJB (Hrg.): Ökologisches Wirtschaften. BUFO 2.2012, 6-7.

BERNZEN, A. & P. DANNENBERG (2012): Ein „Visum" für Obst. Umwelt- und Sozialstandards im internationalen Lebensmittelhandel. Geographische Rundschau 64(3), 44-52.

BERNZEN, A. (2010): Die Weltreise eines Familienzeltes. Geographische Rundschau 62(4), 52

Appendix 2

BRAUN, B., BERNZEN, A. & A. SCHÜTTEMEYER (2010): Australien - ein Kontinent der Städte. Praxis Geographie 40(1), 4-9.

BERNZEN, A. (2008): Australia's food trade with East Asia – overcoming political and cultural barriers. In: BRAUN, B. & A. SCHÜTTEMEYER (Hrsg.): Australien im Prozess der Globalisierung. KOALAS Band 8, Tübingen: 99-117.

BERNZEN, A. (2001): Europeans and Aborigines in Australia. In: HILTSCHER, M. (Hrsg.): Intermingling Fiction with Truth. Münster.

Köln/Cologne, February 2014