

**Labelling schemes for organic food:
Consumer attitudes, preferences and willingness-to-pay
in six European countries**

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List of abbreviations

AIAB	Associazione Italiana per l'Agricoltura Biologica
ANOVA	Analysis of variance
ASC	Alternative specific constant
CCPB	Certificazione e Controllo Prodotti Biologici
CH	Switzerland
CZ	Czech Republic
DE	Germany
DK	Denmark
EC	European Commission
EEC	European Economic Community
EG	Europäische Gemeinschaft
EU	European Union
EWG	Europäische Wirtschaftsgemeinschaft
F	Frequent buyer of organic food
FG	Focus group
G	Gelegenheitskäufer von Öko-Lebensmitteln
GCSE	General Certificate of Secondary Education
I	Intensivkäufer von Öko-Lebensmitteln
ICEA	Istituto per la Certificazione Etica e Ambientale
IT	Italy
MNL	Multinomial logit
N	Sample size
O	Occasional buyer of organic food
OF&G	Organic Farmers & Growers
RPL	Random parameter logit
S-O-R	Stimulus-Organism-Response
SPSS	Statistical Package for the Social Sciences
UK	United Kingdom
WTP	Willingness-to-pay

1 Introduction

1.1 Labelling schemes for organic food in Europe

The European market for organic food has undergone continuous growth during the past decades. While accurate statistics on market data are rare, there are strong indications that absolute market shares and per capita spending for organic food vary considerably across the countries (Schaack et al. 2011:156). In countries with relatively large markets for organic food (e.g. Germany, France, United Kingdom) and/or high per-capita spending levels (e.g. Denmark, Austria), the largest share of organic products is sold via conventional supermarket chains. In these countries, the national organic markets are characterised by increasing competition among organic market actors and higher levels of product and price differentiation. In countries with emerging organic markets (e.g. Czech Republic, Poland), in contrast, a lack of domestic organic food processors results in high import shares of processed organic products. The range of organic products widely available in conventional supermarkets is mostly limited.

The diverse national organic markets within the European Union (EU) have in common that they all fall under EU legislation for organic food. In the EU, only those products can be labelled as organic¹ food that are certified according to the principles of organic production, certification and labelling of Regulation (EC) No 834/2007 (and corresponding implementing regulations). A novelty in the regulatory environment of the European organic market is the introduction of the mandatory EU logo for organic food. Since July 2010, prepacked organic food produced in the EU must be labelled with the new EU logo.² The logo indicates that a product has been produced and processed according to organic principles under the inspection of an accredited control body. The new logo replaced the former EU logo whose use was optional. As a further change, the origin of the raw materials must now be indicated next to the logo, either with 'EU Agriculture', 'non-EU Agriculture' or 'EU/non-EU Agriculture' (Regulation (EC) No 834/2007). Only if all agricultural raw materials have been farmed in the same country, the terms 'EU' and 'non-EU' can be replaced or supplemented by the name of that country (Regulation (EC) No 834/2007).

The new logo was introduced to strengthen the organic sector by making the identification of organic products easier for consumers (Regulation (EU) No 271/2010). The practical

¹ This also refers to the respective translated terms of 'organic' in the different EU languages, such as 'Bio', 'Öko', 'biologico', 'øko'.

² A transition period is granted until July 2012 (Regulation (EU) No 271/2010).

relevance of organic certification logos results from the fact that consumers are not able to verify whether a product is an organic product. Consumer trust is therefore a delicate issue in the organic market. An instrument to gain consumer trust is product labelling based on third-party certification of the supply-side (Albersmeier et al. 2010:71, Roe and Sheldon 2007:1020), which has a long tradition in the organic sector in Europe. Besides the EU logo, a variety of different voluntary organic certification logos is found in many European countries with different kinds of organisations standing behind the labelling scheme: (i) Voluntary governmental logos (e.g. Danish ‘Ø’ logo, German ‘Bio-Siegel’) exist in some but not in all European countries. (ii) Organic logos of private organisations are found in virtually all European countries; however their relative importance varies considerably (Janssen and Hamm 2011a:16). The most common private organisations with own organic certification logos are farmers’ and organic sector associations (e.g. Bio Suisse, Demeter, Soil Association) and control bodies (e.g. Ecocert).

The introduction of a mandatory EU logo for organic food represents a novelty in the European market and raises the question whether voluntary organic certification logos should additionally be used for product labelling. From the viewpoint of producers, processors and retailers, marketing budgets as well as space on product packages are limited. Furthermore, some organic logos³ require that additional criteria regarding the production and/or control process going beyond the mandatory EU principles are met (e.g. Demeter, Danish ‘Ø’), usually involving greater effort for the operator. The use of voluntary organic certification logos in addition to the mandatory EU logo might thus be questioned by practical considerations. On the other hand, the use of voluntary organic logos might be beneficial for suppliers provided that consumers associate an ‘added value’ with the additional logo, for instance stricter production standards, higher food safety or any other perceived quality aspect. For suppliers it is thus important to know which organic certification logos are preferred by consumers. This question is of similar importance for organisations owning an organic certification logo. With the introduction of the mandatory EU logo, organisations owning an organic logo need to consider how their logo is evaluated by consumers.

To the author’s knowledge, little previous empirical findings exist on consumer perceptions, attitudes, preferences and willingness-to-pay regarding *different* organic certification logos. While numerous studies investigated consumer-related aspects of organic food (such as

³ In the present dissertation, the term ‘organic logo’ refers to organic certification logos and not to manufacturer or private brands.

attitudes, willingness-to-pay and buying behaviour), most of these studies were concerned with organic as opposed to conventional food, where it was not further distinguished between logos of different organic labelling schemes. For instance, several studies based on surveys and experiments used a single logo or the prefix 'organic' to distinguish organic from conventional products (e.g. Aertsens et al. 2009, Tagbata and Sirieix 2008, Hoogland et al. 2007, Scarpa et al. 2007, Botonaki et al. 2006, Honkanen et al. 2006, Teratanavat and Hooker 2006, Loureiro et al. 2001, Magnusson et al. 2001). A study from the United States found that consumers were willing to pay a higher price premium for the USDA organic logo than for a generic organic label (Van Loo et al. 2011). Regarding consumer perceptions and attitudes towards a mandatory EU logo for organic food, virtually no previous knowledge exists. The following questions remain open: Do consumers perceive differences among labelling schemes standing behind different organic certification logos? Do consumers prefer certain organic logos over others so that they are actually willing to pay a price premium? Do consumers accept organic products without a certification logo in favour of a lower price?

1.2 Research objectives

The overarching aim of the present dissertation was to give recommendations for owners of organic certification logos and market actors in the organic sector regarding consumer-related aspects of organic labelling schemes. In detail, the dissertation was concerned with two main objectives:

- Firstly, it was aimed to explore and analyse consumer perceptions, attitudes, preferences and willingness-to-pay (WTP) regarding different *voluntary organic labelling schemes*. The purpose was to
 - (i) determine which organic logos are most successful in attracting consumer preferences in form of a high WTP,
 - (ii) reveal key factors that influence consumer preferences and WTP for organic logos, and
 - (iii) identify potential added values important to consumers that organic labelling schemes could incorporate to differentiate their scheme from other organic logos in the eyes of consumers.
- Secondly, it was aimed to explore and analyse consumer perceptions and attitudes towards a *mandatory EU logo and indication of origin for organic food*. This was done to

- (i) get insights into positive aspects that consumers associate with the new mandatory labelling, and
- (ii) identify potential issues that might hinder consumer acceptance of the new labelling.

The objectives were addressed by a combination of qualitative and quantitative methods of consumer research. The six study countries regarding the first objective were Czech Republic, Denmark, Germany, Italy, Switzerland and United Kingdom, of which the five EU countries were also subject of the second objective. Data collection took place within the research project “Economic analysis of certification systems for organic food and farming (CERTCOST)” with financial support from the European Community under the 7th Framework Programme.

1.3 Structure of the dissertation

This dissertation is organised as follows.

Chapter 2 “Economic framework of organic labelling schemes” introduces the economic framework of product labelling and the specific case of organic certification logos. The classification of product attributes in information economics and the special characteristics of credence goods are outlined. The policy instrument of product labelling based on third-party involvement is presented. Different forms of public and private involvement in third-party certification for organic food are depicted. Finally, critical success factors for organic labelling schemes are summarised and the crucial importance of the consumer perspective is highlighted.

Chapter 3 “Theoretical framework of consumer behaviour” elucidates why the psychical constructs of consumer perceptions, attitudes, preferences and willingness-to-pay are subject of this dissertation. The theoretical framework of consumer behaviour based on Stimulus-Organism-Response-Models is outlined. The constructs of consumer perceptions, attitudes, preferences and willingness-to-pay are defined and their relation to consumer behaviour is discussed.

Chapter 4 “Methods and research design” justifies the chosen research methods for addressing the objectives of this dissertation. The rationale for the combinations of qualitative and quantitative methods is outlined. The methods of focus group discussions, choice experiments and structured interviews are discussed with respect to their adequacy for the present research objectives. Furthermore, the research design of the present study is outlined.

Chapter 5 “Consumer perception of different organic certification schemes in five European countries” presents exploratory results of the qualitative study on consumer perceptions, attitudes and preferences regarding different voluntary organic certification logos. This chapter contributes to the first objective of this dissertation by outlining potential ‘added values’ important to consumers that organic labelling schemes could incorporate to differentiate themselves from other organic logos.

Chapter 6 “Consumer perception of standards and labels for organic food in Germany” goes into further detail on the results of the qualitative study in Germany as the largest domestic organic market within Europe.

Chapter 7 “Product labelling in the market for organic food: Consumer preferences and willingness-to-pay for organic certification logos” addresses the first objective of this dissertation. The results of the quantitative study with choice experiments and structured interviews are outlined and discussed.

Chapter 8 “Consumer attitudes towards a mandatory EU logo for organic food” deals with the second objective of this dissertation by presenting and discussing the results of the combined qualitative and quantitative analysis of consumer attitudes towards a mandatory EU logo for organic food.

Chapter 9 “Discussion and conclusions” discusses the key findings of the present dissertation regarding three thematic aspects. Finally, conclusions are drawn for different actors in the organic market – firstly for organisations owning an organic certification logo, and secondly, for producers, processors and retailers. In addition, recommendations are made for potential future research areas that emerged from the present findings. The dissertation closes with a critical appreciation of the role of organic certification logos.

Chapter 10 “Summary” contains a short summary in English language and an extended version in German language.

2 Economic framework of organic labelling schemes

Organic certification logos represent a form of product labelling (Jahn et al. 2005:53, Golan et al. 2001:119). In economics, product labelling is defined as “any policy instrument by a government or other third party that somehow regulates the presentation of product-specific information to consumers” (Teisl and Roe 1998:1). This chapter discusses the economic framework of organic labelling schemes. The first section outlines the classification of product attributes in information economics and the special characteristics of credence goods. The second section introduces the policy instrument of product labelling based on third-party involvement and presents different forms of public and private involvement in third-party certification of organic food. The last section highlights critical success factors in a market with competing organic labelling schemes.

2.1 Organic products as credence goods

The importance of credible labelling in the case of organic food results from the special characteristics that make a food product an ‘organic’ product. The classification of product attributes introduced by Darby and Karni (1973) illustrates the special characteristics of organic food from an economic perspective. According to information economics, each product possesses a variety of attributes which involve varying levels of information flows and uncertainty from the consumer perspective (Darby and Karni 1973:68). So-called search attributes can be evaluated prior to purchase (e.g. price, colour), whereas experience attributes can only be evaluated after consumption (e.g. taste, durability). Credence attributes, in contrast, can either not be verified by consumers at all or only at high transaction costs. Typical credence attributes in the food sector are characteristics that result from the production process, such as particular types of animal husbandry or the non-use of chemical fertilisers (Golan et al. 2001:128).

Throughout Europe and in many other countries, organic food products must comply with defined principles for the production process, in order to be labelled as organic. The process-related food attribute ‘organic’ is thus a credence attribute which consumers cannot verify neither before nor after consumption (Roe and Sheldon 2007:1020, Jahn et al. 2005:55, Golan et al. 2001:128). Even with laboratory tests it is sometimes difficult to detect whether a food product was produced organically. Credence attributes are characterised by an asymmetric distribution of information between suppliers and consumers (Darby and Karni 1973:68), which impedes on the efficient operation of markets (Teisl and Roe 1998:140). In case of no

external intervention, credence good markets may result in market dysfunctions such as adverse selection, so that high quality producers would not be adequately rewarded and low quality producers not be punished (Grolleau and Caswell 2006:472, Akerlof 1970:493). As Golan et al. (2001:130) explain, the “possibility of deception erodes the efficiency of the market. Widespread deception makes consumers less responsive to messages, even those that provide truthful information.”

The willingness of suppliers to disclose information on credence attributes depends on whether the attribute is mostly desirable among consumers (e.g. environmentally friendly production) or undesirable (e.g. high amounts of artificial additives) (Golan et al. 2001:129). An unregulated market for credence goods is particularly prone to supply-side fraud if (i) the credence attribute is mostly desirable and (ii) the risk of being uncovered as a fraudulent supplier is neglectable, which both applies to the case of organic food. In consequence, “credence attributes may require an increased level of external intervention in order for markets (...) to function effectively” (Grolleau and Caswell 2006:474).

2.2 Third-party involvement in organic labelling schemes

Product labelling is a policy instrument to overcome the deficiencies inherent in credence good markets. Two distinct forms of product labelling are found, mandatory and voluntary labelling (Golan et al. 2001:119, Teisl and Roe 1998:140/1). Mandatory labelling involves a statutory basis with the objective of providing consumers with information about attributes that are regarded essential for a buying decision, for instance about undesirable attributes that suppliers would otherwise disguise. One example currently discussed in the European food sector is the mandatory labelling of the use of genetically modified organisms. Voluntary labelling, in contrast, is mostly aimed at highlighting desirable product attributes (Golan et al. 2001:136).

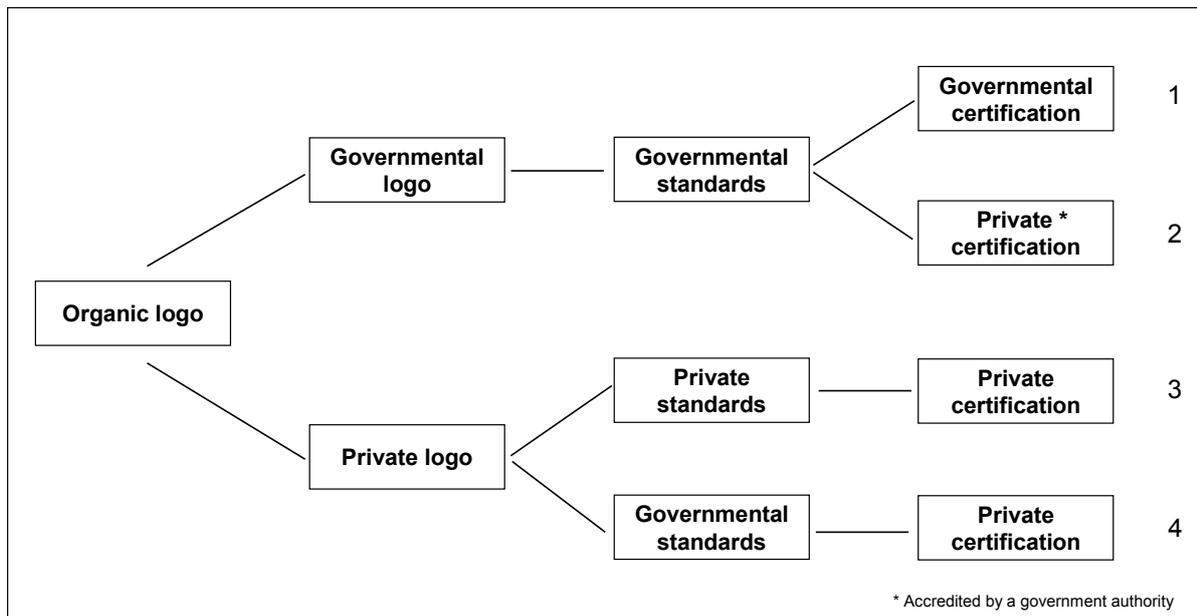
Organic certification logos are an example of a voluntary labelling system with third-party involvement.⁴ In the case of organic food, standard setting, certification and enforcement are undertaken by so-called third-parties. The term third-party refers to an independent organisation which is neither the supplier (first party) nor a contractor who acts in the interest of the supplier (second party) (Tanner 2000:415). Third-party organisations enjoy greater

⁴ While it is *mandatory* that products labelled as organic comply with Regulation (EC) No 834/2007 in the EU, participation in the scheme is *voluntary*, i.e. not all suppliers must provide information about organic or non-organic production (unlike in mandatory labelling schemes where specific information *must* be presented to consumers).

legitimacy provided that consumers regard them as having “no stake in the outcome of the transaction” (Hatanaka et al. 2005:358). A third-party can be any kind of private organisation or government agency.

Figure 1 provides a systematic overview of possible combinations of governmental and private involvement in organic labelling schemes. It can generally be differentiated between governmental and private organic logos, furthermore between governmental standards and standards of private organisations. In the European Union, the minimum standards for organic production, processing, certification and labelling are regulated at EU level by Regulation (EC) No 834/2007 and respective implementing regulations. In the Member States, organic certification and control can be carried out in either of three ways: By accredited private bodies, by government bodies, or by a combination of both forms. Denmark and Finland, for instance, have governmental control authorities. Most EU countries (e.g. Czech Republic, Germany, Italy, United Kingdom), in contrast, employ a system with private control bodies accredited by government authorities.

Figure 1: Governmental and private involvement in organic labelling schemes



Source: Adapted from Golan et al. (2001:132)

While EU law regulates the minimum requirements for organic products, other organisations are free to define rules which may – but do not have to – exceed and/or supplement the requirements of the EU Regulation. In fact, many different governmental and private organic labelling schemes are currently found in the European market for organic food.⁵ Some examples are presented here to explain the different forms of governmental and private involvement:

- Governmental organic logos: In Denmark and the Czech Republic, the production standards of the governmental scheme basically correspond with the EU standards but some further requirements regarding the control procedure must be met. The Danish ‘Ø’ logo (category 1 in Figure 1) requires that the latest preparation of the product (packaging and/or labelling) is undertaken by a company in Denmark under the inspection of the Danish governmental control authorities (Bekendtgørelse om økologiske fødevarer m.v. No 1258, Fødevarestyrelsens vejledning om økologiske fødevarer m.v.). The Czech governmental logo (category 2) requires that the product must have been certified by a private control body (KEZ, Biokont, AbCert) authorised by the Ministry of Agriculture (Act on Organic Farming No 242/2000 Coll.). The German governmental logo Bio-Siegel can be used upon request on all products complying with the EU Regulation (Öko-Kennzeichengesetz). Like the EU Logo, the Bio-Siegel can thus be based on certification by any control body accredited in the EU (category 1 and 2). The French governmental logo ‘AB’ represents a special case not depicted in Figure 1. While the logo is owned by a government authority, it is administered by a private organisation. The underlying standards partly exceed the EU standards. Certification is carried out by certain private control bodies (Ministère de l’agriculture et de la pêche 2010, 2009).
- Private organic logos cover the logos by farmers’ and organic sector associations, certification bodies, and other private organisations. Many private logos are based on own private standards set by the respective organisation owning the logo (category 3). However, there are great differences between the various schemes in the extent to which the requirements differ from the EU Regulation. Demeter, for example, has own production standards exceeding and supplementing the EU Regulation in many areas. Some logos by control bodies, in contrast, ‘only’ signal that the product has been certified according to the EU requirements by the respective control body (category 4).

⁵ To the author’s knowledge, there is no current publication that lists all European organic certification logos.

The overall aim of third-party involvement is to increase the credibility of the label and raise consumer trust. Ideally, a credible label transforms credence attributes into search attributes (Grolleau and Caswell 2006:472). Golan et al. (2001:135) conclude that properly designed and implemented third-party services “reduce uncertainty for producers, reduce search and information costs for consumers, and increase the likelihood that consumers will purchase those goods and services that best match their preferences”. Yet, the credibility of a voluntary label depends on the credibility of the third-party organisation involved in the labelling scheme (Albersmeier et al. 2010:71, Jahn et al. 2005:70, Golan et al. 2001:134). Product labelling with third-party involvement diminishes the problems of asymmetric information in the producer-consumer relationship only if final consumers trust the labelling scheme (Moussa and Touzani 2008:528, Spiller 1996:283). It can thus be concluded that product labelling involves a shift of the credence attribute from the producer side to the third-party organisation (Albersmeier et al. 2010:71).

This phenomenon is confirmed by several studies on organic food consumption which found that scepticism and uncertainty towards organic labelling schemes prevented consumers from buying (more) organic food (Aertsens et al. 2009:1050, Krystallis et al. 2008:180, Hughner et al. 2007:104, Padel and Foster 2005:619f., Lea and Worsley 2005:862, Aarset et al. 2004:99f.). Consumers often lack knowledge on organic certification and agricultural practices (Aertsens et al. 2009:1050, Sawyer et al. 2009:56f., Aarset et al. 2004:99f., Spiller et al. 2004:6, Spiller 1999:58). For the success of an organic certification logo it thus needs to be ensured that consumers recognise the logo, know what it stands for and trust the underlying scheme.

2.3 Competition among organic labelling schemes

In addition to the prerequisites just mentioned above, a further critical success factor comes into play when several labelling schemes on the same subject exist in the market. Golan et al. (2001:134) argue that labelling schemes must be responsive to consumer preferences, since “consumers will search out goods with quality standards that match their preferences”. The authors warn that in case of strict standards raising the product price beyond consumers’ willingness-to-pay, “consumers will seek products with lower standards” (Golan et al. 2001:134). This is an interesting question in the context of organic labelling, given the variety of voluntary schemes with standards exceeding the statutory EU requirements. The new EU logo is mandatory so that other logos can only be used in addition. In such a competitive environment, the success of an organic logo not only relies on the extent to which consumers

prefer organic over conventional food, but further on the extent to which consumers prefer organic products of that particular scheme over other organic products. As outlined in Chapter 1, practical considerations might question the use of voluntary organic logos in addition to the mandatory EU logo. In this sense, voluntary organic logos compete with the mandatory EU logo. Marketing theory suggests that a product must offer an added value or a unique selling proposition important to consumers in order to successfully compete in the market (Armstrong and Kotler 2009:218). This means for voluntary organic labelling schemes that they must offer an 'added value' appreciated by consumers in order to stay in the market. One objective of this dissertation was therefore to identify potential added values of organic labelling schemes that are important to consumers.

The points outlined above highlight the crucial role of the consumer side in voluntary product labelling schemes. Above all, the success of an organic certification logo depends on consumer response to the logo. The aim of the present dissertation was therefore to shed light on consumer perceptions, attitudes, preferences and willingness-to-pay regarding organic certification logos. The following chapter outlines the theoretical framework of consumer behaviour to illustrate the relation between consumer response and the constructs of consumer perceptions, attitudes, preferences and willingness-to-pay.

3 Theoretical framework of consumer behaviour

The aim of the present dissertation was to investigate consumer perceptions, attitudes, preferences and willingness-to-pay regarding organic certification logos. It was assumed that these concepts play a role in consumer decision-making surrounding the purchase of an organic product. The present research is thus allocated in the field of consumer behaviour. This chapter elucidates why the psychical constructs of consumer perceptions, attitudes, preferences and willingness-to-pay were chosen for this dissertation. After brief introductory remarks on the study of consumer behaviour, the first section outlines the process of consumer decision-making to clarify the focus of the present research. The second section introduces the theoretical framework of Stimulus-Organism-Response models upon which the present research was conceptionally based. The final section further explains the concepts of consumer perceptions, attitudes, preferences and willingness-to-pay and their potential influence on consumer behaviour.

The study of consumer behaviour covers all aspects surrounding the “processes involved when individuals or groups select, purchase, use or dispose of products, services, ideas or experiences to satisfy needs and desires” (Solomon et al. 2006:6). While the study of consumer behaviour originated in the field of marketing, consumer behaviour is nowadays of interest to the social sciences in general, given the important role that consumption activities play in today’s societies with their economic, political, social and cultural implications (Blackwell et al. 2006:6f., Solomon et al. 2006:6). As an applied behavioural science the study of consumer behaviour draws on a number of disciplines such as psychology, sociology, economics, anthropology and neurology (Kroeber-Riel et al. 2009:10).

Within the research on consumer behaviour, it can be differentiated between total models and partial models. Total models like the one by Howard and Sheth (1969) attempt to join all factors that influence all kinds of consumer behaviour into one model (Nieschlag et al. 2002:629f.). Total models have been widely criticised for their limited generality (Kroeber-Riel et al. 2009:417). Nowadays, it is largely recognised that the great variety of different kinds of consumer behaviour (such as extensive decision-making, habitual buying, impulse buying) can hardly be captured by one general model (Kroeber-Riel et al. 2009:417f., Foscht and Swoboda 2007:28). Partial models are applied instead which focus on selected constructs to explain certain kinds of consumer behaviour under specific situational conditions (Nieschlag et al. 2002:634). Insofar, the intention of the present research is *not* to identify and explain all variables that influence consumers’ buying behaviour regarding organic

certification logos, but rather focus on key constructs which are regarded as important in the literature.

3.1 Process of consumer decision-making

In the literature, it is assumed that the purchase of a product is embedded in a complex process of consumer decision-making, which is transferred into simplified models to facilitate a systematic analysis. Even though these models have been criticised for their limited generality (Kroeber-Riel et al. 2009:417), a short overview is presented here to illustrate the wider context of consumer decision-making and explain why the present research focused on selected stages of the process.

In many text books on consumer behaviour, the process of consumer decision-making is divided into different stages. While the terminology as well as the number of stages slightly vary across different authors, the starting point of most models is the recognition of a problem or need, followed by the search for information, the evaluation of alternatives, the purchase or choice of a product, and one or several stages surrounding the outcomes of the purchase (Kroeber-Riel et al. 2009:416, Blackwell et al. 2006:70f., Solomon et al. 2006:258f., Assael 2004:30f.). The stages are not seen to occur in a strictly consecutive order but might overlap, coincide or feedback to earlier stages (Kroeber-Riel et al. 2009:416).

It is agreed upon that the models depict an 'ideal' process of decision-making. In reality, the extent to which a consumer actually goes through each stage of the process depends on the nature of the decision at hand (Armstrong and Kotler 2009:178, Blackwell et al. 2006:88, Solomon et al. 2006:261f.). The models are best suited to decisions which are characterised by extensive problem-solving (Foscht and Swoboda 2007:32, Assael 2004:30). Decisions characterised by so-called limited problem-solving require less effort for each activity and some stages might be skipped, whereas habitual decision-making only involves selected stages (Solomon et al. 2006:261). Yet, impulse buying is not adequately captured by the models at all (Blackwell et al. 2006:92).

Subject of the present dissertation are certification logos for organic food. The purchase of food is mostly regarded as habitual decision-making characterised by routines with low effort (Grunert 2005:384). Purchase decisions for food products are usually taken in-store without a preceding stage of information search. In case a consumer is a loyal customer of a particular brand, the evaluation of alternatives is of limited extent (Armstrong and Kotler 2009:179, Blackwell et al. 2006:91). In line with previous studies on product labelling (e.g. McEachern and Warnaby 2008, Loureiro and Umberger 2007, Loureiro et al. 2001), it was assumed for

the present research that a purchase decision for non-branded products involves some conscious control, so that alternatives are evaluated and preferences are formed. Apart from the actual purchase stage, the evaluation of alternatives was seen as the most relevant stage of consumer decision-making for the present research, given that the stages ‘need recognition’ and ‘information search’ are generally of low relevance in the context of food purchases.

3.2 Stimulus-Organism-Response models

The theoretical framework for the analysis of consumer perceptions, attitudes, preferences and willingness-to-pay regarding organic certification logos was based on the neobehaviouristic paradigm of structural models of consumer behaviour. Structural models of consumer behaviour conceptualise consumer behaviour as a response to a variety of factors. In contrast to the behaviouristic tradition, the focus lies on internal psychological processes within the consumer’s organism and not merely on observable stimuli such as product attributes (Kroeber-Riel et al. 2009:34f.). Due to the explicit inclusion of organismic processes, these models are often referred to as Stimulus-Organism-Response (S-O-R) models. S-O-R models can be applied to all forms of observable consumer behaviour, e.g. product purchases in terms of quality and quantity or shop visits (Foscht and Swoboda 2007:30).

According to S-O-R models, consumer behaviour is not a direct response to an observable stimulus, but rather the outcome of unobservable psychological processes that influence stimulus perception and evaluation (Nieschlag et al. 2002:631). These internal organismic processes are also referred to as intervening factors between the stimulus and the response, which is why some authors use the term S-I-R models (e.g. Kroeber-Riel and Weinberg 2003:30f.). Psychological processes, in turn, are assumed to be influenced by the consumer’s social and physical environment (Kroeber-Riel et al. 2009:457f.).

Among the complex internal processes involved in consumer behaviour, it can be differentiated between mainly activating and mainly cognitive processes (Kroeber-Riel et al. 2009:51f.). Complex activating processes drive human behaviour and can be understood as the motive force of behaviour. Kroeber-Riel et al. (2009:55f.) identify emotions, motivations and attitudes as the three most important mainly activating components. Mainly cognitive processes encompass complex deliberate processes such as information perception, evaluation, learning, decision-making and memory (Kroeber-Riel et al. 2009:274f., Trommsdorff 2009:78f.). It needs to be emphasised that activating and cognitive processes are largely interwoven and influence each other (Kroeber-Riel et al. 2009:51, Foscht and Swoboda 2007:37).

In S-O-R models, the distinction among stimuli, organismic processes and response is not of exclusive nature (Jacoby 2002:52f.). Jacoby (2002:52) argues that the depiction of S-O-R models with static boxes linked by various lines and arrows is misleading, since it does not adequately take into account that the three components in fact overlap. It might, for instance, not be appropriate to exclusively designate an observed behaviour to the response part of the model but rather acknowledge that behaviour often influences psychological processes (Kroeber-Riel et al. 2009:222, Jacoby 2002:52f.). Furthermore, the arrows used in many depictions should not be understood as a consecutive cause-and-effect relation (Kroeber-Riel et al. 2009:35). In reality, all parts of S-O-R models can be interlinked. Thus, S-O-R models must not be interpreted as mathematical models with three separate groups of variables where a stimulus is processed within the organism which results in a response.

S-O-R models are regarded as a fundamental concept in German literature on consumer behaviour, while many Anglo-American text books do not discuss S-O-R models at all.⁶ Nevertheless, both schools of thought have in common that internal psychological processes are regarded as key variables for explaining consumer behaviour. The constructs investigated within the present research are regarded as influencing factors on consumer behaviour in both schools of thought.

It can be concluded that the paradigm of S-O-R models has proven to be a useful framework for empirical research on consumer behaviour, since it allows a systematic analysis of different components of consumer behaviour in the form of partial models (Kroeber-Riel et al. 2009:34f., Foscht and Swoboda 2007:29f.). For the present research, the S-O-R model was chosen since it combines all relevant components of the research questions into one framework: Organic certification logos as stimuli on the one hand, and consumer perceptions, attitudes, preferences and willingness-to-pay as organismic constructs on the other hand, based on which inferences about likely purchase behaviour regarding organic certification logos can be drawn.

3.3 Consumer perceptions, attitudes, preferences and willingness-to-pay

In the present study, the analysis of actual buying behaviour regarding organic certification logos in the 'real world' was not feasible (as will be discussed in the following Chapter 4). Therefore, this research focussed on different psychological constructs that were assumed to be

⁶ This applies, for instance, to the work by Solomon et al. (2006), Blackwell et al. (2006), Evans et al. (2006), Assael (2004).

related to the actual buying behaviour, namely consumer perceptions, attitudes, preferences and willingness-to-pay regarding organic certification logos.

As outlined in the previous section, the current literature on consumer behaviour unanimously agrees upon that internal psychological processes within the organism play an important role in the attempt to explain consumer behaviour (Kroeber-Riel et al. 2009, Solomon et al. 2006). The term psychological processes covers a variety of constructs such as values, emotions, motivations, attitudes, preferences, perceptions, learning and involvement.⁷ Whereas the emphasis placed upon selected constructs differs in the literature, consumer attitudes are subject of all common text books on consumer behaviour. Consumer perceptions, in turn, are part of most definitions of attitudes (see Section 3.3.1). Consumer preferences and willingness-to-pay, in contrast, are not as prevalent in the literature on consumer behaviour. These constructs mainly evolved within the discipline of economics (see Section 3.3.2 and 3.3.3). In the following sections, the different constructs are illustrated and it is explained why they were of interest.

3.3.1 Perceptions and attitudes

The definition of attitudes applied in this research is pivotal to understanding the role of perceptions in the context of consumer behaviour, which is why this section starts with the definition of attitudes. Among the different constructs of psychological processes, attitudes are seen as a key variable among factors influencing consumer behaviour (Solomon et al. 2006:138, Foscht and Swoboda 2007:64). An attitude is a lasting, general evaluative judgement of an object (Solomon et al. 2006:60, Evans et al. 2006:67). An object may be a product, a product attribute, a person, an idea or any other physical or intangible stimulus.

While there is no universal definition in the literature of how attitudes are composed, it is generally agreed upon that an attitude has affective and cognitive dimensions (Kroeber-Riel et al. 2009:211). The cognitive component refers to the evaluation of the object at hand based on knowledge and beliefs that the person holds about characteristics of the object. The terms knowledge and beliefs refer to consumer perceptions of the object. Perceptions reflect the characteristics that a person thinks the object possesses. Perceptions are the outcome of a complex process of information processing by which the stimuli received via sensory receptors are selected, organised and interpreted (Solomon et al. 2006:36). Past experience

⁷ This list does not claim to be complete.

with the object is likely to influence these processes. Perceptions are of subjective nature and do not necessarily correspond with 'true' objective criteria (Foscht and Swoboda 2007:88).

The affective component of attitudes refers to the person's feelings about the object, i.e. the person's favourable or unfavourable predisposition towards the object (Solomon et al. 2006:140). Affective states "can be labelled with terms such as hating, valuing or desiring" (Scherer 2005:703). Each attitude thus involves an emotional reaction to the object. The person might be aware of the link between his/her feelings and perceptions about the object, but it is also possible that a person likes an object without really knowing why this is the case (Kroeber-Riel et al. 2009:215).

Different views exist in the literature regarding the relative importance of affective and cognitive components of attitudes (Kroeber-Riel et al. 2009:211). According to Kroeber-Riel et al. (2009:214f.), attitudes are ascribed to the primarily activating constructs, whereas other schools of thought, such as the Theory of Reasoned Action and Theory of Planned Behaviour, highlight the cognitive influence (Ajzen 2005:117f.). The distinction between a mainly affective or cognitive concept plays a central role in theories of attitude formation and change (Cohen and Reed 2006:12) as well as for the measurement of attitudes. In the present research, it was not decided *a priori* which components are of greater importance. Rather, qualitative methods were applied to reveal the different dimensions inherent in attitudes towards organic certification logos (see Section 4.2.2).

The so-called structural approach to attitudes suggests that attitudes also include a conative component (Evans et al. 2006:67, Solomon et al. 2006:140, Scherer 2005:703). The conative component – also referred to as behavioural or intentional component – takes into account how the person will react to the object, e.g. whether the person intends to buy a product. The view that behavioural intention is inherent in attitudes is contested (Kroeber-Riel et al. 2009:217). It is argued that the structural approach does not adequately take into account that positive evaluations and feelings about an object might still not lead to behavioural intention, due to other intervening factors such as financial constraints (Kroeber-Riel et al. 2009:217f., Solomon et al. 2006:156). Classical examples of financial constraints hindering attitude-consistent behaviour are Porsche cars and Rolex watches, towards which many people have positive attitudes but cannot afford to buy one (Solomon et al. 2006:156, Kroeber-Riel et al. 2009:217f.). The present dissertation takes the critic of the structural approach into account and regards attitudes as an interrelation of affective and cognitive processes without an explicit conative component.

The above examples of Porsche cars and Rolex watches highlight why there is an ongoing debate in the literature as to how adequately attitudes can predict consumer behaviour (Papaoikonomou et al. 2011:77f., Kroeber-Riel et al. 2009:219f., Trommsdorff 2009:152f.). Besides financial constraints, a number of factors have been identified that determine the influence of attitudes on behaviour. Many authors refer to (i) the kind of attitudes, (ii) the kind of behaviour at question and (iii) situational conditions as the most important factors (Kroeber-Riel et al. 2009:223f., Solomon et al. 2006:156):

- i. Kinds of attitudes: Attitudes can be differentiated into specific and unspecific attitudes (Kroeber-Riel et al. 2009:224, Solomon et al. 2006:156). For example, the attitude towards a particular organic labelling scheme (e.g. Demeter) is more specific than the attitude towards organic food in general. It is therefore postulated that the measured attitudes and the behaviour of interest should exhibit a similar degree of generalisation (Kroeber-Riel et al. 2009:224, Trommsdorff 2009:153, Solomon et al. 2006:156).
- ii. Kinds of behaviour: It can only be assumed that attitudes influence behaviour if the behaviour is preceded by a decision-making process that involves a considerable degree of cognitive control. Attitudes play a minor or neglectable role in impulse buying and habitual buying with low involvement (Kroeber-Riel et al. 2009:226, Solomon et al. 2006:156).
- iii. Situational conditions: An actual buying situation can involve foreseeable as well as unexpected conditions that might hinder the decision-maker from behaving in accordance with his/her attitudes. A classical example of an unexpected condition is the case where the desired product is out of stock (Solomon et al. 2006:156, Assael 2004:229). Situational conditions also cover individual and social norms which might influence behaviour in a way not congruent with personal attitudes (Kroeber-Riel et al. 2009:223).

Lastly, it is worth mentioning that the relationship between attitudes and behaviour is of reciprocal nature (Kroeber-Riel et al. 2009:222). Past experience with a product, for instance, is likely to influence a person's attitude towards the product, in particular in a purchase decision with low involvement (Kroeber-Riel et al. 2009:222). It can be concluded that several issues need to be considered when attitudes are analysed with the intention to predict consumer behaviour. Despite the on-going debate about how adequately attitudes predict consumer behaviour, there is general agreement in the literature that "some knowledge of an individual's attitude will increase the likelihood of understanding the individual's intended and actual behaviour" (Evans et al. 2006:72).

3.3.2 Preferences

From a marketing perspective, consumer preferences are of similar importance as attitudes, since the ultimate goal of marketing can be summarised as satisfying consumer needs better than competitors (Meffert et al. 2008:12). In this research, the term preference is understood as an evaluative judgement of *several* objects in the context of decision-making (Foscht and Swoboda 2007:62, Slovic 1995:364), and not as a general liking or disliking of an object, which is how the term is often understood in psychology (see e.g. the definition by Scherer 2005:703). According to Blackwell et al. (2006:400) preferences “represent attitudes toward one object in relation to another”. This definition highlights the role of both concepts for the prediction of consumer behaviour and illustrates why attitudes alone might be of limited explanatory power (Nieschlag et al. 2002:635).

The concept of consumer preferences is interpreted slightly different in the disciplines of consumer behaviour and economics. In microeconomic theory, the study of consumer preferences has a long tradition. It is assumed that a consumer prefers the alternative with the greatest perceived utility in a situation where the consumer can choose between a minimum of two alternatives. In this school of thought, consumer preferences are seen to determine which product a consumer chooses. Consumers are assumed to make rational choices (Hensher et al. 2005:62f., Louviere et al. 2000:2). Louviere et al. (2000:8), for instance, suggest a model of consumer choice similar to the process of consumer decision-making outlined in Section 3.1 but with an additional stage of preference formation following from the evaluation of alternatives and preceding the choice/purchase. The paradigm of rational choice is contested in behavioural sciences where it is emphasised that consumers do not always behave rationally from a merely economic point of view (Solomon et al. 2006:292, Slovic 1995:369). In some situations, consumers make decisions without a prior formation of preferences, in particular when heuristics are used as decision rules (Solomon et al. 2006:279f., Amir and Levav 2008:146). In the context of complex decision-making, a consumer might simply not be able to form a preference order and identify the alternative with the highest utility (Slovic 1995:369).

In the present dissertation, it is acknowledged that consumers do not always behave in accordance with previously formed preferences. Nevertheless, it is assumed that the investigation of consumer preferences regarding organic certification logos allows inferences about intended and actual consumer behaviour. The rationale of the present research is the presence of not just *one* but many different organic labelling schemes in the market. Hence

the study covers consumer preferences and not ‘merely’ attitudes towards single organic certification logos.

3.3.3 Willingness-to-pay

While different definitions of the term willingness-to-pay (WTP) exist in the literature, subject of all definitions is the price that a consumer is willing to pay for a product or product attribute at a certain point of time. In marketing research, the WTP usually captures the *maximum* price at which a consumer will buy a product (Simon and Fassnacht 2009:84). Some authors highlight that the WTP often takes on the form of an interval ranging from a minimum to a maximum price, since consumers might also refrain from buying a product if they regard the price as too low (Simon and Fassnacht 2009:174, Wang et al. 2007:201). This definition of WTP takes into account that the price of a product also acts as a quality cue.

The WTP concept is closely linked to the microeconomic concept of ‘reservation price’, which some authors define as the maximum price like stated above, whereas alternative definitions refer to the reservation price as i) the price at which a consumer is *indifferent* between buying and not buying or ii) the *minimum* price at which a consumer will *not buy* the product (Wang et al. 2007:200). In this dissertation, the term willingness-to-pay is understood as the maximum price a consumer is willing to pay for a product or product attribute.

In accordance with Lancaster’s Consumer Theory (1966), it is not only possible to determine the WTP for a product but also for single product attributes. Lancaster’s Consumer Theory stipulates that the utility of a product stems from the various (tangible and intangible) attributes that the product encompasses. A consumer’s WTP for a product attribute thus reflects the perceived utility that the consumer assigns to the attribute (Simon and Fassnacht 2009:85). In the present research, the focus is on consumers’ WTP for single attributes, namely organic certification logos standing for particular organic labelling schemes.

According to microeconomic theory, a consumer’s WTP reflects the utility that a product provides to the consumer. In this sense, the WTP can be interpreted as a “monetary measure for the utility of a product alternative” (Diller 2008:155). The WTP is further regarded as a monetary measure of consumer preferences (Louviere et al. 2000:61, Hensher et al. 2005:357f.). The underlying assumption is that a consumer is willing to pay a (leastwise slightly) higher price for the *preferred* product than for products providing a lower level of utility.

Implicit in all definitions of WTP “is a link to the probability of purchase” (Jedidi and Jagpal 2009:39). For predicting consumer behaviour, the WTP is seen to be somewhat closer to behaviour than attitudes towards the product or attribute (Kroeber-Riel et al. 2009:221), since the WTP involves price-related aspects which play an important role in many purchase situations. Similar to consumer behaviour in general, a consumer’s WTP is seen to be influenced by a variety of intervening variables, foremost psychological factors and situational conditions. Among the psychological factors, not only product-related constructs (e.g. attitudes towards the product or product attributes) but also price-related constructs such as price awareness and knowledge influence a consumer’s WTP (Diller 2008:155). It is important to emphasise that the WTP reflects the *perceived* value that a consumer assigns to the product which is of subjective nature (Wertenbroch and Skiera 2002:228) and might not be related to actual market prices or ‘objective’ criteria that the product fulfils. The WTP is thus related to the concept of consumer perceptions and attitudes discussed above.

Interestingly, many textbooks on consumer behaviour⁸ do not deal with the concept of consumers’ WTP for products and attributes in detail, whereas it is widely discussed in the literature on pricing behaviour, management and strategy. The interest in consumers’ WTP corresponds with a demand-oriented approach to pricing, according to which customer value should play the central role for pricing decisions (Armstrong and Kotler 2009:292). In addition, insights into consumers’ perceived value of products and attributes are important for all sorts of product- and promotion-related decisions by companies as well as for policy-making. The present research did not primarily aim to provide information for actual pricing strategies for products with organic certification logos. Rather, insights into consumers’ perceived value of different organic certification logos allowed making recommendations for the promotion of organic labelling schemes and the definition of underlying standards and control regimes.

⁸ This applies, for instance, to the work by Kroeber-Riel et al. (2009), Trommsdorff (2009), Foscht and Swoboda (2007), Blackwell et al. (2006), Evans et al. (2006), Solomon et al. (2006).

4 Methods and research design

The present research was based on a combination of qualitative and quantitative methods. As discussed in Chapter 3, consumer perceptions, attitudes, preferences and willingness-to-pay (WTP) regarding organic certification logos are theoretical constructs that cannot be directly observed. Therefore, methods needed to be applied that make theoretical constructs accessible to researchers. With qualitative methods, the spectrum of consumer views regarding organic certification logos was firstly explored. For this purpose, focus group discussions were conducted. A quantitative survey employing choice experiments and structured interviews with rating scales was then carried out with 2,441 consumers of organic food to elicit consumer preferences and WTP as well as perceptions and attitudes regarding different organic labelling schemes. The six study countries were Czech Republic, Denmark, Germany, Italy, Switzerland and United Kingdom.

The first section deals with the rationale for combining qualitative and quantitative methods. The subsequent subchapters address the three methods of data collection applied in this dissertation. These subchapters contain a discussion of why the respective method was chosen and an outline of the research design. The final section explains why the study countries were chosen and presents the sampling methods. The methods of data analysis are included in subsequent chapters (Sections 5.4.2, 6.4.2, 7.4.2 and 8.4).

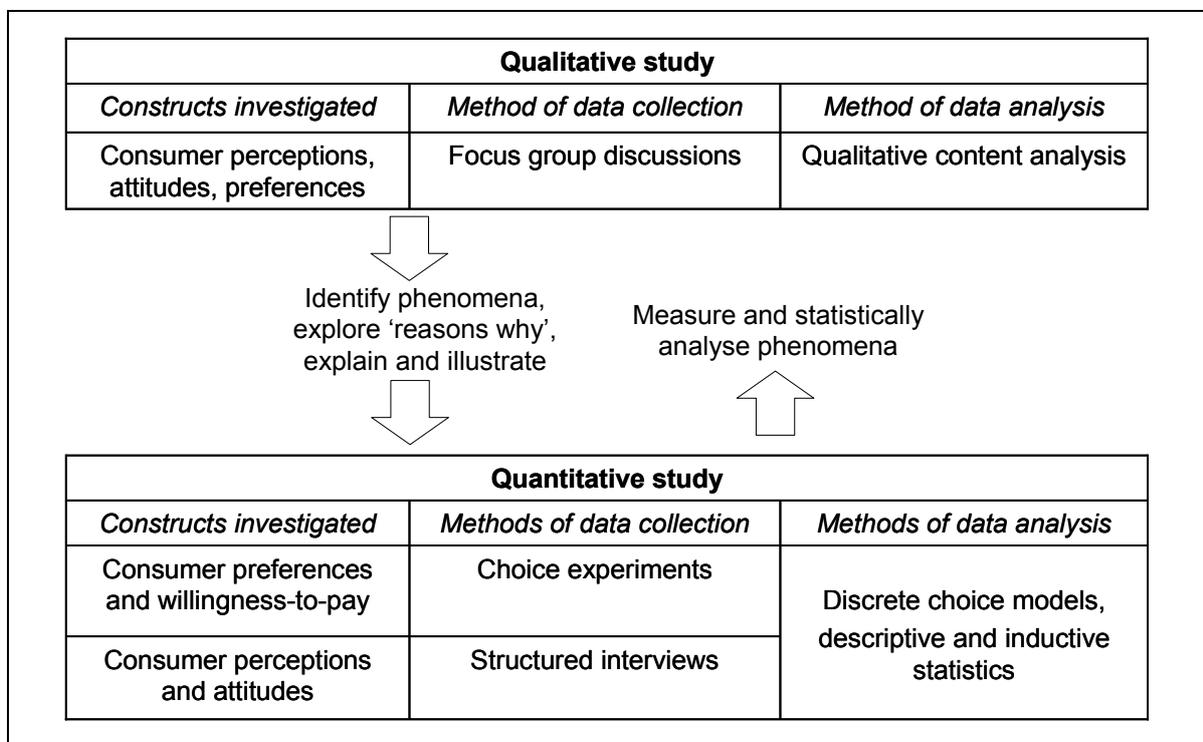
4.1 Combination of qualitative and quantitative methods

The differences between qualitative and quantitative research methods mainly lie in the nature of the research questions, the way of data collection and analysis, and the number of participants (Burns and Bush 2010:235, Shao and Zhou 2007:107f.). Quantitative methods involve a large number of respondents and are generally characterised by structured questions or experiments “in which the response options have been predetermined” (Burns and Bush 2010:235). Quantitative methods allow testing hypotheses by measuring concepts and relationships (Shao and Zhou 2007:108). Qualitative methods, in contrast, are exploratory in nature and involve “collecting, analyzing, and interpreting data by observing what people do and say” (Burns and Bush 2010:235) in a non-standardised way. The common characteristic of qualitative approaches is the interpretative way of generating knowledge by describing, reconstructing and understanding (Denzin and Lincoln 2008:4f., Snape and Spencer 2006:22). Qualitative methods are characterised by more depth and greater richness of context than

quantitative methods (Aaker et al. 2010:162f., Shao and Zhou 2007:107f.) and are ideal for investigating phenomena little is known about (Aaker et al. 2010:162).

In the literature, different justifications for combining qualitative and quantitative methods are found (Bryman 2008:608f., 2006:98f.). In this dissertation, the qualitative data collection and analysis preceded the quantitative study. However, both parts were seen to be of equal importance. A combination of methods was employed to get a more comprehensive picture of the area of enquiry by making use of the strengths of both fields (Figure 2). The arrows in Figure 2 illustrate how both studies are related. The qualitative study fulfilled several purposes. Most importantly, to the author's knowledge hardly any previous empirical findings existed regarding the research aims of this dissertation (see Chapter 1). Therefore, it was firstly necessary to explore how consumers perceive organic certification logos, whether they prefer certain logos and why this might be the case. The qualitative study thus aimed at shedding light on reasons behind consumer preferences and behaviour, based on which the choice experiments and structured interviews were designed. The quantitative study then allowed to measure and statistically analyse key issues and concepts, where the qualitative study helped to explain and illustrate the quantitative findings.

Figure 2: Combination of methods in the present research



4.2 Focus group discussions

4.2.1 Focus group discussions versus other methods of qualitative inquiry

For the qualitative study in the present research, focus group discussions were chosen. Focus group discussions are semi-structured group interviews facilitated by a skilled moderator. The essential data obtained in focus group discussions are the participants' statements. Group facilitation is based on a discussion guideline that outlines the relevant topics. The moderator's role is to initiate the discussion which may then flow relatively freely (Bryman 2008:480). In the field of consumer research, focus group discussions are typically applied to investigate attitudes, opinions, product preferences and purchase motives (Burns and Bush 2010:245).

Among the methods of data collection for qualitative inquiry, individual interviews could have been used alternatively.⁹ However, focus group discussions offer a number of advantages as well as disadvantages compared with individual interviews, which needs to be weighed up when choosing a method of data collection (Burns and Bush 2010:244f., Bryman 2008:488f.). The group context of focus group discussions has implications for the nature of collected information, the moderator's role, and practical issues:

- *Nature of collected information*

The key advantage of focus group discussions is the interactive nature. Focus group discussions encourage group interaction and mutual stimulation among the participants. Since participants can react to the views expressed by others, a broader spectrum of different opinions is often revealed (Bryman 2008:485f., Finch and Lewis 2006:171f.). With focus group discussions it is thus possible to gain insights into different aspects and dimensions of a problem (Bryman 2008:475f., Churchill and Brown 2007:85f.). Furthermore, the group context leaves the single participant room for deciding when to join the discussion, whereas one-to-one interviews might put pressure on the participant to come up with an answer since the interviewer is focused on a single person (Greenbaum 2000:11).

Regarding the subject depth, individual interviews can potentially reveal more detailed information from single participants since the interviewer can probe more deeply than in focus group discussions (Shao and Zhou 2007:114, Greenbaum 2000:17). Furthermore, it

⁹ The method of observation represents the third main method used in qualitative research. However, the method of observation was not applicable to the present research concerned with unobservable psychic processes, since this method is limited to phenomena which can be observed (Shao and Zhou 2007:121).

needs to be acknowledged that focus group discussions are not suited for sensitive topics that might cause discomfort among participants in a group context (Bryman 2008:489). Similarly, topics where culturally expected or politically correct views play an important role are better investigated by individual interviews (Bryman 2008:489, Greenbaum 2000:17).

- *Moderator's role*

The dynamic nature of group interaction also bears a number of risks. Focus group discussions require careful group facilitation to make sure all participants engage in the discussion. A skilled moderator is needed to encourage quiet participants to express their opinion while preventing others from dominating the discussion (Aaker et al. 2010:173, Finch and Lewis 2006:180f.). Moreover, it might be more difficult to standardise the moderator's interventions in focus group discussions, potentially leading to a stronger moderator bias compared to individual interviews (Shao and Zhou 2007:114). On the other hand, focus group discussions are less prone to interviewer fatigue due to their lively nature (Aaker et al. 2010:171, Greenbaum 2000:20).

- *Practical issues*

From the viewpoint of resources involved, focus group discussions offer a number of advantages: A relatively large amount of information can be gathered in a short period of time at relatively low costs compared to individual interviews (Aaker et al. 2010:171). The recruitment of participants, however, is often more difficult with focus group discussions since a group of people is needed at a fixed date, whereas individual interviews are relatively easy to schedule (Aaker et al. 2010:171, Bryman 2008:488).

For the present research, the advantages of focus group discussions were regarded to outweigh the disadvantages compared to individual interviews. Foremost, this research aimed at revealing a broad spectrum of consumer views rather than in-depth information from single participants. Furthermore, the research topic at hand – purchase of organic food – is generally not a sensitive topic. However, research in this field often faces the problem of biased results since people regard the purchase of organic food as culturally expected. The target group of the present research were consumers of organic food. The problem of culturally expected views therefore needed to be resolved in the recruitment procedure to ensure that the participants are really consumers of organic food (see Section 4.5), but it was not seen as a major disadvantage in the actual group context.

4.2.2 Design of the focus group discussions

The qualitative study was designed to explore the following aspects of the overall objectives of the present research outlined in Chapter 1:

1. Consumer perceptions, attitudes and preferences regarding different voluntary organic labelling schemes, and
2. Consumer perceptions and attitudes towards a new mandatory EU logo and indication of origin for organic food.

Accordingly, the discussion guideline of the focus group study was organised around three main sections which are shown in Table 1 (the whole discussion guideline is shown in Table 26 in the Annex).

Table 1: Structure of the discussion guideline

Topics investigated	Opening questions
a) Consumer perceptions and attitudes regarding different organic certification <i>logos</i> and preferences for products with particular organic <i>logos</i> .	“Do you prefer products with one of these logos over products with other logos that are shown here?”
b) Consumer perceptions and attitudes regarding different organic <i>standards</i> and preferences for products with particular organic <i>standards</i> .	“Are you aware of any differences in organic standards behind these labels that are important to you?”
c) Consumer perceptions and attitudes regarding a new mandatory EU logo and indication of origin for organic food.	“What do you think about a mandatory EU logo and indication of origin? Do you welcome the logo or do you see any problems?”

During Section a) and b), the participants were shown an assembly of different organic certification logos (Table 2) and were asked for their preferences regarding the presented logos and the underlying standards (see Table 1 for the opening questions). This way of asking prompted the participants to make comparisons among different logos and standards respectively. By probing into reasons behind the stated preferences through the moderators, consumer awareness, perceptions and attitudes regarding different logos and standards could be revealed. It was asked for preferences instead of perceptions and attitudes in order to focus the discussion on those aspects that mattered to consumers with respect to *differences* among organic labelling schemes. As discussed in Chapter 1, with the new mandatory EU logo the additional use of other organic certification logos makes sense for suppliers provided that consumers prefer particular logos over others.

Table 2: Organic certification logos presented in the focus groups

Country	Old EU logo	National government logo	Logos of organic sector and farmers' associations	Logos of control bodies	Prefix 'organic' without logo ¹			
CH		–	Bio Suisse Knospe  BIO SUISSE	Bio Knospe  BIO	Demeter 	–	✓	
CZ			–	–	–	–	✓	
DE			Bioland 	Demeter 	Naturland 	–	✓	
DK			–	Demeter 	–	– ²	✓	
IT		–	Demeter 	AIAB³ 	Bioagricert 	CCPB⁴ 	ICEA⁵ 	✓
UK		–	Soil Association 	Organic Farmers & Growers 	Organic Food Federation 	–	✓	

¹ Generic label without a certification logo (prefix 'Bio', 'biologico', 'organic', 'Öko', 'øko' respectively).

² The Danish governmental control logo is grouped under national governmental logo.

³ AIAB= Associazione Italiana per l'Agricoltura Biologica.

⁴ CCPB=Certificazione e Controllo Prodotti Biologici.

⁵ ICEA=Istituto per la Certificazione Etica e Ambientale.

The selection of logos was based on the results of an inventory study (Janssen and Hamm 2011a:16). It was aimed to test different kinds of organic certification logos, namely the EU logo, governmental logos, and private logos. In each country, only those logos were included which existed in the market. Since the focus groups were conducted prior to the introduction of the new mandatory EU logo, the old voluntary EU logo was shown.

In Section c), consumer views on the introduction of a new mandatory EU logo for organic food were explored (this section was not included in the non-EU country Switzerland). Since the study took place prior to the final decision on the design of the new logo, the participants were not confronted with a picture of the new EU logo itself. Instead they were informed that a common mandatory logo would be introduced and the mandatory indication of origin of the raw materials was explained. The participants were then asked for their views on the subject (see Table 1 for the opening question). The moderators probed into underlying reasons of the stated attitudes to reveal consumer perceptions of a mandatory EU logo and indication of origin.

4.3 Choice experiments

4.3.1 Choice experiments versus other methods for measuring WTP

Among the different methods for measuring consumer preferences and willingness-to-pay (WTP), choice experiments were chosen for the present research.¹⁰ In choice experiments, participants are asked to make a choice among a set of products which differ in one or several attributes. Participants are thus required to weigh up price and other product attributes (Ben-Akiva et al. 1994:337). WTP measures can be determined if price is one of the systematically varied attributes (Louviere et al. 2000:61, Hensher et al. 2005:357f.). WTP measures are then inferred from participants' choices, which is why this method represents an indirect method for measuring WTP (Völckner 2006b:37). Choice experiments are based on Random Utility Theory (Thurstone 1987) postulating that an individual who makes a choice among different alternatives strives to maximise utility. The individual thus chooses the one alternative that provides him/her with the highest utility (Louviere et al. 2000:8f., McFadden 1974:106f.). In accordance with Lancaster's Consumer Theory (Lancaster 1966), it is assumed that the utility of a product stems from the different product attributes.

¹⁰ Choice experiments are also referred to as choice-based conjoint analysis (e.g. by Simon and Fassnacht 2009:126f., Backhaus et al. 2008:452f., Völckner 2006a:37f.) or discrete choice analysis (e.g. by Diller 2008:195).

Different methods exist for eliciting consumers' WTP, which can be largely grouped into methods based on real purchase behaviour (market data and field experiments) versus methods based on stated or simulated purchase behaviour (surveys, laboratory experiments, auctions and lotteries) (Sattler and Nitschke 2003:364, Wertenbroch and Skiera 2002:229). WTP measures of real purchase behaviour can be derived from actual market data or field experiments. While these methods exhibit a high degree of external validity, internal validity might be problematic due to uncontrollable influences (Wertenbroch and Skiera 2002:229). Moreover, WTP measures from actual market data might be of limited nature in cases where prices in real market settings do not vary substantially (consumers' 'true' WTP could be higher than the market prices) (Sattler and Nitschke 2003:364, Ben-Akiva et al. 1994:337). Overall, methods based on real purchase behaviour are relatively expensive and time-consuming (Breidert et al. 2006:4).

Methods based on stated or simulated purchase behaviour generally suffer from the bias that participants are aware of the experimental situation and thus "more rational of their purchase behavior compared to their normal shopping behavior" (Breidert et al. 2006:4). In empirical research, however, methodological and economic considerations are often seen to outweigh these structural disadvantages (Simon and Fassnacht 2009:135f.). In the present research, budget constraints prohibited the use of methods based on real purchase behaviour. Thus a number of methods based on stated or simulated purchase behaviour theoretically came into question. It is now briefly discussed why choice experiments were regarded more suitable for the present research than the methods of contingent evaluation, self-explicated models, conjoint analysis, auctions and lotteries. Compared to these methods, the major advantage of choice experiments is its resemblance to a real purchase situation (Breidert et al. 2006:9f., Völckner 2006b:37). In choice experiments, participants evaluate a product as a whole and decide which product to choose. This procedure requires less cognitive effort than most of the other methods (Breidert et al. 2006:9f., Völckner 2006b:37).

In *contingent valuation*, participants are either asked to (i) directly state their WTP for entire products or single attributes (open-ended approach) or (ii) indicate whether they would buy a product at a given price (close-ended approach) (Mitchell and Carson 1989:97f.). The advantage of contingent valuation is that it involves little time and low costs, whereas choice experiments require some form of experimental set-up. The major disadvantage of open-ended contingent valuation is its artificial focus on price leading to increased price awareness (Simon and Fassnacht 2009:115f.). Participants must put a monetary value on their preferences which is cognitively challenging and not realistic (Breidert et al. 2006:8). Close-

ended contingent valuation requires less cognitive effort but bears the risk of overestimating the WTP due to the fact that participants might just accept the given prices as reasonable (tendency to answer ‘yes’ in surveys) (Völckner 2006b:36), whereas in choice experiments, participants can choose among several price levels.

In so-called *self-explicated-models*, participants firstly state the importance of price in relation to other product attributes and then evaluate single attribute characteristics (Völckner 2006b:36). Similar to open-ended contingent valuation, this procedure is criticised for its lack of resemblance to real purchase situations (Sattler and Hensel-Börner 2000:4).

In *auctions*, WTP measures are derived from participants’ bids for a product. Different kinds of auction mechanisms exist which are all regarded as superior compared to contingent valuation in terms of revealing the ‘true’ WTP (Skiera and Revenstorff 1999:225f.). However, auctions generally suffer from the structural disadvantage that “the bidding mechanism does not naturally mimic how consumers reveal preferences in grocery stores” (Hoffman et al. 1993:320). Auctions face the risk of limited validity due to gambling behaviour (e.g. strategic bidding) (Völckner 2006a:139) and the fact that bidders compete with one another for a limited stock (Wertenbroch and Skiera 2002:229). Moreover, auctions require a setting that can host a group of people at the same time, whereas choice experiments can be conducted at the point-of-sale. In *lotteries*, the participants first have to state their WTP for the product at hand. Afterwards the product price is randomly determined by a lottery. In case the price is lower than the stated WTP, the participant must buy the product, whereas there is no buying option in case of a higher price (Wertenbroch and Skiera 2002:230). Auctions and lotteries both require careful instruction of participants and the methods are criticised for its cognitive challenge (Breidert et al. 2006:9).

Contingent valuation, self-explicated-models, auctions and lotteries are so-called compositional methods, i.e. the WTP for single product attributes is directly investigated (Hartmann and Sattler 2004:3). In decompositional methods, in contrast, the WTP for single attributes is inferred from participants’ rating/ranking (*conjoint analysis*) or choice (*choice experiments*) of total products through the estimation of part-worth utilities for all tested attributes (Völckner 2006a:36f., Hartmann and Sattler 2004:3). A disadvantage inherent in the decompositional approach is the fact that these methods are less suitable for cases where the WTP of *entire* products is of interest (Völckner 2006b:37). However, the methods are well-established for determining the relative importance of different product attributes (Backhaus et al. 2008:452f.), which was the focus of the present research. Compared to choice

experiments, conjoint analysis is criticised for its greater cognitive effort and lack of resemblance to a real purchase situation, due to the fact that participants have to rate or rank different products (Völckner 2006b:37).

When choosing a method for measuring WTP based on stated and simulated buying behaviour, an important aspect to consider is the issue of hypothetical bias. Hypothetical bias might occur in hypothetical purchases when the participants' evaluations do not have any financial implications. The result is an overestimation of the WTP (Lusk and Schroeder 2004:480, Cummings et al. 1995:265f.).¹¹ For that reason, several authors advocate methods that are incentive-compatible (Völckner 2006a:148, Lusk and Schroeder 2004:480, Cummings et al. 1995:265f.). Völckner (2006a:148), moreover, emphasises that “WTP is a situation-specific, individual level construct” and should thus be measured at the point-of-sale with an incentive-compatible method. With choice experiments, it is possible to fulfil these requirements, which is why this method was chosen for the present dissertation.

4.3.2 Design of the choice experiments

With choice experiments, it was aimed to analyse consumer preferences and willingness-to-pay (WTP) for different voluntary organic certification logos. In empirical studies, researchers have to decide upon a number of factors regarding the design of choice experiments (adapted from Hensher et al. 2005:100f.): 1. Tested products, 2. Tested product attributes and attribute levels, 3. Number of alternatives within a choice set, 4. Number of choice sets per person, and 5. Presentation of choice sets.

Tested products

In the present research, the choice experiments were conducted with two different kinds of products: organic apples and eggs. These two products were chosen since they fulfil the following criteria. Firstly, it was intended to investigate both a plant and an animal product. Secondly, many consumers regularly buy apples and eggs. Thirdly, these products are available from domestic production in the study countries and they are widely available in organic quality. Fourthly, they can be sold as non-branded products. In the present research, it was not desired to investigate consumer preferences for brands. Existing organic brands are often related to particular organic certification logos, so that consumers might have been

¹¹ Mixed findings exist in the literature regarding the question whether hypothetical methods lead to higher WTP measures for food products than non-hypothetical methods. Grunert et al. (2009), for instance, did not observe a significant difference unlike other authors (e.g. Lusk and Schroeder 2004, Cummings et al. 1995).

confused when being presented with non-existing combinations of brands and organic certification logos. The subject of brands is further discussed in Chapter 9.

Tested product attributes and attribute levels

In the present research, two product attributes were of interest, organic certification logos and price. In each study country, four different organic labels were tested (three organic logos plus generic label without a logo, see Table 3). The number of tested logos was limited to three, since the focus group discussions showed that consumers were generally not familiar with a large variety of organic logos. In the choice experiments, different kinds of organic certification logos were tested: 1. EU logo, 2. governmental logos, 3. private logos, 4. generic label just with the prefix 'organic' without a certification logo. The old voluntary EU logo was used in the experiments, since the survey was conducted prior to the introduction of the new mandatory EU logo. In each country, only those logos were included which existed in the market and could be used on domestic products. The only exception is Switzerland, where only two common Swiss organic certification logos were found in the market at the time of writing (Bio Suisse and Demeter). To have a similar experimental design with four product stimuli per choice set in each study country, a fake logo was created referring to the Swiss organic regulation. Due to the absence of a governmental logo in Italy and the UK, another private logo was included here.

Table 3: Organic logos tested in the choice experiments

Country	Label 1	Label 2	Label 3	Label 4
CH	Bio Suisse ¹ 	Fake logo ² 	Demeter ³ 	
CZ	Old EU logo 	Governmental logo 	Demeter ³ 	
DE	Old EU logo 	Governmental logo 	Demeter ³ 	Generic label with the prefix 'organic' ⁷ without logo
DK	Old EU logo 	Governmental logo 	Demeter ³ 	
IT	Old EU logo 	CCPB ⁴ 	Demeter ³ 	
UK	Old EU logo 	Soil Association ⁵ 	OF&G ⁶ 	

¹ Umbrella organisation of Suisse famers' associations.

² Referring to the Suisse governmental organic regulation.

³ International farmers' association.

⁴ CCPB=Certificazione e Controllo Prodotti Biologici. Italian control body.

⁵ Soil Association=British organic sector organisation.

⁶ OF&G=Organic Farmers & Growers. British control body.

⁷ 'Bio', 'Öko', 'biologico', 'øko' respectively.

The products were offered at four different price levels. The relative price levels were the same in all countries (0.8, 1.0, 1.2, 1.4) but absolute prices differed. The absolute prices used in the experiments (Table 4) were based on the average market price of organic apples/eggs in the respective survey regions one month before the experiments were conducted, which was taken as price level 1.0. Using the same absolute prices in all countries would have involved the risk of biased WTP measures, since previous studies showed that the use of high absolute prices in choice experiments also lead to higher WTP measures (Carlsson and Martinsson 2008:174).

Table 4: Prices in the choice experiments

Product	Price levels	Prices ¹							
		CH	CZ	DE	DK	IT ²			UK
						Ancona	Bari	Milano	
Apples	0.8	3.18 €	1.36 €	2.19 €	2.04 €	2.33 €	2.14 €	2.58 €	2.23 €
	1.0	3.96 €	1.69 €	2.69 €	2.55 €	2.91 €	2.68 €	3.22 €	2.79 €
	1.2	4.75 €	2.03 €	3.19 €	3.06 €	3.49 €	3.22 €	3.86 €	3.36 €
	1.4	5.54 €	2.37 €	3.79 €	3.57 €	4.07 €	3.75 €	4.51 €	3.92 €
Eggs	0.8	2.70 €	1.45 €	1.49 €	2.42 €	1.81 €	1.97 €	1.77 €	1.94 €
	1.0	3.38 €	1.81 €	1.89 €	3.02 €	2.26 €	2.46 €	2.21 €	2.39 €
	1.2	4.07 €	2.17 €	2.29 €	3.63 €	2.71 €	2.95 €	2.65 €	2.91 €
	1.4	4.75 €	2.54 €	2.69 €	4.23 €	3.16 €	3.44 €	3.09 €	3.36 €

¹ Prices in Euro are based on the exchange rates by the European Central Bank, Quarter 1, 2010. The prices refer to one kilogram of apples and six eggs respectively.

² In Italy, the market prices for organic apples and eggs differed considerably between the three cities where the survey was conducted, so different absolute prices were used in the three cities.

Number of alternatives within a choice set

The choice experiments were designed as so-called labelled experiments, i.e. each tested organic label was present in each choice set. Each choice set thus contained four product alternatives with different organic logos and prices, which otherwise looked identically. In the literature, it is reported that four product alternatives per choice set do not involve an unacceptable level of cognitive burden for participants if only a few product attributes are varied (DeShazo 2002:141). In addition to choosing one of the four product alternatives, the participants were also free to refrain from buying any of the offered alternatives ('no-buy option'). The no-buy option was included to make the buying decision more realistic. Furthermore, previous research showed that forced choice might lead to biased results (Dhar and Simonson 2003:146f., Dhar 1997:224).

Number of choice sets per participant

The experimental design for the systematic variation of the price levels across the four label alternatives was based on an orthogonal fractional factorial design with 16 different choice sets for apples and eggs respectively (developed with the software package SPSS). The sample was divided into eight blocks, so that each participant was presented with two choice sets of organic apples and two choice sets of organic eggs.

Presentation of choice sets

In the present research, the choice experiments were conducted face-to-face. It was aimed to create an experiment which resembled a real buying situation. Unlike in other studies with choice experiments (e.g. Loureiro and Umberger 2007, Lockshin et al. 2006, Lusk and Schroeder 2004), real organic apples and eggs were offered to the participants instead of

pictures or descriptions of products (Figure 3). Typical product information, which was identical across the alternatives, was shown on the price tags (apples: variety, domestic origin; eggs: egg size, domestic origin). Furthermore, the participants were instructed that they would have to pay for the chosen products just like in a real shop to reduce the hypothetical bias (Lusk and Schroeder 2004:480).

Figure 3: Set-up of the choice experiments¹



¹ Example from Germany

4.4 Structured interviews with rating scales

4.4.1 Rating scales versus other methods of perception and attitude measurement

The choice experiments were followed by structured interviews with the same participants. The single-source approach aimed at the identification of factors that might influence consumers' WTP for organic certification logos. For this purpose, data on consumer perceptions and attitudes regarding the organic logos tested in the choice experiments were collected. Furthermore, consumer perceptions and attitudes regarding a mandatory EU logo and indication of origin for organic food were measured.

For the structured interviews, the theoretical constructs of perceptions and attitudes needed to be translated into measurable indicators (Kroeber-Riel et al. 2009:237). The most common method for measuring consumer perceptions and attitudes is the survey method with rating

scales (Kroeber-Riel et al. 2009:237, Solomon et al. 2006:151).¹² Based on rating scales with a finite number of predefined answer categories, perceptions of and attitudes towards an object can be measured either with a single item or with a multi-item battery (Solomon et al. 2006:152). Multi-item batteries incorporate the comprehensive multi-dimensional nature of perceptions and attitudes discussed in Chapter 3 (Kroeber-Riel et al. 2009:237, Solomon et al. 2006:152).

4.4.2 Design of the structured interviews with rating scales

Different scales were used for the evaluation of the logos tested in the choice experiments on the one hand and the evaluation of a new mandatory EU logo on the other hand. All items of the rating scales were developed based on the results of the focus group discussions. This procedure was chosen since it is stressed in the literature that hypothetical constructs (such as perceptions and attitudes) should only be considered as intervening factors causing an observable behaviour *if* a causal relation is empirically proven (Kroeber-Riel et al. 2009:33).¹³

Perceptions and attitudes regarding logos tested in the choice experiments

The findings of the focus group discussions suggested that consumer attitudes towards an organic certification logo were related to a number of elements, particularly trust in the logo, credibility of the logo, and perceptions of the underlying standards and control system. Moreover, logo awareness acted as a prerequisite for being able to evaluate a certification logo and the underlying scheme.¹⁴ Further elements were mentioned by single participants in the focus group discussions, for instance ‘uniqueness’, ‘quality’ and ‘authenticity’. In several countries, participants believed that certain logos indicated domestic origin.

In accordance with the literature (Kroeber-Riel et al. 2009:237), it was thus revealed that an attitude towards an organic certification logo was composed of affective (e.g. trust, credibility) and cognitive elements (e.g. logo recognition, perceptions of standards and control), both closely intertwined. It was therefore decided to use a multi-item battery for measuring consumer perceptions and attitudes towards each of the tested logos. In order to keep the cognitive burden involved for participants to a managerial length, only selected items

¹² Two other kinds of methods for measuring attitudes exist, both of which are rather costly. Observational methods derive attitudes from observed behaviour and are thus contested. The measurement of physiological reactions of test persons (e.g. pulse rate, electrodermal reactions) requires a complicated laboratory setting and is limited to affective components of attitudes (Kroeber-Riel et al. 2009:129).

¹³ As discussed in Chapter 1, little empirical findings from previous studies existed on the research topics. Therefore, the results of the qualitative study were used as a basis.

¹⁴ In all countries except the United Kingdom, most participants stated they were not able to evaluate logos that they did not know. In the United Kingdom, several participants made inferences about labelling schemes based on the design of unknown logos.

were included in the questionnaire, which are presented in Table 5.¹⁵ Each item was phrased as a seven-point semantic differential scale with opposite pairs of phrases at the endpoints and a neutral midpoint (except for the item on domestic origin).¹⁶ As suggested in the literature, a ‘don’t know’ category was included, since the pre-test showed that many participants did not have sufficient experience with some of the logos to form a judgement (Aaker et al. 2010:254).

Table 5: Items on perceptions and attitudes towards organic logos

Item dimension	Interview question	Answer categories
Awareness	Please rate each of the labels on the following scale.	Scale from 1 to 7 with: 1 = This label is completely unknown to me. 7 = This label is well-known to me.
Trust	Please rate each of the labels on the following scale.	Scale from 1 to 7 with: 1 = I completely trust this label. 7 = I do not trust this label at all. Additional category ‘don’t know’
Credibility	Please rate each of the labels on the following scale.	Scale from 1 to 7 with: 1 = This label does not stand for real organic products. 7 = This label stands for real organic products. Additional category ‘don’t know’
Organic standards	How strict are the organic standards behind the label?	Scale from 1 to 7 with: 1 = below average 4 = average 7 = above average Additional category ‘don’t know’
Control system	How strict is the control system behind the label?	Scale from 1 to 7 with: 1 = below average 4 = average 7 = above average Additional category ‘don’t know’
Uniqueness	Please rate each of the labels on the following scale.	Scale from 1 to 7 with: 1 = Products with this label are not clearly different from other organic products. 7 = Products with this label are clearly different from other organic products. Additional category ‘don’t know’
Domestic origin	Do you think the label stands for products of German [respective home country] origin?	3 answer categories: - Yes. - No, this label does not necessarily mean the product is of German [respective home country] origin. - Don’t know.

¹⁵ Please note that the results regarding the item ‘uniqueness’ are not included in this dissertation, since the item was misunderstood by many participants in the interviews (there was confusion whether ‘being different’ referred to positive or negative aspects).

¹⁶ Please note that in this dissertation, the term ‘semantic differential scale’ is used like in Anglo-American literature on consumer behaviour where it refers to rating scales with opposite pairs of phrases at the endpoints (e.g. Shao and Zhou 2007:170, Solomon et al. 2006:152f.), which is not the same as the classical semantic differential scale (Kroeber-Riel et al. 2009:244).

Attitudes regarding a new mandatory EU logo

The focus group discussions revealed several elements which influenced consumer attitudes towards a new mandatory EU logo and indication of origin. The mentioned elements could be grouped into four main topics: a) Mandatory logo for organic food, b) Standards and control system behind the new logo, c) Indication of origin of the raw materials, d) Attitudes towards the EU as the organisation behind the logo. A multi-item battery was developed with a total of ten statements covering the four topics. A balanced seven-point rating scale ranging from “strongly agree” to “strongly disagree” was used. The items are presented in Table 6.

Table 6: Items on perceptions and attitudes towards a mandatory EU logo

Items	Topics
1. It is a good idea to have an EU-wide logo for certified organic products.	Mandatory logo
2. Without a mandatory EU organic logo, some food products are hard to identify as organic at the point of sale.	
3. There are more than enough organic logos already and a new, mandatory organic logo will just add complexity to the market.	
4. It is unnecessary to use other organic logos in addition to the mandatory EU organic logo.	
5. It is a good idea to have the same minimum standards for organic products all over the EU.	Standards and control system
6. I have great trust in the inspection system behind an EU-wide organic logo.	
7. I have great trust in the organic standards behind an EU-wide organic logo.	
8. For food products, I think the indication “EU” or “non-EU”, without the country of origin, is sufficient.	Indication of origin
9. I welcome the fact that the new EU organic logo differentiates between “EU agriculture” and “non-EU agriculture”.	
10. The EU generates nothing but bureaucracy.	Attitude towards the EU

Both multi-item batteries were composed of elements directly related to the attitude object at hand (organic certification logos). In the focus group discussions, more unspecific attitudes were not mentioned by the participants surrounding the discussions about preferred logos and the new EU logo. This procedure is in line with the literature on the attitude-behaviour-relation claiming that the measured attitudes and the behaviour of interest should exhibit a similar degree of generalisation, as discussed in Chapter 3 (Kroeber-Riel et al. 2009:224, Trommsdorff 2009:153, Solomon et al. 2006:156).

Overall, the structured interviews contained four parts in the following order, of which Part 1 was conducted face-to-face while Parts 2-4 were conducted as a written survey (the questionnaire form is shown in Figure 11 in the Annex):

1. Rating scale on perceptions and attitudes regarding the organic logos tested in the choice experiments.

2. Rating scale on perceptions and attitudes regarding a mandatory EU logo for organic food and indication of origin.
3. Buying behaviour for organic food: The participants estimated their organic budget share, i.e. the share of organic products in the total expenditures for food and beverages. Ten predefined answer categories were provided (from 0-10% up to 91-100%). Furthermore, the participants should name the place(s) where they regularly purchase organic food.
4. Socio-demographic characteristics: Gender, age, household size, level of education and net household income.

4.5 Sampling

The study countries of the present research were Czech Republic, Denmark, Germany, Italy, Switzerland and United Kingdom. These countries were selected since they represent different organic labelling ‘traditions’ and stages of organic market development:¹⁷

- In the Czech Republic, the market for organic food is still relatively small but growing fast. The Czech Republic has a prominent governmental logo. The former EU logo for organic food was rarely used by Czech producers.
- Denmark as the European country with the highest per capita expenditures on organic food has a very prominent governmental logo. Besides, the former EU logo was relatively common.
- Germany – the largest market for organic food in Europe – has a prominent governmental logo. In addition, logos of farmers’ associations have a long tradition (in particular Demeter, Bioland and Naturland). The former EU logo for organic food was rarely used by German producers.
- In Italy – a net exporter of organic products – the former EU logo was used frequently. In addition, numerous logos of private organisations are found.
- Switzerland as a non-EU country was included in the study since it has the second highest per capita expenditures on organic food in Europe. Furthermore, the umbrella organisation Bio Suisse has an organic logo indicating domestic origin of the raw

¹⁷ The presented information on the use of organic logos refers to the situation prior to the introduction of the mandatory EU logo and is taken from Janssen and Hamm (2011a:16). The market data are taken from Schaack et al. (2011:156f.).

materials (Bio Suisse Knospe), which is the only logo in the sample with criteria regarding origin.

- The United Kingdom is the second largest market for organic food in the EU. There is no governmental logo but several private organic certification logos, of which the logo of the Soil Association is the most common one. The former EU logo for organic food was rarely used by British producers.

The target group of the qualitative and quantitative studies were consumers of organic food who were at least partly responsible for the food purchase in their household. Non-buyers of organic food were excluded from participation, since this research focussed on preferences of consumers who actually buy organic food. The investigation of non-buyers would allow insights into the question of whether the topic of organic labelling schemes is somehow related to reasons preventing these people from buying organic food. However, this question goes beyond the objectives of the present dissertation.

4.5.1 Qualitative study

Three focus groups were conducted in each study country in spring 2009. Altogether, 189 consumers of organic food participated in the study. The screening of participants was based on a structured questionnaire. During recruitment, the participants were asked for their organic consumption intensity in seven different product groups so that an index of organic food consumption could be created based on which the participants were grouped into occasional and frequent buyers of organic food.¹⁸ In each country, two focus groups were conducted with occasional and one group with frequent organic consumers. The two consumer segments were separated because their level of knowledge about organic labelling schemes was expected to be different. In mixed groups, the more frequent consumers might have been ascribed the role of an 'expert', which could have prevented less experienced consumers from actively involving in the discussion (Finch and Lewis 2006:190f.).

¹⁸ The participants were asked how often they buy different products of seven product groups in organic quality. The predefined answer categories were: 'almost never' (0), 'sometimes' (1) and 'almost always' (2). The numbers in brackets show the points assigned to the categories. For each participant, the points reached in the seven product categories were added up. In all countries, consumers with less than 3 points were excluded from participating in the study. The number of points that determined the classification as occasional and frequent buyers was different from country to country, in order to take the different stages of the organic market development into account. Consumers with an index of 3 to 5 points (in the Czech Republic and Italy), 3 to 6 points (in Germany and the United Kingdom), and 3 to 9 points (in Denmark and Switzerland), respectively, were classified as occasional organic consumers. Consumers with a higher index were classified as frequent buyers of organic food.

Quota sampling for the age and gender distribution of the focus groups was applied with country-specific quotas (Table 7). The quotas for the two age groups ‘18 to 44 years’ and ‘45 to 75 years’ reflected the distribution of these age groups within the population of the study country. Regarding gender, the quotas reflected the buying behaviour of households in each country.

Table 7: Screening criteria and recruitment quotas

Screening criteria / Quotas	Operationalisation																													
	Qualitative study	Quantitative study																												
Screening criterion: Organic food consumption	Self-assessed index of organic food consumption (scale from 0 to 14 points) based on the organic consumption propensity in seven product groups (answer categories ‘almost never’ (0), ‘sometimes’ (1) and ‘almost always’ (2); numbers in brackets show the points assigned to the categories). Consumers with less than 3 points were excluded from participating in the study.	Purchase of organic apples <i>and</i> organic eggs at least once or twice a month (based on self-assessment).																												
Screening criterion: Responsibility for food purchase in household	Participants had to be responsible for the food purchase in their household (at least half of the purchases; based on self-assessment).																													
Screening criterion: Occupation, profession	People were excluded when they lived on a farm, they or someone else in their household worked in the agricultural sector / in the area of food processing / market research / at one of the partner organisations.	Not applied.																												
Quota: Age	Country-specific quotas; reflect the distribution of the two age groups ‘18 to 44 years’ and ‘45 to 75 years’ within the population of the study country (quotas in %):																													
	<table border="1"> <thead> <tr> <th></th> <th>CH</th> <th>CZ</th> <th>DE</th> <th>DK</th> <th>IT</th> <th>UK</th> </tr> </thead> <tbody> <tr> <td>18-44 years</td> <td>50.0</td> <td>60.0</td> <td>46.4</td> <td>49.5</td> <td>43.0</td> <td>51.7</td> </tr> <tr> <td>45-75 years</td> <td>50.0</td> <td>40.0</td> <td>53.6</td> <td>50.5</td> <td>57.0</td> <td>48.3</td> </tr> <tr> <td>Total</td> <td>100.0</td> <td>100.0</td> <td>100.0</td> <td>100.0</td> <td>100.0</td> <td>100.0</td> </tr> </tbody> </table>			CH	CZ	DE	DK	IT	UK	18-44 years	50.0	60.0	46.4	49.5	43.0	51.7	45-75 years	50.0	40.0	53.6	50.5	57.0	48.3	Total	100.0	100.0	100.0	100.0	100.0	100.0
	CH	CZ	DE	DK	IT	UK																								
18-44 years	50.0	60.0	46.4	49.5	43.0	51.7																								
45-75 years	50.0	40.0	53.6	50.5	57.0	48.3																								
Total	100.0	100.0	100.0	100.0	100.0	100.0																								
Quota: Gender	Country-specific quotas; reflect the buying behaviour of households (quotas in %):																													
	<table border="1"> <thead> <tr> <th></th> <th>CH</th> <th>CZ</th> <th>DE</th> <th>DK</th> <th>IT</th> <th>UK</th> </tr> </thead> <tbody> <tr> <td>Female</td> <td>66.6</td> <td>67.0</td> <td>65.0</td> <td>70.0</td> <td>70.0</td> <td>70.0</td> </tr> <tr> <td>Male</td> <td>33.3</td> <td>33.0</td> <td>35.0</td> <td>30.0</td> <td>30.0</td> <td>30.0</td> </tr> <tr> <td>Total</td> <td>100.0</td> <td>100.0</td> <td>100.0</td> <td>100.0</td> <td>100.0</td> <td>100.0</td> </tr> </tbody> </table>			CH	CZ	DE	DK	IT	UK	Female	66.6	67.0	65.0	70.0	70.0	70.0	Male	33.3	33.0	35.0	30.0	30.0	30.0	Total	100.0	100.0	100.0	100.0	100.0	100.0
	CH	CZ	DE	DK	IT	UK																								
Female	66.6	67.0	65.0	70.0	70.0	70.0																								
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Total	100.0	100.0	100.0	100.0	100.0	100.0																								
Quota: Number of participants	Number of participants per focus group between 8 and 15.	A minimum of 400 participants per country.																												

4.5.2 Quantitative study

Data was collected face-to-face in February and March 2010 after a pre-test with fifteen to twenty participants per country one month earlier. In each country, around 400 consumers of organic food took part in the study. The choice experiments and interviews were conducted at two kinds of shops/locations: 1. conventional supermarkets and/or shopping centres and

2. specialised organic food shops. The shares of choice experiments conducted at each kind of shop approximately reflected the market share of that kind of shop in the respective country (Table 8).

Table 8: Share of participants surveyed at different kinds of shops (%)

	CH	CZ	DE	DK	IT	UK
Conventional supermarkets/ shopping centres	87.4	50.0	74.6	100.0	49.6	74.7
Specialised organic food shops	12.6	50.0	25.4	–	50.4	25.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

In order to reach different kinds of consumers, the survey was conducted on weekdays and Saturdays, during daytime as well as in the evening. The participants were recruited with a screening questionnaire (see Table 7 above). It was intended to reveal the preferences of consumers who regularly buy the tested products in organic quality to ensure that the results are relevant for actual buying behaviour. Two screening questions were used for this purpose: First, participants had to be responsible for the food purchase in their household; second, they had to buy organic apples *and* eggs at least once a month (based on self-assessment). Quota sampling for age and gender was applied (see Table 7 above). The country-specific quotas for the two age groups (18 to 44 and 45 to 75 years) reflected the share of these groups in the total population. Regarding gender, the quotas reflected the buying behaviour of households in each country.

5 Consumer perception of different organic certification schemes in five European countries

This chapter represents an article published by the author of this dissertation and Prof. Dr. Ulrich Hamm as co-author. Any reference to this chapter should be cited as:

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5.1 Abstract

With the introduction of the new mandatory EU logo for organic food and farming the various existing organic certification schemes in the European market face a challenge: Producers and retailers might only continue to display the existing organic logos on product packages if the underlying certification schemes offer consumers an added value compared to the mandatory EU logo and its scheme. The present study aims to identify potential added values that organic certification schemes could incorporate to differentiate themselves from the mandatory EU logo. The study explores consumer awareness and perception of different organic certification schemes and the corresponding logos, about which little is known to date. The qualitative approach with focus group discussions in the five European countries Czech Republic, Denmark, Germany, Italy and United Kingdom revealed that consumer knowledge of organic certification schemes is generally low. In Italy and the United Kingdom, the great majority of participants was not aware of any differences between the schemes that were discussed. In the Czech Republic, Denmark and Germany, several participants preferred a particular organic certification scheme over others. The following aspects could be identified as potential added values for certification schemes to differentiate themselves from the EU logo and the underlying scheme: Stricter production standards, stricter control, domestic origin, and fair prices for farmers.

5.2 Introduction

In the European Union (EU), organically produced food has to comply with predefined standards in order to be labelled and sold as ‘organic’. Regulation (EC) No 834/2007 constitutes the regulatory framework for the production, processing, labelling and control of organic products.¹⁹ EU Regulation (EC) No 834/2007 came into force on 1 January 2009, substituting Regulation (EEC) 2092/91. One major change of the new regulation concerns the

¹⁹ In this contribution, the term ‘organic products’ solely refers to organic food.

labelling of organic food: The new regulation stipulates the introduction of a new mandatory EU logo for organic food. From July 2010 on, all prepacked organic products produced within the EU must carry the new logo.²⁰ The new logo replaces the old EU organic logo whose use was optional.

In all European countries, voluntary organic certification logos²¹ have been in the market for many years: Besides the old EU logo, numerous governmental (e.g. the German 'Bio-Siegel' and the Danish 'Ø') as well as private organic logos are currently found across Europe. The term 'private logos' covers the logos of farmers' associations (e.g. Demeter), their umbrella organisations (e.g. Bio Suisse), certification bodies (e.g. Ecocert) and other private organisations.

Most organic certification logos target the final consumer. The key function of organic certification logos is to communicate that the production process has been certified and the product meets certain standards (Roe and Sheldon 2007:1021, Jahn et al. 2005:53f., Golan et al. 2001:130f.). The use of other organic logos in addition to the mandatory EU logo seems reasonable if consumers associate an added value with the additional logo, for instance stricter standards, higher food safety or any other perceived quality aspect. Against this background, public as well as private owners of organic certification schemes need to consider the implications of the new mandatory EU logo on the future use of their own logos and schemes (this point is further elaborated in Section 5.3).

This contribution aims at identifying potential 'added values' from the consumer's perspective that organic certification schemes could incorporate in order to differentiate themselves from the mandatory EU logo and the corresponding standards. Recommendations for public and private owners of organic certification schemes are made. The analysis is based on the investigation of whether and why consumers prefer particular organic certification schemes over others. To date, little is known about these questions. The following research questions are addressed with regard to consumers in the five European countries Czech Republic, Denmark, Germany, Italy and United Kingdom:

- Do consumers perceive differences standing behind different organic certification logos? In what way?

²⁰ A transition period is granted for product packages and labels produced before 1 July 2010. All packaging and labels manufactured after that date shall feature the new EU logo (Commission Regulation (EC) No 889/2008).

²¹ In this contribution, the terms 'organic certification logo' and 'organic logo' refer to the logos of governmental and private certification schemes. These are not to be confused with organic producer and retailer brands (such as Rapunzel and Tesco's organic).

- Do consumers prefer particular organic certification schemes over others and what are the added values that consumers associate with the preferred schemes?
- In what way do consumer views differ between the study countries with respect to the above questions?

The contribution is structured as follows: Section 5.3 introduces the theoretical framework of organic certification upon which this contribution is based. Section 5.4 outlines the methods of data collection and data analysis. Section 5.5 presents the results of the study which are discussed in Section 5.6. In the final section, recommendations for governmental as well as private organic certification schemes are made.

5.3 Theoretical framework of organic certification labelling

The economic rationale of organic certification labelling is closely related to the characteristics that make a product an organic product. EU Regulation (EC) No 834/2007 defines standards for the production and processing of organic food. Organic products are thus characterised by particular principles for the production and processing, which cannot be verified by consumers neither during the purchase process nor after consumption of the product (Jahn et al. 2005:55). In information economics, products with attributes that the consumer cannot verify are referred to as credence goods (Darby and Karni 1973:68f.). Credence goods feature a high degree of information asymmetry, i.e. information is distributed unequally among producers and consumers (Darby and Karni 1973:68f.). Markets with information asymmetry involve the danger of opportunistic behaviour in the supply chain such as fraud, since chances of being uncovered are low (McCluskey 2000:5, Darby and Karni 1973:68f.). Consumer trust in the product integrity is therefore a critical issue for credence goods to successfully compete in the market, in particular if the credence attribute is accompanied by a price premium like in the case of organic food (Jahn et al. 2005:54, McCluskey 2000:5, Bonroy and Constantatos 2008:238).

Third-party certification represents an instrument for overcoming the dilemma of information asymmetry of credence goods (McCluskey 2000:2). A neutral certifier, which is accredited by a competent authority, guarantees regular inspections of the processes within the supply chain and ensures compliance with the respective standards. This is signalled to final consumers by product labelling (Roe and Sheldon 2007:1020, Golan et al. 2001:130f.). Organic food products often carry the logo of the respective certification scheme on the package. In this context, several authors point out that third-party certification involves a shift of the credence attribute from the producer to the certifier: Third-party certification diminishes the problems

of asymmetric information in the producer-consumer relationship only if the final consumer trusts the certification scheme (Albersmeier et al. 2010:71, Jahn et al. 2005:70, Golan et al. 2001:134). Thus the success of a certification scheme like the certification of organic food largely depends on the level of consumer trust in the scheme.

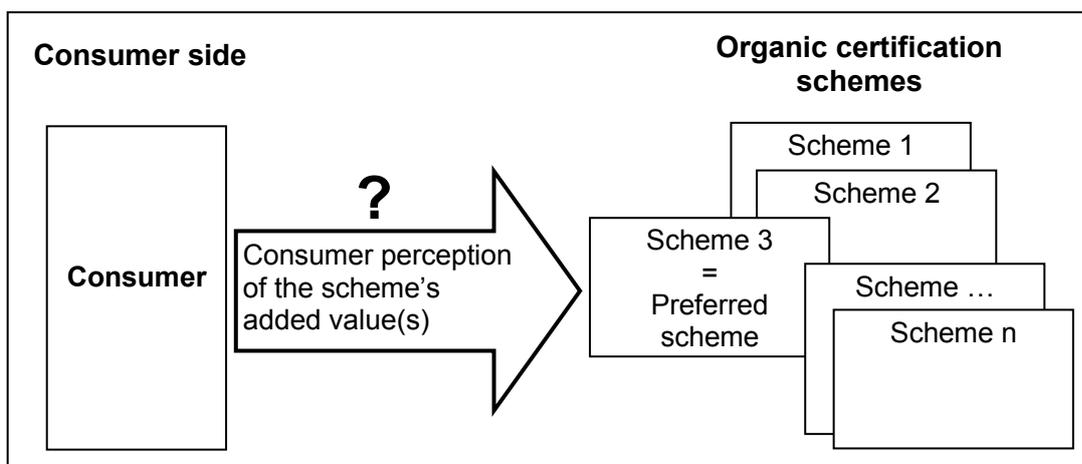
In the EU market, all organic products must be certified according to Regulation (EC) No 834/2007. The Regulation is enforced in the same way in all EU member states, i.e. the same minimum standards and certification procedures apply. Once a product has been certified by an accredited certification body in an EU country it is automatically recognised EU-wide. Certification can be carried out by a) accredited private bodies, b) governmental bodies or c) a combination of both forms. Many certification bodies operate in several EU countries. With the EU Regulation setting the minimum requirements, other certification schemes are free to define standards which may – but do not have to – exceed and/or supplement the requirements of the EU Regulation. In fact, many different organic certification schemes with own logos are currently found in the European market for organic food:

Governmental organic logos are found in several (but not in all) EU countries. The requirements for using the governmental logos slightly differ from country to country. The German ‘Bio-Siegel’, for example, can be used on request on all products complying with the EU Regulation on organic food and farming (Öko-Kennzeichengesetz). In other countries such as Denmark and the Czech Republic, the production standards of the governmental scheme also correspond with the EU standards but some further requirements regarding the control procedure must be met: The Danish ‘Ø’ requires that the latest preparation of the product (packaging and/or labelling) is undertaken by a company in Denmark under the inspection of the Danish governmental control authorities (Bekendtgørelse om økologiske fødevarer m.v. No 1258, Fødevestyrelsens vejledning om økologiske fødevarer m.v.). In the Czech Republic, the product must have been certified by the respective Czech control body in order to carry the Czech governmental logo (Act on Organic Farming No 242/2000 Coll.).

Private certification schemes – i.e. farmers’ associations and their umbrella organisations, certification bodies, and/or other private organisations – are found in many EU countries. There are great differences between the various schemes in the extent to which the schemes’ requirements differ from the EU Regulation. Demeter, for example, has own production standards exceeding and supplementing the EU Regulation in many areas. The logos of several certification bodies, in contrast, ‘only’ signal that the product has been certified according to the EU Regulation by the respective certification body.

In a competitive environment with many different organic certification schemes, the success of a certification scheme not only relies on the extent to which consumers prefer organic over conventional food, but further on the extent to which consumers prefer organic products of that particular scheme over other organic products. The introduction of a mandatory EU logo for organic food represents a novelty in the European market and raises the question whether existing organic logos should additionally be displayed on product packages. In fact, from the viewpoint of producers and retailers, marketing budgets as well as the space on product packages are limited. Practical considerations might thus question the use of two or more organic logos. In this sense, existing organic logos ‘compete’ with the mandatory EU logo for organic food. Marketing theory suggests that a product must offer an added value or a unique selling proposition important to consumers, in order to successfully compete in the market (Armstrong and Kotler 2009:260f., Wilson and Gilligan 2005:51f.). Given the mandatory EU logo, other organic certification schemes should hence strive to be perceived as unique by consumers. This contribution aims to identify potential added values of organic certification schemes that are important to consumers. Figure 4 depicts the theoretical concept for analysing consumer perception of organic certification schemes which is applied in this contribution. It is noteworthy that simply being different from products certified according to the EU Regulation is not enough. Rather, the consumer perspective is the crucial point (Golan et al. 2001:119): Stricter organic production standards compared to the EU regulation, for instance, do not constitute an added value per se; an added value is only given if consumers know about and appreciate a scheme’s stricter standards.

Figure 4: Organic certification schemes and the consumer side



5.4 Methods

Hardly any previous findings exist regarding consumer awareness and perception of different organic certification schemes. In particular, a cross-country comparison on this topic has not yet been conducted. Therefore, a qualitative research approach with focus group discussions was chosen for the analysis of consumer awareness and perception (Bryman 2008:475f., Denzin and Lincoln 2008:4f., Snape and Spencer 2006:22f.).

5.4.1 Method of data collection

With focus group discussions it is possible to gain insights into the different aspects and dimensions of a problem (Bryman 2008:475f.). One of the method's main strengths is the communicative character. Compared with other qualitative methods based on personal interviews, the key advantage lies in the mutual stimulation of the participants: A broader spectrum of opinions is revealed, since the participants interact with each other and reflect the opinions of the others (Bryman 2008:485f., Finch and Lewis 2003:171f.). However, depending on the research topic the group context of focus group discussions can also be a major drawback: Firstly, the method might encourage participants to express culturally expected views and, secondly, it is not appropriate for sensitive topics where participants might feel uncomfortable talking in the presence of other people (Bryman 2008:489). In the present study, it was assumed these issues would not cause any problems.

The discussion guideline for this study contained two main sections:

- Section 1: Awareness of different organic logos and preferences for products with particular organic logos
- Section 2: Awareness of different organic standards and preferences for products with particular organic standards

During the discussions, the participants of the focus groups were shown the most common organic certification logos in the respective study country (see Table 9). In addition, the labelling with the term 'organic' without a certification logo was shown. The selection of the logos was based on the results of an inventory study which had been conducted by the authors of this study and their partner organisations a few months before.

Table 9: Organic certification logos discussed in the focus groups

Country	EU logo	National governmental logo	Logos of farmers' and organic sector associations	Logos of certification bodies
CZ	✓	✓	–	–
DE	✓	✓	Bioland Demeter Naturland	–
DK	✓	✓	Demeter	–
IT	✓	–	Demeter AIAB	Bioagricert CCPB ICEA
UK	✓	–	Soil Association	Organic Farmers & Growers Organic Food Federation

Primary data was collected in the five EU countries Czech Republic (CZ), Denmark (DK), Germany (DE), Italy (IT), and United Kingdom (UK). The participants were consumers of organic food. In the Czech Republic, Denmark and Germany, participants were recruited by staff members and/or students of the partner organisations in front of stores with an organic food range. In Italy and the United Kingdom, participants were recruited by market research institutes via telephone. In all countries, the screening of participants was based on the same set of criteria: The participants had to be at least partly responsible for the food purchase in their household and they had to be consumers of organic food. In all countries, two focus groups were conducted with occasional organic consumers and one group with frequent organic consumers.²² The two consumer segments were separated because their level of knowledge of organic certification schemes was expected to be different. In mixed groups, the more frequent consumers might have been ascribed the role of an ‘expert’, which could have prevented less experienced consumers from actively involving in the discussion.

Quota sampling for the age and gender distribution of the focus groups was applied, with country-specific quotas for the five countries. Two age groups were differentiated: ‘18 to 44 years’ and ‘45 to 75 years’. The quotas for the two age groups reflected the distribution of these age groups within the population of the study country. The quota for the share of the

²² The intensity of organic food consumption was measured by means of an index with a scale from 0 to 14 points. The participants were asked for their organic consumption intensity in seven different product groups with the standardised answer categories ‘almost never’ (0), ‘sometimes’ (1) and ‘almost always’ (2). The numbers in brackets show the points assigned to the categories. For each participant, the points reached in the seven product categories were added up. In all countries, consumers with less than 3 points were excluded from participating in the study. The number of points that determined the classification as occasional and frequent buyers was different from country to country, in order to take the different stages of the organic market development into account. Consumers with an index of 3 to 5 points (in the Czech Republic and Italy), 3 to 6 points (in Germany and the United Kingdom), and 3 to 9 points (in Denmark), respectively, were classified as occasional organic consumers. Consumers with a higher index were classified as frequent buyers of organic food.

younger age group ranged from 43% in Italy to 53% in the Czech Republic. Regarding gender, the quotas reflected the buying behaviour of households in each country. The quota for the share of women ranged from 60% in the UK to 70% in Italy. The actual composition of the focus groups slightly deviated from the quotas, since some recruited participants cancelled with short notice or did not come to the appointment.²³ Nevertheless, the failure rates were within the normal range for focus groups (Greenbaum 2000:68).

A total of three focus groups was conducted in each study country in May and June 2009. The group size ranged from 8 to 15 participants. Altogether, 149 consumers participated in the study. All groups were moderated by staff members of the partner organisations. The focus groups lasted between 52 and 90 minutes.

5.4.2 Method of data analysis

In order to conduct a cross-country comparison of the national results, it was necessary that the national data was analysed and reported in a similar way. This was achieved by a two-stage process of qualitative content analysis (Mayring and Brunner 2007, Mayring 2003).

In the present study, the original material was analysed by the respective national partners according to a common framework.²⁴ The purpose of Stage 1 of the data analysis process was to get an overview of the occurring themes in each study country, in order to develop the category scheme for qualitative content analysis. Initially, the focus group discussions were transcribed in the national languages. Those statements relevant to the main questions of the discussion guideline were identified and paraphrased. A two-column table was used with the original material in the left hand column and the corresponding paraphrase in the right hand column. The occurring themes were identified, collected in a list and summarised in national summary reports in English language. The reports were organised according to the main questions of the discussion guideline.

The objectives of Stage 2 of the data analysis process were to report the national results in more depth and make the results comparable across the study countries. Based on the five national summary reports, the authors of this contribution developed a category scheme for qualitative content analysis adapted from Gläser and Laudel (2006) as well as from Ritchie et

²³ The focus groups were composed as follows (the figures after the country code refer to the share of the younger age group and the share of women respectively): CZ 70% and 70%; DE 56% and 61%; DK 56% and 67%; IT 43% and 70%; UK 52% and 59%.

²⁴ A centralised approach to data analysis with one person analysing the focus group discussions of all countries was seen unfeasible, since crucial meaning would have been lost if the original material had been translated into English language and analysed by a foreigner.

al. (2006). The category scheme for this study consisted of a list of themes and subthemes which were extracted from the national summary reports. In addition to explicit categories, the scheme contained the subcategory ‘Other’ to cater for country specific conditions. At national level, the original material was then analysed based on the category scheme. The results were reported in detailed national reports that were structured according to the category scheme.

Finally, a cross-country comparison was conducted by the authors of this contribution with feedback from the other partners. Based on the detailed national reports, the results from the different countries were compared with each other, so that similarities and differences regarding the research questions could be identified.

5.5 Results

The results of the focus group discussions are presented in two thematic sections according to the two main research questions: 1. Awareness and perception of differences standing behind different organic logos, 2. Perceived added values associated with particular certification schemes. Both questions are closely linked to the participants’ awareness level of the different organic logos that were discussed, which is presented in Table 10. It needs to be pointed out that in qualitative research studies, the awareness level is not measured in quantitative terms. Rather, a general idea on the participants’ perspectives is presented here.

Table 10: The awareness of different organic logos among the focus group participants

Country	Well-known	Known by some	Mostly unknown
CZ	Czech governmental logo	–	EU logo
DE	German governmental logo	Bioland Demeter Naturland	EU logo
DK	Danish governmental logo EU logo	–	Demeter
IT	–	EU logo Controllo Biologico	AIAB Bioagricert Demeter ICEA
UK	–	–	EU logo Organic Farmers & Growers Organic Food Federation Soil Association

In the following two sections, selected verbatim quotations of the participants’ comments are used to illustrate the results. All quotations are indicated with the respective study country (CZ, DE, DK, IT, UK), the number of the focus group (1 to 3), the organic consumption

intensity of the participant ('O' for occasional buyer and 'F' for frequent buyer) and the anonymous participant number (1 to 15).

5.5.1 Awareness and perception of differences standing behind different organic logos

In all study countries, the focus group discussions showed that the participants' knowledge of differences standing behind different organic logos is generally low. In total, three main aspects were raised by the participants: Standards, control and origin of the product. The two latter, however, were only brought up in some study countries. Further, in many comments it became obvious that the participants did not clearly distinguish between standards and control. Both terms were used interchangeably and the general perception seemed to be that stricter control goes hand in hand with stricter standards. Despite the low level of knowledge among participants in all countries, the participants' awareness of differences between different logos varied across the study countries. The results reflect the different regulatory frameworks and ways of how the organic sectors evolved in the five countries.

Only very few participants could name actual differences between the organic standards of different certification schemes. Interestingly, in all countries many participants believed that the domestic standards were higher than in certain other European countries. However, different 'reference countries' were mentioned across the study countries: In the focus groups in Italy, for instance, lower standards were associated with Rumania, whereas in the German focus groups, the domestic standards were perceived to be stricter than the Italian and Spanish counterparts.

In the Czech Republic and Denmark, several participants perceived the governmental standards to be stricter than the EU standards, but many of the participants' assumptions were, in fact, false. Interestingly, several participants mistakenly thought the respective governmental logo stood for products of domestic origin. In both countries, however, no participant could mention actual differences between the organic standards that were discussed, which one participant expressed as follows: "For sure, I don't know the standards. (...) [I] have no clue about it." (CZ FG1-O/6). Still, many speculative statements were made. The three labels discussed in the focus groups in the Czech Republic actually represent the same standards. However, the Czech governmental standards were mostly perceived to be the strictest. The EU standards were seen to be less strict and were referred to as minimum standards. Products without a certification logo were generally not trusted, since it was assumed that these products did not comply with any organic standards at all.

In Denmark, several participants perceived the Danish standards to be stricter than the EU standards, which is not true anymore since January 2009 (Fødevarestyrelsens vejledning om oekologiske fødevarer m.v. of July 2009). Many participants commented on differences in the control systems, and the general view was that the Danish governmental control was the most trustworthy since it was carried out by a governmental authority: “I think that governmentally controlled [the ‘Ø’], there is a greater guarantee that it has been [farmed] organically for a longer period than with that EU logo” (DK FG3-F/2”).

In Germany, the standards of farmers’ associations were perceived to be stricter by some participants, whereas lower standards were associated with the governmental logo ‘Bio-Siegel’ and the EU logo, respectively. However, hardly any participant could name actual differences between the standards. Only Demeter was commented on in more detail and the anthroposophical background was mentioned a number of times. Accordingly, several participants perceived Demeter to have the highest standards. The governmental logo ‘Bio-Siegel’, in contrast, was often referred to as the minimum standard with a negative connotation: “I know that the Bio-Label [Bio-Siegel] is only minimum standard.” (DE FG1-O/10). The standards of the farmers’ associations Bioland and Naturland were either seen as ‘in-between’ Demeter and the Bio-Siegel or as equally high as Demeter. The EU standards were not commented on at all, since no participant in Germany really knew the old EU logo.

In Italy and the United Kingdom, almost all participants were unaware of any differences between different organic certification schemes. Only very few participants had knowledge of standards or control systems. In Italy, hardly any participant had ever considered that the various organic logos could mean different things, which one participant expressed as follows: “I really did not know the different logos could imply different standards.” (IT FG1-F/7). Many Italian participants believed there were universal European standards all organic products complied with. In the United Kingdom, the organic logos that were subject of the discussion were mostly unknown.²⁵ A few participants considered the Soil Association to have strict standards, but no real comparisons could be made. Many of the participants were confused about what ‘organic’ meant. Several participants were unsure how organic production was regulated and had no perception of standards and their enforcement: “Are

²⁵ The low level of knowledge of organic certification logos among the UK participants might have to do with the fact that in the UK most organic produce is sold in supermarkets under prominent organic retail brands (e.g. Tesco’s organic). Organic certification logos are often displayed on the back of product packages (if they are shown at all). The UK participants frequently mentioned several organic retail brands in the focus group discussions proving that they were familiar with organic products. However, it needs to be pointed out that the sample is not representative of the UK population.

companies actually regulated and checked on? (...) Do they have (...) standards they have to go by or can anyone say ‘organic?’” (UK FG3-F/10).

5.5.2 Perceived added values associated with particular organic certification schemes

Regarding consumer preferences for particular organic certification schemes, the focus group discussions revealed different pictures across the study countries. While in the Czech Republic and Denmark, the majority of participants clearly preferred products with the governmental logo, most participants in Italy and the United Kingdom had no preferences for any particular organic certification scheme. Germany represents the case ‘in-between’: Several participants clearly preferred products of particular organic certification schemes whereas others had no preferences.

The findings show that preferences for a particular organic certification scheme could stem from a number of aspects that the participants associate with the logo and the corresponding scheme. The following aspects were mentioned most often: Perceived stricter production standards, perceived stricter control, domestic origin of the product, familiarity with the logo, and greater trust. Table 11 provides an overview of the perceived added values that participants associated with particular certification schemes, which are explained further in the following sections. The last section deals with reasons for not preferring any particular organic certification scheme.

Table 11: Perceived added values associated with particular certification schemes

Perceived added values	Country				
	CZ	DE	DK	IT	UK
Perceived stricter production standards	✓✓	✓✓	✓✓		✓
Perceived stricter control		✓	✓✓	✓	
Domestic origin of the product	✓✓		✓✓		
Familiarity with the logo	✓✓	✓✓	✓✓		
Greater trust	✓✓	✓✓	✓✓	✓	

✓✓ = mentioned by several people

✓ = mentioned by a few people

empty cell = not mentioned

Perceived stricter production standards

In the Czech Republic and Denmark, many participants stated to prefer the respective domestic standards represented by the governmental logo, since these were perceived to be stricter than other standards. A Czech participant explained that “the reason why I prefer Czech Bio [the governmental logo] is the quality (...). For instance Germany does not have as strict norms for meat production as the KEZ [Czech inspection body].” (CZ FG2-F/5). In Germany, some people preferred the farmers’ associations for their perceived stricter standards compared to the Bio-Siegel. Among the three farmers’ associations, Demeter was referred to most often: “I know that Demeter has very high requirements (...). Whereas Bioland-products, they also have a long period of conversion (...), but the standards are not as strict. Demeter, they are really according to anthroposophic principles.” (DE FG3-O/6). Like in this statement, many participants commenting on Demeter mentioned the anthroposophical background in connection with high production standards. In the United Kingdom, only one participant mentioned a preference for the Soil Association due to the organisation’s strict production standards, but no detailed information about the standards were provided. In Italy, no participant stated a preference for particular organic standards.

Perceived stricter control

Participants in three study countries associated certain organic logos with stricter control, which generated greater trust in the product integrity. This was particularly pronounced in Denmark, where the majority of the participants expressed great trust in the Danish control system behind the governmental logo, since it is carried out by governmental authorities. As one participant put it “many have more faith in Denmark even though it may be the same rules, then Denmark may give more attention to the enforcement of the rules” (DK FG1-O/5). In Germany, a few people mentioned stricter control in connection with their preference for the farmers’ associations. In Italy, a few people associated the EU logo and the logo of the certification body ‘Controllo Biologico’ with stricter control. One participant explained “I am very careful to check that the product carries the [EU] logo, it gives me a feeling of safety. I know it implies a quality control.” (IT FG2-O/7). In the Czech Republic and the United Kingdom, greater trust in the control system was not mentioned as a reason for preferring particular certification schemes.

Domestic origin of the product

In the Czech Republic and Denmark, many participants preferred products with the respective governmental logo, since they thought that the logo stands for the domestic origin of the

product: “I accept that label [the Czech governmental logo] automatically for organic products, because then I do not have to think about the place of origin [of the product].” (CZ FG1-O/1). However, this assumption is false.

Familiarity with the logo

For some people in the Czech Republic, Denmark and Germany, preferences for particular certifications schemes were based on the fact that the participants were familiar with the logo. In these cases, the preferred logo was not associated with any particular characteristic of the corresponding scheme but with organic production in general. The logo was a tool to identify organic produce. In many of these comments, it was apparent that the participants had greater trust in products with an organic logo that they knew: “I would not choose [products just labelled with the word ‘organic’]. I would rather go by the labels (...) that I know.” (DE FG2-F/2).

Greater trust

Some people in all study countries apart from the United Kingdom mentioned that they trust particular organic certification schemes more than others. It became apparent that trust was largely intertwined with the other four concepts mentioned above. In particular, perceived stricter control and familiarity with the logo were directly associated with greater trust.

No preferences for particular organic certification schemes

Most participants in Italy and the United Kingdom and some participants in the other study countries stated to have no preference for particular organic certification schemes. One reason was that the participants did not know of any differences standing behind the different logos, which the following statements illustrate: “I never raised myself the question of the differences between all these logos, it is something totally new to me.” (IT FG1-F/2). “I do not know the differences, I honestly admit, and therefore it does not really have a meaning to me.” (DE FG1-O/5). Other participants explained that they were aware of certain organic standards or control systems being stricter, but the differences were not relevant to them. Several people considered other criteria to be more important when buying organic products. Foremost, trust in the seller or retailer was mentioned in all study countries. Furthermore, organic retailer and producer brands played a decisive role, particularly in the United Kingdom, but also in the other study countries.

5.6 Discussion

Based on the focus group discussions, a number of perceived added values could be identified that consumers currently associate with particular certification schemes. However, the results reflect consumer views before the introduction of the mandatory EU logo. It is now discussed whether the identified aspects represent potential added values by which existing certification schemes could differentiate themselves from the mandatory EU logo and the corresponding certification scheme in the future.

Perceived stricter production standards

Defining the standards of a certification scheme falls under the competency of the institution that 'owns' the scheme. EU regulation (EC) No 834/2007 only sets minimum standards for organic production and processing. As the results of the focus group discussions suggest, some consumers prefer particular organic certification schemes because of perceived stricter standards. Defining stricter production standards could thus be a promising strategy for existing certification schemes to differentiate themselves from the mandatory EU logo. However, communication with consumers is extremely important in this context. According to previous studies, consumers know little about organic production methods (Stolz et al. 2009:175f., Hughner et al. 2007:104). A differentiation strategy based on stricter production standards must therefore focus on those aspects that are a) important in the eyes of consumers and b) easy to communicate. Previous studies show that especially animal welfare is of particular concern for organic consumers in European countries (Zander and Hamm 2010:502, Hughner et al. 2007:102).

Perceived stricter control

The findings from the focus group discussions illustrate that many consumers are not aware that organic products are subject to a control system. It can therefore be concluded that certification schemes should communicate to consumers more clearly that all organic products underlie a control process. However, it is questionable whether the implementation of a control system stricter than required by the EU regulation represents a potential added value: Firstly, it has to be determined what 'stricter control' means in the eyes of consumers. Secondly, private standard owners like farmers' associations and inspection bodies face a dilemma: They compete for producers who, in turn, might actually oppose stricter control measures like more frequent control visits or stricter bureaucratic requirements, at least as long as the producers do not receive a special price premium for their products.

Another possible added value connected to ‘control’ was revealed in the focus group discussions in Denmark. The domestic control system was perceived more trustworthy and somehow stricter than foreign certification bodies. This example suggests that private as well as governmental certification schemes could thus differentiate themselves from the EU scheme by stipulating that the product must have been inspected by a domestic certification body.

Domestic origin of the product

Several studies confirm that the regional or local origin of food products is increasingly important to consumers (Zander and Hamm 2010:502, Wirthgen 2005:205, Stolz et al. 2009:176, Toler et al. 2009:1277). The focus group discussions in Denmark and the Czech Republic revealed that the participants associated certain organic logos with the domestic origin of the product, which led to a positive notion. For private organic certification schemes a promising strategy to offer a unique selling proposition to consumers could thus be to define criteria regarding the domestic or regional origin of the raw materials. Governmental certification schemes, however, cannot simply introduce criteria for the origin of the raw materials, since state aid for promotion activities referring to the domestic or regional origin of products may infringe upon Article 87 of the Treaty of Rome (Becker 2009:113). A publicly funded organic label including a regional indication would need to be carefully phrased. Further quality or control criteria would have to be established and the promotion activities would need to focus on these criteria rather than the regional origin, as a decision by the European Court of Justice regarding a label from Germany showed (Becker 2005:6f.). A relaunch of governmental organic logos as regional organic logos is thus not advisable.

Familiarity with the logo

Compared to voluntary organic logos, the new mandatory EU logo will probably gain consumer awareness relatively quickly, since all prepacked organic products must carry the logo. For governmental and private certification schemes, a well-known logo might thus not be enough to differentiate themselves from the mandatory EU logo in the long run.

Trust in the certification scheme

Consumer trust in the certification scheme is a crucial prerequisite for overcoming the dilemma of information asymmetry in the organic market (Albersmeier et al. 2010:71, Jahn et al. 2005:70, Golan et al. 2001:134). According to the marketing literature, consumer trust is a multidimensional and dynamic construct (Flores and Solomon 1998:205f., Butler 1991:644). In our study, the moderators did not specifically address consumer trust, but several

participants raised this topic and four sources of trust in certification schemes could be identified, namely the four concepts mentioned above. It is currently unclear how successful the new mandatory EU logo will be in building consumer trust. However, our findings suggest that governmental and private certification schemes might successfully build greater consumer trust than the EU logo if they successfully incorporate stricter production standards and/or a domestic control system. Private certification schemes could further include criteria regarding the domestic or regional origin of the product.

5.7 Conclusions

With the introduction of the new mandatory EU logo for organic food and farming, it is currently unclear which role the existing voluntary organic logos might play in the future. As outlined in Section 5.3, voluntary organic logos ‘compete’ with the mandatory EU logo: From the viewpoint of producers and retailers, marketing budgets as well as the space on product packages are limited, which questions the use of two or more organic logos – unless the additional logo is recognised by consumers as a signal for an ‘added value’ compared to the mandatory EU logo. Based on the results of the focus group discussions with consumers, a number of potential added values could be identified that organic certification schemes could incorporate so that – in the eyes of consumers – these schemes differentiate themselves from the mandatory EU logo and the corresponding standards. However, the findings highlight that consumers know little about organic standards and certification. In some countries, the participants did not particularly prefer any certification schemes over others suggesting that there might actually not be a high latent demand for certification schemes with additional requirements, unless more efforts are made to communicate the added values to consumers. These issues highlight the need for further research, in particular on the phenomenon that consumers buy organic products despite their limited knowledge about organic production and certification. Recommendations are now made for public and private owners of organic certification schemes regarding how to proceed with their logos and the underlying requirements in light of the mandatory EU logo and the marketing potentials of added values.

Governmental organic certification schemes

In the Czech Republic, Denmark and Germany, the respective governmental logo for organic products was subject of the focus group discussions. In these three countries, the governmental standards correspond with the EU standards (Act on Organic Farming No 242/2000 Coll., Öko-Kennzeichengesetz, Bekendtgørelse om økologiske fødevarer m.v. No 1258 of 12.12.2008), but while the German Bio-Siegel can be used on request on all

products complying with the EU standards (Öko-Kennzeichengesetz), the governmental logos in the Czech Republic and Denmark require some further conditions (see Section 5.3). In both latter countries, our results suggest that consumer trust in products with the governmental logo is very high. Therefore, it seems advisable to continue the use of the governmental logos in the future. Interestingly, Denmark is one of the countries that have promoted the introduction of a mandatory EU logo from the beginning on. In Germany, the Bio-Siegel is widely known, but trust in the governmental logo is less pronounced than in the Czech Republic and Denmark. However, given the Bio-Siegel's high awareness level, it is advisable to display the governmental logo in addition to the EU logo in a transition period. Once the EU logo has gained consumer trust, the Bio-Siegel is basically needless, since it stands for the exact same standards and control system as the EU logo. The Bio-Siegel would just require additional space on product packages but space is often very limited.

Private organic certification schemes

Our findings suggest that consumer perception of the farmers' associations and the private certification bodies in the EU countries is rather low. With the introduction of the new mandatory EU logo, the private certification schemes therefore need to raise their profiles, otherwise producers and retailers might not use these logos on product packages any longer. Based on the focus group results, three potential added values could be identified which private schemes could incorporate in order to differentiate themselves from the EU logo: Stricter production standards, a domestic control system and domestic origin of the product. Besides, a study by Zander and Hamm (2010:500f.) on additional ethical attributes of organic food provides a further differentiation strategy for private standard owners: Organic consumers in the European countries Austria, Germany, Switzerland and United Kingdom are particularly interested in 'fair prices for farmers'. Translating fair prices into a certification scheme is certainly not an easy task but could be a promising niche strategy for selected private standard owners.

6 Consumer perception of standards and labels for organic food in Germany

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6.1 Summary

From July 2010 on, prepacked organic food products must be labelled with the new EU logo. For many years, there have been numerous voluntary organic certification labels in Germany. This paper examines how consumers perceive differences between the organic standards behind the different labels. From the analysis, recommendations are derived for agrarian political decision makers at EU level, national and regional level as well as for private farmers' associations.

The focus group discussions with consumers showed that only single participants could name specific differences between different organic standards. Some participants distinguished between high standards of the farmers' associations in contrast to lower legal standards. Many participants, however, were not aware of any differences. The new EU logo for organic food was seen rather critically by the participants. It was feared that the organic standards might be lowered and the control system was questioned. Hence, it is urgently recommended to carry out comprehensive communication campaigns with the introduction of the new EU logo, in order to gain consumer trust. In an interim phase, the Bio-Siegel should be used in addition to the mandatory EU logo so that consumers can easily recognise organic food. The farmers' associations must differentiate their standards more clearly from the EU standards and put more emphasis on communicating the added values to consumers, if they do not want their logos to disappear from the market.

6.2 Zusammenfassung

Abgepackte Öko-Lebensmittel müssen ab Juli 2010 mit dem neuen EU-Logo gekennzeichnet sein. In Deutschland gibt es seit vielen Jahren zahlreiche freiwillige Öko-Zertifizierungszeichen. Dieser Beitrag untersucht, wie Verbraucher Unterschiede zwischen den hinter den verschiedenen Kennzeichen stehenden Öko-Standards wahrnehmen und

beurteilen. Aus der Analyse werden Handlungsempfehlungen für agrarpolitische Entscheidungsträger auf EU-Ebene, Bundes- und Länderebene sowie für private Anbauverbände abgeleitet.

Die Fokusgruppendifkussionen mit Verbrauchern zeigten, dass nur einzelne Teilnehmer konkrete Unterschiede zwischen verschiedenen Öko-Standards benennen konnten. Einige Teilnehmer hatten eine ungefähre Vorstellung von hohen Standards der Anbauverbände im Gegensatz zu niedrigeren gesetzlich vorgeschriebenen Standards. Viele Teilnehmer waren sich jedoch keiner Unterschiede bewusst. Die neue EU-Kennzeichnung für Öko-Lebensmittel wurde von den Teilnehmern eher kritisch bewertet. So wurde u. a. eine Herabsetzung der Öko-Standards befürchtet und das Kontrollsystem in Frage gestellt. Es wird daher dringend empfohlen, bei der Einführung der neuen EU-Kennzeichnung umfassende Kommunikationsmaßnahmen durchzuführen, um das Vertrauen der Verbraucher rasch zu gewinnen. In einer Übergangsphase sollte das Bio-Siegel weitergeführt und zusätzlich zum verpflichtenden EU-Logo genutzt werden, um Verbrauchern eine eindeutige Identifizierung von Öko-Produkten zu erleichtern. Wenn die deutschen Anbauverbände mit ihren Kennzeichen am Markt bestehen bleiben wollen, müssen sie ihre Standards deutlicher als bisher von den EU-Standards abgrenzen und Verbrauchern ihre Alleinstellungsmerkmale besser kommunizieren.

6.3 Einleitung

6.3.1 Thema und Zielsetzung des Beitrags

Ökologisch erzeugte Lebensmittel – in diesem Beitrag kurz Öko-Produkte genannt – müssen genau definierte Richtlinien erfüllen. Den ordnungspolitischen Rahmen für die Erzeugung, Verarbeitung, Kennzeichnung und Kontrolle von Öko-Produkten bildet in den Ländern der Europäischen Union die Verordnung (EG) Nr. 834/2007 (im Folgenden EG-Öko-Verordnung genannt), die am 1. Januar 2009 die Verordnung (EWG) 2092/91 ablöste. Ausschließlich Produkte, die den Richtlinien der EG-Öko-Verordnung genügen, können als „Öko“ bzw. „Bio“ gekennzeichnet und entsprechend auf den Markt gebracht werden. Bezüglich der Kennzeichnung von Öko-Produkten sieht die EG-Öko-Verordnung eine Neuerung vor: Ab Juli 2010 wird das bislang optional zu nutzende EU-Öko-Logo durch ein neues EU-Logo ersetzt, das für alle abgepackten Öko-Produkte in der EU verpflichtend ist. Anders als bisher muss direkt neben dem Logo einer der drei folgenden Hinweise zur Herkunft der landwirtschaftlichen Ausgangsstoffe platziert sein: „aus EU-Landwirtschaft“, „aus Nicht-EU-Landwirtschaft“ oder „aus EU-/Nicht-EU-Landwirtschaft“. Nur wenn mindestens 98% der

Ausgangsstoffe aus demselben Land stammen, kann stattdessen das entsprechende Land genannt werden (Verordnung (EG) Nr. 834/2007).

In Deutschland gibt es seit vielen Jahren zahlreiche freiwillige Öko-Zertifizierungszeichen. Das in Deutschland am weitesten verbreitete Zertifizierungslogo für Öko-Produkte ist das staatliche Bio-Siegel. Das Bio-Siegel kann auf Antrag auf allen Produkten, die den Vorgaben der EG-Öko-Verordnung genügen, gebührenfrei verwendet werden. Das Bio-Siegel bezieht sich somit auf dieselben Öko-Standards wie das EU-Logo, nur dass es keinen obligatorischen Hinweis auf die Herkunft der landwirtschaftlichen Ausgangsstoffe vorsieht. Daneben existieren in Deutschland bereits seit Jahrzehnten private Anbauverbände mit eigenen Richtlinien zur Erzeugung und Herstellung von Öko-Produkten, die teilweise das erklärte Ziel verfolgen, die eigenen Produkte durch die Erfüllung höherer Standards von Produkten nach EG-Öko-Verordnung abzuheben, also eine Differenzierung innerhalb des Öko-Marktes zu erreichen (Bioland e.V. n.d., Demeter e.V. n.d., Naturland e.V. 2009).

Die Entstehung der neuen EU-Regelung zur Kennzeichnung von Öko-Produkten wurde von kontroversen Diskussionen begleitet, weil der erste Entwurf vorsah, die Verwendung privater Öko-Zertifizierungslogos zu verbieten. Dieser Vorschlag stieß auf heftige Gegenwehr, insbesondere von Seiten der Anbauverbände (Blake 2009:19, Bund Ökologische Lebensmittelwirtschaft 2006:9), so dass die entsprechenden Passagen aus dem Entwurf gestrichen wurden. Somit können die bestehenden Öko-Logos auch zukünftig – zusätzlich zur obligatorischen EU-Kennzeichnung – verwendet werden. Grundsätzlich richten sich die meisten der auf Öko-Produkten ausgelobten Zertifizierungslogos in erster Linie an den Endverbraucher. Ihre Kernfunktion besteht darin, die Einhaltung definierter Standards zu kommunizieren (Jahn et al. 2005:53, Golan et al. 2001:131). Die Auslobung eines zusätzlichen Öko-Logos erscheint insbesondere dann sinnvoll, wenn Verbraucher mit dem Logo einen Mehrwert, wie bspw. die Einhaltung höherer Öko-Standards oder eine vermeintlich höhere Sicherheit, verbinden. Vor diesem Hintergrund sollten sich sowohl private Anbauverbände als auch staatliche Stellen mit eigenen Öko-Logos mit der Frage befassen, welche Konsequenzen die Einführung der obligatorischen EU-Kennzeichnung haben könnte.

Der vorliegende Beitrag untersucht, wie erfolgreich die jeweiligen Öko-Standards gegenüber Verbrauchern bislang ausgerichtet und kommuniziert wurden und leitet aus dieser Analyse Handlungsempfehlungen für agrarpolitische Entscheidungsträger auf EU-Ebene, Bundes- und

Länderebene sowie für private Anbauverbände ab. Bei der Analyse stehen folgende Fragen im Mittelpunkt:

- Inwiefern nehmen Verbraucher bislang Unterschiede zwischen verschiedenen Öko-Standards wahr?
- Inwiefern bevorzugen Verbraucher Produkte mit bestimmten Öko-Standards?
- Welche Vor- und Nachteile sehen Verbraucher in der neuen obligatorischen EU-Kennzeichnung für Öko-Produkte?

Der Beitrag ist wie folgt aufgebaut: Nach einer kurzen Einführung in die Rolle der Zertifizierung und Kennzeichnung von Öko-Produkten werden im folgenden Abschnitt die Methode der Datenerhebung mit Fokusgruppen und die Methode der Datenauswertung beschrieben. Im Anschluss werden die Ergebnisse der Datenanalyse vorgestellt. In der abschließenden Diskussion der Ergebnisse werden Empfehlungen für die neue EU-Kennzeichnung, das staatliche Bio-Siegel und die Zeichen der Anbauverbände abgeleitet.

6.3.2 Zur Rolle der Zertifizierung und Kennzeichnung von Öko-Produkten

Das Erfordernis einer Zertifizierung und Kennzeichnung von Öko-Produkten ergibt sich aus der Tatsache, dass Öko-Standards in erster Linie den Produktionsprozess regeln und sich weniger auf Eigenschaften des Endprodukts selbst beziehen. Verbraucher können die Einhaltung von Öko-Standards anhand des Endprodukts nicht überprüfen und auch Spezialisten ist der Nachweis nur mit Hilfe aufwendiger Verfahren möglich. Die Wertschöpfungskette für Öko-Lebensmittel weist somit eine hohe Informationsasymmetrie auf und ist anfällig für opportunistisches Verhalten wie bspw. Betrug (Jahn et al. 2005:54, McCluskey 2000:5). Prozessbezogene Produkteigenschaften dieser Art werden gemäß der informationsökonomischen Systematik als so genannte Potemkin-Eigenschaften bezeichnet (Tietzel und Weber 1991:116f.). Die Zertifizierung von ökologisch erzeugten Lebensmitteln durch unabhängige Kontrollstellen und die entsprechende Produktkennzeichnung (bspw. mit einem Logo) zielen darauf ab, Verbrauchern die Einhaltung der Öko-Standards zu signalisieren, um so dem grundsätzlichen Problem der Informationsasymmetrie entgegenzuwirken (Schulze et al. 2008:509). Der Erfolg eines Zertifizierungssystems wie der Öko-Zertifizierung hängt dabei maßgeblich davon ab, inwiefern Verbraucher die Produktkennzeichnung wahrnehmen, das dahinter stehende Produktionssystem verstehen, dem Zertifizierungssystem Vertrauen schenken und die entsprechenden Produkte bevorzugen (Jahn et al. 2005:56f., Golan et al. 2001:134f.).

6.4 Methoden

Für die vorliegende Zielsetzung wurde ein qualitativer Forschungsansatz mit Hilfe von Fokusgruppendifkussionen²⁶ gewählt. Der Oberbegriff qualitative Forschung umfasst eine Fülle verschiedener Ansätze und Methoden, deren wesentliche Gemeinsamkeiten in einer interpretativen Erkenntnisgewinnung durch Beschreiben, Rekonstruieren und Verstehen liegen (Mruck und Mey 2007:28f., Przyborski und Wohlrab-Sahr 2008:25f.). Im Gegensatz zur quantitativen Forschung wird dabei nicht das Ziel verfolgt, Zusammenhänge statistisch zu erfassen und in numerischer Form zu analysieren (Mruck und Mey 2007:28f.). Nachteile qualitativer Ansätze sind somit eine mangelnde Repräsentativität und Quantifizierbarkeit der Ergebnisse (Mruck und Mey 2007:28f.). Qualitative Forschung zielt hingegen auf Theoriebildung ab und eignet sich speziell zur Untersuchung von Fragestellungen, zu denen kaum oder nur unzureichende Erkenntnisse vorliegen (Lamnek 2005:71f.). Das trifft auf die zu untersuchenden Fragestellungen in dieser Studie zu. Bisher ist kaum bekannt, wie Verbraucher von Öko-Lebensmitteln Unterschiede zwischen verschiedenen Öko-Standards wahrnehmen und beurteilen. Ferner ist zum jetzigen Zeitpunkt unklar, wie Verbraucher die neue obligatorische EU-Kennzeichnung einschätzen. Mit Hilfe dieser Studie soll das Spektrum an Einstellungen unter Verbrauchern von Öko-Lebensmitteln erfasst und die hinter den Einstellungen stehenden Grundhaltungen aufgedeckt werden. Im Folgenden wird näher auf Methode, Design und Durchführung der Datenerhebung und -analyse eingegangen.

6.4.1 Datenerhebung

6.4.1.1 Methode der Datenerhebung

Als Methode der Datenerhebung wurden Fokusgruppendifkussionen gewählt. Fokusgruppendifkussionen sind eine Methode der qualitativen Datenerhebung, bei der die Teilnehmer (in der Regel zwischen 6 und 12 Personen) unter der Leitung eines Moderators bestimmte Fragestellungen diskutieren (Finch und Lewis 2006:170f.). Eine Fokusgruppendifkussion beruht auf einem Gesprächsleitfaden, der die Rahmenthemen in Form von offenen Fragen vorgibt und je nach Untersuchungsfeld mehr oder weniger stark strukturiert ist (Blank 2007:288f., Lamnek 2005:96). Mit Hilfe dieser Methode lassen sich insbesondere Einblicke in die verschiedenen Aspekte und Dimensionen eines Problems

²⁶ In der Literatur werden die Begriffe Fokusgruppendifkussionen, Fokusgruppen, Gruppendiskussionen und Fokusgruppeninterview zum Teil synonym verwendet. Zur Abgrenzung des in Deutschland vorherrschenden und diesem Beitrag zugrunde liegenden Verständnisses von Fokusgruppendifkussionen von der im anglo-amerikanischen Raum verbreiteten Methode der Focus Groups wird hier auf die Beiträge von Lamnek (2005:18f.) sowie Bohnsack und Przyborski (2007) verwiesen.

gewinnen (Lamnek 2005:71). Ein typischer Anwendungsbereich von Fokusgruppendifkussionen in der Konsumentenforschung liegt in der Untersuchung von Einstellungen, Meinungen, Kaufmotiven und Produktpräferenzen (Blank 2007:284, Mayerhofer 2007:480, Bryman 2008:475). Dem kommunikativen Charakter von Fokusgruppendifkussionen kommt dabei eine zentrale Bedeutung zu. Im Vergleich zu stärker standardisierten Methoden weist diese Methode eine hohe Alltagsnähe auf, indem sich die Teilnehmer in ihren eigenen Worten äußern und miteinander austauschen können (Blank 2007:285). Gegenüber anderen qualitativen Erhebungsverfahren mit Einzelinterviews liegt ein Vorteil in der gegenseitigen Stimulierung der Teilnehmer, wodurch in der Regel ein breiteres Spektrum an Meinungen zum Vorschein kommt, da die Teilnehmer miteinander interagieren und die Meinungen der anderen reflektieren (Lamnek 2005:84, Blank 2007:285, Stolz et al. 2009:155).

6.4.1.2 Design und Durchführung der Datenerhebung

Der Gesprächsleitfaden für die Fokusgruppendifkussionen enthielt drei zentrale Leitfragen. Zunächst wurden die Teilnehmer gefragt, ob sie Produkte mit bestimmten Öko-Logos bevorzugten. An dieser Stelle wurde das Thema Öko-Richtlinien und -Standards von Seiten des Moderators noch nicht erwähnt. Aufgrund dieser Vorgehensweise konnte untersucht werden, inwiefern die Teilnehmer selbst die Verbindung zwischen Öko-Logos und den dahinter stehenden Standards herstellten. Im Anschluss an Frage 1 erläuterte der Moderator, dass die abgebildeten Logos für bestimmte Öko-Richtlinien stehen, und die Teilnehmer wurden nun gefragt, ob sie zwischen den verschiedenen Richtlinien wichtige Unterschiede sehen. Als letztes wurde die neue EU-Kennzeichnung für Öko-Produkte kurz erläutert und zur Debatte gestellt. Alle Leitfragen wurden als visuelle Unterstützung in Form einer computergestützten Präsentation nacheinander mit einem Beamer an die Wand projiziert. Bei Frage 1 und 2 waren verschiedene Öko-Logos gemäß Abbildung 5 (Figure 5) in Farbe abgebildet. Zur Diskussion standen das staatliche Bio-Siegel, das alte EU-Logo sowie die Logos der drei Anbauverbände Bioland, Demeter und Naturland. Die Auswahl der Logos erfolgte mittels einer Bestandsaufnahme in Einkaufsstätten im Raum Kassel und Göttingen wenige Monate vor Durchführung der Fokusgruppen, wonach die ausgewählten Logos die am weitesten verbreiteten Logos in dieser Region waren.

Figure 5: Auszug aus der visuellen Unterstützung zum Gesprächsleitfaden

Im Rahmen der Studie wurden insgesamt drei Fokusgruppendifkussionen mit je 10 bis 15 Teilnehmern in Kassel und Göttingen im Mai 2009 durchgeführt. Die 60 bis 70 Minuten dauernden Diskussionen wurden mit Hilfe einer Videokamera und zweier Audio-Aufnahmegeräte aufgezeichnet. Zielgruppe der Studie waren Gelegenheits- und Intensivkäufer von Öko-Lebensmitteln. Die Rekrutierung der Teilnehmer fand vor Naturkostläden und konventionellen Lebensmittelgeschäften mit einem breiten Sortiment an Öko-Lebensmitteln statt. Die Auswahl der Teilnehmer erfolgte mittels eines Screening-Fragebogens, der neben verschiedenen Ausschlusskriterien²⁷ Quoten²⁸ für die Alters- und Geschlechterzusammensetzung der Fokusgruppen vorgab. Weiterhin wurde im Screening-Fragebogen die Öko-Kaufintensität der Teilnehmer mit einem Index bestimmt.²⁹ Die Teilnehmer wurden daraufhin in Öko-Gelegenheitskäufer und Öko-Intensivkäufer unterteilt,

²⁷ Von der Teilnahme ausgeschlossen wurden Personen, die nicht für den Lebensmitteleinkauf in ihrem Haushalt zuständig waren, die in der Landwirtschaft, im Bereich Lebensmittelverarbeitung, in der Marktforschung oder am Fachbereich Ökologische Agrarwissenschaften der Universität Kassel arbeiteten, sowie Personen, die im vergangenen Jahr an einer Gruppendiskussion teilgenommen hatten.

²⁸ Bezüglich des Alters der Teilnehmer wurde zwischen den zwei Kategorien „18 bis 44 Jahre“ und „45 bis 75 Jahre“ unterschieden, wobei gemäß der demographischen Verteilung in der bundesdeutschen Bevölkerung (Statistisches Bundesamt 2008:44) der Anteil beider Kategorien jeweils 50% betragen sollte. Im Hinblick auf die geschlechtermäßige Zusammensetzung der Fokusgruppen wurden Anteile von 65% Frauen und 35% Männer angestrebt, da frühere Studien mit zufälliger Auswahl der Teilnehmer in Einkaufsstätten einen Frauenanteil von circa 65% ergaben (siehe bspw. Müller and Hamm 2001, Spiller et al. 2004:33).

²⁹ Für sieben Gruppen von Lebensmitteln wurde abgefragt, inwieweit und wie häufig die Teilnehmer die einzelnen Produktgruppen in Öko-Qualität kauften. Aus den drei Antwortkategorien „so gut wie nie“ (0 Punkte), „ab und zu“ (1 Punkt) und „so gut wie immer“ (2 Punkte) wurde eine Gesamtpunktzahl zwischen 0 und 14 errechnet. Teilnehmer mit einer Gesamtpunktzahl von 3 bis 6 Punkten wurden als Gelegenheitskäufer und Teilnehmer mit 7 bis 14 Punkten als Intensivkäufer eingestuft. Personen mit weniger als 3 Punkten wurden von der Teilnahme ausgeschlossen.

wobei zwei Fokusgruppen ausschließlich aus Öko-Gelegenheitskäufern und eine Fokusgruppe aus Öko-Intensivkäufern bestand. Die Trennung der beiden Käufersegmente erfolgte aufgrund der Annahme, dass Unterschiede im Öko-Kaufverhalten mit Unterschieden im Erfahrungs- und Kenntnisstand bezüglich Öko-Richtlinien einhergehen. Infolgedessen könnte in „gemischten Fokusgruppen“ Intensivkäufern eine Art Expertenrolle zugeschrieben werden, so dass sich Gelegenheitskäufer mit geringerem Kenntnisstand weniger beteiligen würden. Von einer derartig heterogenen Zusammensetzung einer Fokusgruppe wird in der Regel abgeraten (vgl. bspw. Finch und Lewis 2006:190f., Mayerhofer 2007:482).

Die tatsächliche Zusammensetzung der drei Fokusgruppen ist in Tabelle 12 (Table 12) dargestellt. Die Gruppengröße variierte zwischen 10 und 15 Teilnehmern, da die Quote der nicht erschienenen Personen in den drei Gruppen sehr unterschiedlich ausfiel (0% bei FG2 und 33% bei FG3). Mit einem Verhältnis von 61% Frauen und 39% Männern sowie 56% in der jüngeren und 44% in der älteren Altersgruppe weicht die tatsächliche Zusammensetzung der Gruppen aufgrund des unvorhersehbaren Nichterscheinsens mehrerer Personen leicht von den ursprünglich angestrebten Quoten ab. Diese Verzerrungen liegen im für Fokusgruppen üblichen Rahmen.

Table 12: Zusammensetzung der Fokusgruppen

Geschlecht und Alter	Total		Gruppe 1 Öko-Gelegenheits- käufer		Gruppe 2 Öko-Gelegenheits- käufer		Gruppe 3 Öko- Intensivkäufer	
	N	%	N	%	N	%	N	%
Frauen, 18-44 Jahre	12	33,3	5	45,5	5	33,3	2	20,0
Frauen, 45-75 Jahre	10	27,8	2	18,2	3	20,0	5	50,0
Männer, 18-44 Jahre	8	22,2	1	9,1	5	33,3	2	20,0
Männer, 45-75 Jahre	6	16,7	3	27,3	2	13,3	1	10,0
Total	36	100,0	11	100,0	15	100,0	10	100,0

6.4.2 Datenanalyse

Die Analyse der Daten erfolgte mit der Methode der qualitativen Inhaltsanalyse in Anlehnung an Mayring (2003) sowie Gläser und Laudel (2006). Die qualitative Inhaltsanalyse ist eine Methode zur systematischen und regelgeleiteten Analyse sprachlichen Materials. Die im Textmaterial enthaltenen, für die Forschungsfragen relevanten Informationen werden dabei extrahiert, zusammengefasst und interpretiert (2007). Bei der qualitativen Inhaltsanalyse wird das Textmaterial in Analyseeinheiten unterteilt und nach einem vorab definierten Ablaufschema analysiert (2003).

Mit Hilfe der Audio- und Videoaufzeichnungen wurden zunächst Transkriptionen der Fokusgruppendifkussionen mit Standardorthografie angefertigt. Die strukturierte und regelgeleitete Auswertung der Daten erfolgte mit Hilfe eines Kategoriensystems, das sich eng an den Forschungsfragen orientierte und gemäß der Vorgehensweise nach Gläser und Laudel (2006) im Laufe des Analyseprozesses anhand des untersuchten Materials erweitert wurde. Die im Textmaterial identifizierten Analyseeinheiten wurden zunächst verdichtet, d. h. auf deren Kernaussagen reduziert, bevor sie in zwei weiteren Textdurchläufen den Kategorien zugeordnet wurden. Daran anschließend wurden alle zu einer Kategorie gehörenden Aussagen gesammelt, zusammengefasst und interpretiert.

Im gesamten Auswertungsprozess erfolgte jeder Analyseschritt quer über die drei Fokusgruppen. Bei der Zusammenfassung und Interpretation der Ergebnisse wurde berücksichtigt, inwiefern ein Aspekt in den drei verschiedenen Fokusgruppen thematisiert wurde. So konnte in der Darstellung der Ergebnisse vermerkt werden, in welchen Gruppen ein Aspekt genannt wurde. Es sei an dieser Stelle jedoch darauf hingewiesen, dass keine quantitative Analyse angestrebt wurde, da die Häufigkeit geäußerter Argumente innerhalb einer Fokusgruppe kaum interpretiert werden kann (Mayerhofer 2007:483). In der vorliegenden Studie wurde davon ausgegangen, dass lediglich die Tatsache, ob ein Aspekt in einer Gruppe genannt wurde oder nicht, gewisse Rückschlüsse auf dessen Relevanz zulässt.

6.5 Ergebnisse

Die Darstellung der Ergebnisse ist entsprechend der Forschungsfragen in drei Abschnitte unterteilt. Der erste Abschnitt befasst sich mit der Wahrnehmung von Unterschieden zwischen verschiedenen Öko-Richtlinien. Im zweiten Abschnitt wird dargelegt, inwiefern die Teilnehmer Produkte mit bestimmten Öko-Standards bevorzugten. Im dritten Abschnitt wird auf die Einstellungen der Teilnehmer zur neuen EU-Kennzeichnung für Öko-Lebensmittel eingegangen. Zur Veranschaulichung der Ergebnisse sind stellvertretende Originalzitate der Teilnehmer angeführt. Alle Zitate sind am Ende mit Angaben zur Fokusgruppe (1 bis 3), zur Öko-Kaufintensität („G“ für Gelegenheitskäufer und „I“ für Intensivkäufer) sowie zur anonymisierten Teilnehmernummer (1 bis 15) versehen. In den Zitaten sind Weglassungen durch runde Klammern (...) gekennzeichnet. Angaben in eckigen Klammern sind Ergänzungen der Verfasser, die zum Verständnis des Zitats notwendig sind.

6.5.1 Wahrnehmung von Unterschieden zwischen verschiedenen Öko-Standards

Die Wahrnehmung von verschiedenen Öko-Standards reichte bei den Teilnehmern von völliger Unkenntnis bis zu punktuelltem Wissen über die Inhalte bestimmter Standards. Mehrere Teilnehmer verglichen die hinter den verschiedenen Logos stehenden Richtlinien miteinander, indem sie Rangfolgen von hohen zu niedrigen Standards bildeten. Es muss jedoch betont werden, dass nur wenige Teilnehmer tatsächlich mehrere Standards miteinander verglichen. Während das staatliche Bio-Siegel allen Teilnehmern vertraut war, kannte so gut wie keiner das EU-Logo. Bezüglich der drei Anbauverbände wiederum ergab sich ein uneinheitliches Bild: Einige Teilnehmer waren mit Demeter, Bioland und Naturland vertraut, andere wiederum kannten keines der drei Logos. Insgesamt herrschte in allen drei Gruppen unter den Teilnehmern keine Scheu, Unkenntnis offen zuzugeben. Außerdem wurde deutlich, dass die Wahrnehmung bei vielen Teilnehmern nicht wesentlich über eine ungefähre Vorstellung von hohen im Gegensatz zu niedrigeren Standards hinausging.

Insgesamt brachten die Teilnehmer am häufigsten Demeter mit höheren Standards in Verbindung. Im Gegensatz dazu wurde das Bio-Siegel häufig mit Mindeststandards, teilweise auch mit Massenproduktion und „Billigläden“ (FG3-G/8) assoziiert.

„Ich glaube, dass Demeter deshalb deutlich teurer ist, weil die von den Bauern in der Umgebung ihre Produkte (...) beziehen. Ich bin mir nicht ganz sicher. Und Bio nach EG-Öko-Verordnung wird ja von überall hertransportiert. Das ist eine Massenproduktion, biologische Massenproduktion sozusagen. Und daher wird es auch schon wieder günstiger.“ (FG1-G/3).

Produkte ohne Zertifizierungslogo, nur mit dem Wort „Bio“ oder „Öko“ versehen, wurden hingegen am niedrigsten eingestuft. Die meisten Teilnehmer zweifelten an, dass diese Produkte überhaupt unter festgelegte Richtlinien fielen, weshalb sie diesen Produkten nicht vertrauten. Vielen Teilnehmern war offensichtlich nicht bekannt, dass die Verwendung der Begriffe „Bio“ und „Öko“ gesetzlich geregelt ist.

„Ich habe auch oft das Gefühl, wo nur Bio draufsteht, dass das einfach nur draufgeschrieben wird, damit die Leute das vermehrt kaufen, oder damit sie bereit sind, einen höheren Preis zu zahlen. Weil gerade bei dieser reinen Aufschrift Bio hat man oft das Gefühl, da steht überhaupt nichts dahinter.“ (FG1-G/9).

Die Richtlinien der Anbauverbände Bioland und Naturland wurden entweder zwischen Demeter und dem Bio-Siegel oder gleichwertig mit Demeter eingestuft.

„Von der Priorität her, würde ich sagen, ist das Demeter so das am höchsten angesiedelte oder das ehrlichste. Und das Bioland ist, bin mir jetzt nicht sicher, das ist irgend so eine Übergangslösung. Das ist nicht ganz rein, aber doch auf dem Weg dahin. Und das Bio [Bio-Siegel] sagt mir [nichts], also da habe ich keinen Inhalt dazu. Das ist einfach nur Bio. Was da jetzt wirklich dahinter steht, weiß ich nicht.“ (FG1-G/11).

Als einzige konkrete Unterschiede zwischen den Standards wurden spezielle Eigenschaften von Demeter genannt, die in Abschnitt 6.5.2 dargestellt werden.

In allen Fokusgruppen gaben einige Personen offen zu, überhaupt keine Unterschiede zwischen verschiedenen Richtlinien zu kennen.

„Ich würde sagen, (...) wenn mir die Öko-Richtlinien sowieso nicht bekannt sind oder relativ unbekannt, dann kann ich auch zu den Unterschieden gar nichts sagen, da kann ich eigentlich nur Vertrauen haben.“ (FG1-G/1).

In zwei Fokusgruppen stellten mehrere Personen fest, dass ihnen die Bedeutung des Begriffs „Bio“ unklar war. Hier herrschte große Unsicherheit bezüglich der Vorgaben für die Erzeugung von Öko-Produkten.

„Was ist Bio genau? Vielleicht kann mich auch mal jemand aufklären? (...) Vielleicht kann mir dabei jemand weiterhelfen? Was steckt jetzt wirklich dahinter?“ (FG1-G/5).

Daneben fragten sich einige Teilnehmer, ob Öko-Produkte generell unter ein Kontrollsystem fallen und inwieweit das auch auf importierte Öko-Produkte zutrifft.

6.5.2 Verbraucherpräferenzen für bestimmte Öko-Standards

Entsprechend der unterschiedlichen Wahrnehmung von Öko-Standards wurden auch die Fragen nach Präferenzen für bestimmte Öko-Standards von den Teilnehmern sehr unterschiedlich beantwortet. Einige Teilnehmer schienen eine klare Vorliebe für bestimmte Öko-Standards zu haben, andere hingegen überhaupt nicht, was im Folgenden näher dargestellt wird.

In allen Fokusgruppen brachten einige Teilnehmer eine Präferenz für vermeintlich höhere Standards zum Ausdruck. Diese Aussagen bezogen sich ausnahmslos auf die Standards der Anbauverbände. Demeter wurde dabei am häufigsten genannt, einige Personen bevorzugten jedoch ausdrücklich Bioland, trotz vermeintlich niedrigerer Standards als Demeter.

„Ich finde Bioland ganz gut von den Verbandsrichtlinien. Es ist halt ein bisschen strenger als Bio [Bio-Siegel], aber nicht so streng wie Demeter und auch nicht so aufwendig in der Landwirtschaft wie Demeter.“ (FG3-G/14).

Andere Teilnehmer wiederum machten keine Unterschiede zwischen Demeter, Bioland und Naturland und zogen diese drei Anbauverbände dem Bio-Siegel vor.

„Meine Liste wäre jetzt Bioland, Demeter, Naturland relativ gleichrangig und dieses EU-Bio [Bio-Siegel] kaufe ich wirklich immer nur unter ganz bestimmten Umständen. Denn ich denke mal, das ist zwar besser als gar nichts, aber da weiß ich, da sind die Standards einfach so niedrig, das kaufe ich also dann, wenn es das Produkt als was anderes nicht gibt.“ (FG3-G/7).

Insgesamt gingen die Teilnehmer kaum darauf ein, weshalb sie Wert auf höhere Standards legten und worin ihrer Ansicht nach die Unterschiede zwischen den Standards bestanden. Einige Teilnehmer bevorzugten Demeter aufgrund des anthroposophischen Hintergrunds, wobei Anthroposophie aber nicht näher erläutert wurde. Vereinzelt wurden spezielle Eigenschaften der Produktionsweise von Demeter angeführt, wie die Berücksichtigung kosmischer Bedingungen. Zwei Personen erwähnten den besseren Geschmack von Demeter-Milch.

„Von Anthroposophie halte ich eigentlich jetzt nichts, aber Milch kaufe ich zum Beispiel bei Demeter, weil die die Milch nicht behandeln und die anderen machen ja so H-Milch. Und ich finde, das schmeckt man auch.“ (FG3-G/14).

Aus einigen Aussagen ging hervor, dass höhere Standards mit strengeren Kontrollen in Verbindung gebracht wurden, was zu größerem Vertrauen in die Echtheit der Öko-Produkte führte.

„So ein Label wie zum Beispiel Bioland, da kann ich eher davon ausgehen, dass die strenger kontrollieren. Erstens strenger kontrollieren, insbesondere strengere Standards an die Produktionsweise haben.“ (FG3-G/7).

Andere Teilnehmer sprachen allgemein von hoher Produktqualität als Folge von hohen Standards, ohne näher darzulegen, was sie unter Qualität verstanden. Eine Person stellte ausführlich dar, dass ihr Einkaufsverhalten von der jeweiligen Art des Produkts abhing, wobei sie höhere Produktionsstandards als besonders wichtig erachtete bei Obst und Gemüse mit essbarer Schale sowie bei Produkten, deren Erzeugung große Belastungen für die Umwelt und die beteiligten Arbeiter verursachte. Diese Person verband mit höheren Produktionsstandards demnach sowohl persönliche als auch altruistische Motive.

Interessanterweise schränkten viele Teilnehmer, die angaben, Demeter aufgrund höherer Produktionsstandards zu bevorzugen, ihre Aussagen ein und verwiesen darauf, dass sie sich Demeter-Produkte aufgrund der hohen Preise nur bedingt leisten konnten bzw. wollten.

„Ich bevorzuge nach wie vor Demeter, wenn es irgendwie geht, wenn es auch preislich geht. Ich kaufe öfter auch abgelaufene Ware, dann geht das meistens.“ (FG2-I/6). „Ja, da würde ich mich auch anschließen. Kommt ja natürlich auch auf den Preis an, denn Demeter ist ja häufig deutlich teurer. Dann würde ich auch ein preiswerteres Produkt bevorzugen. Aber sonst Demeter wegen der anthroposophischen Ausrichtung.“ (FG2-I/9).

In allen Fokusgruppen gaben einige Teilnehmer an, grundsätzlich keine Präferenzen für bestimmte Öko-Standards zu haben. Einerseits gab es mehrere Teilnehmer, die keine Unterschiede zwischen verschiedenen Öko-Standards kannten.

„Ich kenne die Unterschiede nicht, gebe ich ehrlich zu, von daher hat es für mich auch nicht wirklich eine Bedeutung.“ (FG1-G/5).

Öko-Zertifizierungslogos spielten für viele dieser Teilnehmer dennoch eine Rolle, und zwar als schlichtes Erkennungsmerkmal für Öko-Lebensmittel. Produkte mit bekannten Zertifizierungslogos wurden klar bevorzugt, ohne dass damit konkrete Vorstellungen über die Höhe der Standards einhergingen. Vertrauen spielte hier die entscheidende Rolle, da Öko-Produkten ohne Zertifizierungslogo misstraut wurde.

„Das linke [EU-Logo] kenne ich gar nicht. Und dieses Naturland ist mir auch nicht vertraut. Ich achte in erster Linie auf dieses Sechseck [Bio-Siegel] und Bioland. Und an dritter Stelle käme Demeter.“ (FG2-I/8).

„Wenn jetzt einfach nur das Wort Bio draufsteht, [den Produkten] würde ich prinzipiell eher misstrauen, weil, ich weiß nicht, ob das Wort irgendwie rechtlich geschützt ist. Wahrscheinlich kann man das einfach draufschreiben. Daher würde ich dem Wort nicht trauen, aber allen anderen, die eher so zertifikatmäßig aussehen, dann schon.“ (FG3-G/3).

Andere Teilnehmer gingen explizit darauf ein, dass ihnen andere Kriterien bei der Auswahl eines Öko-Produkts wichtiger waren als die Unterschiede zwischen verschiedenen Standards. In vielen Aussagen wurde eine Präferenz für regionale Produkte deutlich. Neben der Herkunft der Produkte wurde auch der Preis als Auswahlkriterium von vielen Teilnehmern thematisiert. Einige Teilnehmer ließen wissen, dass sie in der Regel preisgünstigere Öko-Produkte wählten, ohne dabei auf ein bestimmtes Öko-Logo zu achten.

„Ich würde auch immer dazu neigen, einen Preisvergleich zu machen und mich dann wahrscheinlich für das günstigste [entscheiden], oder wenn im mittleren Bereich was gut aussieht, dann nehme ich auch das.“ (FG2-I/8).

Aussehen und Geschmack eines Produkts wurden als weitere Auswahlkriterien genannt. In der Gruppe der Öko-Intensivkäufer wurde darüber hinaus angeführt, dass es sich bei Öko-Richtlinien nur um Mindeststandards handelt und es von daher entscheidend ist, wie der einzelne Betrieb die Richtlinien umsetzt. In erster Linie waren diesen Teilnehmern die Unterschiede zwischen ökologisch und konventionell erzeugten Produkten wichtig.

„Das ist für mich das Hauptkriterium, zu wissen der Unterschied zwischen Bio und konventionell. Der Unterschied innerhalb der Bio-Ware ist so groß nicht.“ (FG2-I/1).

6.5.3 Verbrauchereinstellungen gegenüber der neuen EU-Kennzeichnung für Öko-Lebensmittel

Die neue EU-Kennzeichnung für Öko-Lebensmittel wurde den Teilnehmern einleitend wie folgt durch den Moderator erläutert:

„Als letztes möchten wir gerne Ihre Meinung hören zu einem aktuellen Thema. Ab Juli 2010 wird es ein EU-weites, einheitliches Bio-Warenzeichen geben. Alle Bio-Produkte, die in der EU hergestellt werden, müssen dann mit diesem Warenzeichen versehen sein. Zusätzlich zu den Warenzeichen muss ausgewiesen sein, wo die landwirtschaftlichen Rohstoffe herkommen, aus denen das Produkt besteht.“

Die verschiedenen Angaben zur Herkunft der landwirtschaftlichen Ausgangsstoffe wurden an die Wand projiziert und erläutert. Daneben wurden die Teilnehmer informiert, dass zusätzlich zur verpflichtenden Kennzeichnung weitere Öko-Logos verwendet werden können. Zum Zeitpunkt der Fokusgruppen stand das konkrete Aussehen des neuen EU-Logos noch nicht fest, worüber die Teilnehmer in Kenntnis gesetzt wurden.

In allen Fokusgruppen wurde die neue EU-Kennzeichnung für Öko-Lebensmittel lebhaft diskutiert, wobei sowohl positive Aspekte als auch Bedenken zur Sprache kamen. Insgesamt standen viele Teilnehmer der neuen Regelung eher skeptisch gegenüber und formulierten Bedingungen, unter denen sie die neue Kennzeichnung akzeptieren würden. Die Darstellung der Ergebnisse ist in die folgenden vier Themen untergliedert, die von den Teilnehmern in den Diskussionen aufgeworfen wurden: 1. Einführung eines einheitlichen, verpflichtenden Logos, 2. Standards und Kontrolle, 3. Angabe zur Herkunft der landwirtschaftlichen Ausgangsstoffe und 4. Verwendung bestehender Öko-Logos.

6.5.3.1 Einführung eines einheitlichen, verpflichtenden Logos

Einige Teilnehmer begrüßten die Einführung eines einheitlichen, verpflichtenden Logos für Öko-Lebensmittel, weil es dadurch einfacher sei, Öko-Lebensmittel zu identifizieren, insbesondere für Verbraucher, die nicht so häufig Öko-Produkte kauften.

„Ich glaube, für Leute, die sich nicht so mit Bio-Lebensmitteln auseinandersetzen, ist das gut, so ein großes Oberkennzeichen zu haben. Aber für Leute, die Ahnung haben und die sich damit beschäftigen, ist es natürlich ein bisschen doppelt gemoppelt.“ (FG1-G/6).

Daneben wurde in allen Fokusgruppen erwähnt, dass ein EU-weites Logo bei Aufenthalten im Ausland, wie bspw. im Urlaub, hilfreich sei, da sich deutsche Verbraucher in der Regel nicht mit den ausländischen Öko-Richtlinien und -Logos auskennen und ein einheitliches Logo von daher Sicherheit bei der Produktwahl liefere.

Demgegenüber stand eine Reihe von kritischen Stimmen, die die Einführung eines neuen Logos für überflüssig hielten. Zum einen wurde angeführt, dass Öko-Lebensmittel bereits eindeutig gekennzeichnet seien.

„Was macht das für einen Sinn? Wenn es Bio ist, dann erkennt man das jetzt auch schon.“ (FG2-I/4).

Darüber hinaus wurde in allen Fokusgruppen konkret über die zukünftige Rolle des Bio-Siegels spekuliert, das aus Sicht der Teilnehmer in Deutschland bereits die Funktion des neuen EU-Logos erfüllte. Dieser Punkt verursachte Unverständnis unter den Teilnehmern, weshalb die neue Kennzeichnung eher skeptisch beurteilt wurde.

„Mir ist noch nicht ganz klar, (..) ersetzt das [neue EU-Logo] dann dieses sechseckige [Bio-Siegel] oder könnte dann beides nebeneinander stehen? Oder was für eine Funktion soll das [neue EU-Logo] haben?“ (FG3-G/7).

Einige Teilnehmer waren der Ansicht, dass die Einführung eines neuen Logos die Identifizierung von Öko-Ware nicht vereinfachen, sondern vielmehr erschweren würde, da es zu Verwirrung auf Seiten der Verbraucher kommen könnte. Als Begründung wurde die Vielzahl bereits bestehender Logos angeführt.

„Das [neue EU-Logo] würde dann (...) nicht zu einer Vereinheitlichung beitragen, sondern eher zu einem Wust von noch mehr Kennzeichnung und mich würde das eher in die Irre führen.“ (FG1-G/1).

6.5.3.2 Standards und Kontrolle

Die am häufigsten geäußerten Bedenken gegenüber der neuen Kennzeichnung betrafen die hinter der Kennzeichnung stehenden Öko-Standards. In allen Fokusgruppen gingen die Teilnehmer davon aus, dass sich die EU-weite Kennzeichnung auf niedrigere als die in Deutschland gesetzlich vorgeschriebenen Standards stützen würde. Den Teilnehmern war offensichtlich nicht bewusst, dass es bereits EU-weit einheitliche Öko-Richtlinien gibt, die in Deutschland den gesetzlich vorgeschriebenen Mindeststandard bilden. Die Bedenken resultierten aus der falschen Vorstellung, dass die Vorgaben in anderen europäischen Ländern niedriger seien als in Deutschland.

„Ich vermute mal, dass die Standards heruntergeschraubt werden. Ich weiß nicht, ob in anderen Ländern die Standards genauso hoch sind wie in Deutschland.“ (FG2-I/10).

Einige Teilnehmer begründeten ihre Befürchtung einer Herabsetzung der Standards mit ihrer Skepsis gegenüber EU-Verordnungen im Allgemeinen.

„Was immer die Tendenz ist, bei den europäischen Sachen, ist dieses Verallgemeinernde. So dass es so ein Bio-Brei wird, dass man im Einzelnen dann doch nicht mehr unterscheiden kann.“ (FG2-I/5).

Infolge der Verunsicherung hinsichtlich der Höhe der Standards verlangten viele Teilnehmer nach weiteren Informationen und regten an, dass bei Einführung des neuen Logos die zugrunde liegenden Standards kommuniziert werden sollten. Ein Teilnehmer machte dazu einen ganz konkreten Vorschlag:

„Es scheint überhaupt noch an Information zu fehlen. Wenn man so ein Etikett [wie das neue EU-Logo] einführt, dann muss man auch zum Beispiel in den Läden eine entsprechende Tafel aufhängen, wo dann die Richtlinien draufstehen, damit jeder das auch mit Inhalt füllen kann, dieses Zeichen.“ (FG1-G/11).

In allen Fokusgruppen wurde darüber hinaus in Frage gestellt, wie die Einhaltung von EU-weiten Standards kontrolliert werden kann. Misstrauen herrschte insbesondere gegenüber importierten Öko-Produkten aus Drittländern. Die Teilnehmer gingen davon aus, dass mit der neuen Kennzeichnung die Einführung eines neuen Kontrollsystems notwendig sei.

„Die minimalen Anforderungen müssen immer eingehalten werden. Die Frage ist nur: Wer kontrolliert das?“ (FG3-G/6). „Das würde ich auch spannend finden. EU-Landwirtschaft, Nicht-EU-Landwirtschaft, die Kontrolle. Also wir wissen ja, Mittel-, Zentral-, Südamerika (...), ist so die Frage, wie das da so ist.“ (FG3-G/9). „Da reicht mir schon Süditalien, mit der Mafia und so.“ (FG3-G/8).

Interessanterweise wurde die Frage nach der Kontrolle von ausländischer Ware nur im Zusammenhang mit der neuen EU-Kennzeichnung thematisiert. Aus den Diskussionen ging nicht hervor, worin die Teilnehmer Unterschiede zur momentanen Regelung sahen. Insgesamt verdeutlichten die Wortbeiträge den geringen Kenntnisstand der Teilnehmer bezüglich Öko-Standards und -Kontrolle. In einer Fokusgruppe wurde vermutet, dass mit einem EU-weiten Kontrollsystem erhebliche Kosten verbunden seien und die Teilnehmer spekulierten darüber, ob für Produzenten zusätzliche Lizenzkosten anfielen. Infolgedessen wurde der EU unterstellt, mit der neuen Regelung Einnahmen generieren zu wollen.

„Das ist eigentlich Geldmacherei für mich. Es gibt ja schon ein Zeichen, dass es nach EU ist.“ (FG2-I/4).

6.5.3.3 Angabe zur Herkunft der landwirtschaftlichen Ausgangsstoffe

In allen Fokusgruppen wurde die in der neuen Kennzeichnung vorgesehene Angabe zur Herkunft der landwirtschaftlichen Ausgangsstoffe eingehend diskutiert. Dabei stießen die Angaben „aus EU-Landwirtschaft“ bzw. „aus Nicht-EU-Landwirtschaft“ weitestgehend auf Ablehnung. Nur einzelne Teilnehmer sahen in dieser Kennzeichnung Vorteile. Die meisten fanden die Angabe zu ungenau, weil ihrer Ansicht nach zwischen den EU-Ländern sehr große

Unterschiede herrschten. Es wurde deutlich, dass Öko-Produkten aus bestimmten Herkunftsländern weniger vertraut wurde als anderen.

„Ich finde es einen großen Unterschied, ob Gemüse aus Spanien oder aus Belgien kommt. Also Spanien kaufe ich viel weniger. Ist viel vergifteter. Ist beides EU.“ (FG3-G/5).

Einige Teilnehmer befürchteten, dass es durch die Herkunftsbezeichnungen „aus EU-Landwirtschaft“ bzw. „aus Nicht-EU-Landwirtschaft“ zu „Verschleierungen“ (FG3-G/11) kommen könnte. Daneben spielte für einige Teilnehmer das Herkunftsland eine wichtige Rolle als Informationsquelle über die zurückgelegten Transportwege. Insgesamt bevorzugten so gut wie alle Teilnehmer die Angabe eines konkreten Herkunftslands.

„Ich denke, was aus Deutschland kommt, das ist noch mal ein Stück kontrollierter als alles, was weiter weg kommt. Und je weiter es weg kommt, desto (...) mehr Umschlagplätze gibt es, desto mehr Möglichkeiten gibt es, da irgendwo Sachen anders umzuverpacken und dergleichen. Und von daher würde ich schon begrüßen, wenn das Herkunftsland tatsächlich darauf steht.“ (FG2-I/1).

6.5.3.4 Verwendung bestehender Öko-Logos

Die Tatsache, dass die bestehenden Öko-Logos zusätzlich zur obligatorischen EU-Kennzeichnung weiterhin verwendet werden können, wurde in allen Fokusgruppen ausdrücklich begrüßt und es wurde deutlich, dass eine gegenteilige Regelung auf breite Ablehnung gestoßen wäre.

„Auf alle Fälle sollten die Zusatzbezeichnungen Demeter, Bioland oder so was bleiben, damit der interne Markt einfach differenziert werden kann.“ (FG3-G/6).

Einige Teilnehmer gaben in diesem Zusammenhang an, die neue Regelung grundsätzlich zu akzeptieren, sich aber weiterhin an den bestehenden Logos zu orientieren.

„Ich würde es nach wie vor begrüßen, wenn die (...) Verbände draufstehen [und] gute Hinweise auf den Erzeuger. Und ich habe auch so ein bisschen Schwierigkeiten damit, die EU alles über einen Kamm zu scheren. Aber dagegen habe ich nichts, also wenn da noch ein weiteres Zeichen drauf ist.“ (FG2-I/1).

Andere Teilnehmer wiederum äußerten die Befürchtung, dass die neue Kennzeichnung die Logos der Anbauverbände verdrängen könnte.

„Das [neue EU-Logo] könnte auch dazu führen, dass so etwas wie Demeter ganz verschwindet, weil man diese Gesetzgebung einfach überstülpt. Also diese Standardisierungen sind auch ziemlich gefährlich.“ (FG3-G/15).

6.6 Diskussion und Schlussfolgerungen

Aus den Ergebnissen der Fokusgruppendifkussionen lassen sich Empfehlungen für agrarpolitische Entscheidungsträger ableiten. Im Folgenden wird gezielt auf die neue EU-Kennzeichnung für Öko-Produkte, das staatliche Bio-Siegel sowie die Zeichen der Anbauverbände eingegangen. Zunächst soll jedoch ein Punkt angesprochen werden, der alle Akteure mit eigenen Öko-Zertifizierungszeichen betrifft. In den Fokusgruppen wurde deutlich, dass Öko-Produkten ohne Zertifizierungszeichen generell misstraut wurde. In der Wahrnehmung der Teilnehmer waren bekannte Logos grundsätzlich ein Hinweis auf die Einhaltung bestimmter Richtlinien. Wissen über konkrete Inhalte von verschiedenen Standards war hingegen gar nicht oder nur ansatzweise vorhanden. Daneben war nicht allen Teilnehmern klar, dass Öko-Produkte generell einem Kontrollsystem unterliegen, was sich teilweise in mangelndem Vertrauen in die Produkte niederschlug. Folglich sollte die Öko-Branche verstärkt darauf setzen, die wesentlichen Einzelmerkmale des Öko-Landbaus verbrauchergerecht zu kommunizieren (Stolz et al. 2009:178). Dabei sollte insbesondere das Kontroll- und Zertifizierungssystem hervorgehoben werden.

6.6.1 Die neue EU-Kennzeichnung für Öko-Produkte

Die neue EU-Kennzeichnung für Öko-Produkte wurde von den Fokusgruppenteilnehmern eher skeptisch beurteilt. Viele Teilnehmer sahen in der neuen EU-Kennzeichnung kaum Vorteile gegenüber dem Status Quo oder hielten sie schlicht für überflüssig. Tatsächlich wurde eine Reihe von Bedenken geäußert. Die Diskussionen verdeutlichten die Unwissenheit vieler Teilnehmer bezüglich Standards und Kontrolle von Öko-Produkten auf EU-Ebene. Interessanterweise waren die geäußerten Bedenken größtenteils unbegründet, da die Teilnehmer von falschen Tatsachen ausgingen wie bspw. der Annahme, dass die Öko-Standards in anderen EU-Ländern niedriger seien als in Deutschland. Für den Markterfolg der neuen Kennzeichnung ist letztendlich entscheidend, wie Verbraucher die Kennzeichnung wahrnehmen und beurteilen, wobei zunächst nachrangig ist, ob die Einschätzungen aus Verbrauchersicht auf Tatsachen beruhen oder nicht. Anders als bei der Einführung freiwilliger Logos wird die neue obligatorische EU-Kennzeichnung relativ schnell einen hohen Bekanntheitsgrad erlangen, weil das Logo auf allen verpackten Öko-Produkten platziert sein muss. Die Herausforderung liegt jedoch darin, unbegründete Bedenken auf Verbraucherseite auszuräumen und das Vertrauen der Verbraucher zu gewinnen. Deshalb sollte die Kennzeichnung in der Wahrnehmung der Verbraucher mit positiv belegten Inhalten verknüpft

werden. Dazu bedarf es möglichst bereits bei Einführung des neuen Logos flankierender Kommunikationsmaßnahmen, um der Entstehung eines negativen Images vorzubeugen.

Die Möglichkeit der zusätzlichen Auslobung bestehender Zertifizierungslogos stieß unter den Fokusgruppenteilnehmern auf breite Zustimmung. Viele Teilnehmer machten deutlich, dass sie einen differenzierten Öko-Markt begrüßten. Somit war die Entscheidung der Kommission, auf ein Verbot privater Logos zu verzichten, aus Sicht deutscher Verbraucher richtig.

6.6.2 Das staatliche Bio-Siegel

Grundsätzlich steht das deutsche Bio-Siegel für die gleiche Aussage wie das neue obligatorische EU-Zeichen: Die Kennzeichnung von Lebensmitteln, die auf der Grundlage der EG-Öko-Verordnung erzeugt wurden. Daher muss die Frage gestellt werden, ob es sinnvoll ist, zwei unterschiedliche Zeichen mit derselben Bedeutung parallel einzusetzen. Zunächst einmal ist festzustellen, dass das deutsche Bio-Siegel unter den Fokusgruppenteilnehmern den höchsten Bekanntheitsgrad aufwies. Kein anderes der diskutierten Öko-Logos wurde von den Teilnehmern jedoch so gegensätzlich wahrgenommen wie das Bio-Siegel. Für einige Teilnehmer stellte das Bio-Siegel das zentrale Erkennungsmerkmal für Öko-Produkte dar, andere Teilnehmer hingegen assoziierten es mit Mindeststandards oder Massenproduktion. Wegen der für viele deutsche Verbraucher wichtigen Funktion eines Erkennungsmerkmals für Öko-Produkte sollte das Bio-Siegel zumindest so lange bestehen bleiben, wie das neue zentrale Erkennungszeichen der EU bei deutschen Verbrauchern noch nicht bekannt ist. Die obligatorische Verwendung des EU-Zeichens auf allen Verpackungen ist allein noch keine Gewähr für eine schnelle Durchdringung des Marktes. Diese hängt in erster Linie vom Umfang der Kommunikationsanstrengungen seitens der EU ab und in zweiter Linie von der Aussagekraft und der Anmutungsleistung des zum Zeitpunkt dieser Veröffentlichung noch nicht bekannten Designs des Zeichens an sich. Neben der Verbrauchersicht sind jedoch auch die Interessen der Anbieterseite zu berücksichtigen. Mit der verpflichtenden EU-Kennzeichnung, für die eine Mindestgröße von 20 mm vorgeschrieben ist, stehen Hersteller und Händler vor dem Problem, ein neues Zeichen auf Produktpackungen und eventuell zusätzlich auf Preisschildern und Werbematerialien integrieren zu müssen. Angesichts des eng begrenzten Raumes auf Produktpackungen ist die Frage zu stellen, ob bzw. wie lange sich Anbieter einen parallelen Aufdruck von zwei Zeichen, die für die gleiche Aussage stehen, leisten. Es erscheint unwahrscheinlich, dass dies über einen größeren Zeitraum hinweg erfolgen wird. Es sollten daher von allen Beteiligten – Politik und Marktakteuren –

Anstrengungen unternommen werden, das verpflichtende EU-Zeichen für Öko-Produkte bei Verbrauchern rasch bekannt zu machen.

Ein Relaunch des Bio-Siegels in Richtung auf ein deutsches Herkunftszeichen ist angesichts der Möglichkeit, dem neuen EU-Logo den Zusatz „aus Deutschland“ beizufügen, wenig zielführend. Ebenso wäre eine Neuausrichtung des Bio-Siegels in Richtung auf kleinräumigere Herkunftszeichen problematisch. Zwar sprachen in den Fokusgruppen viele Teilnehmer der regionalen Herkunft eines Produkts eine hohe Bedeutung bei der Kaufentscheidung zu, was auch durch andere Studien belegt wird (Stolz et al. 2009:176, Pleon 2008:12). Laut EG-Vertrag ist es jedoch nur zulässig, Produkte mit einer bestimmten geographischen Herkunft durch staatliche Maßnahmen am Markt hervorzuheben, bspw. durch die Auslobung eines gemeinschaftlichen Logos, wenn die Anforderungen der Verordnung (EG) Nr. 510/2006 für eine geschützte Ursprungsbezeichnung bzw. eine geschützte geographische Angabe erfüllt sind (Becker 2009:113f.). Als Reaktion auf eine Entscheidung des Europäischen Gerichtshofs vom 5. November 2002 musste u. a. das Zeichen „Herkunft und Qualität aus Baden-Württemberg“ umbenannt werden in „Gesicherte Qualität Baden-Württemberg“ (Becker 2005:11). Vor diesem Hintergrund erscheint es problematisch, eine große Zahl regionaler Kennzeichnungen auf Grundlage des staatlichen Bio-Siegels einzuführen und die regionale Herkunft in den Mittelpunkt der Kennzeichen zu stellen.

6.6.3 Private Anbauverbände

Die Ergebnisse der Fokusgruppendifkussionen lassen die Schlussfolgerung zu, dass sich die Anbauverbände in der Außenwahrnehmung nicht deutlich genug vom gesetzlichen Mindeststandard abheben. Für viele Teilnehmer stellten die Standards der Anbauverbände als solche noch kein Alleinstellungsmerkmal dar, für das sie bereit waren, einen höheren Preis zu zahlen. So führte die Wahrnehmung von Unterschieden zwischen den Richtlinien nicht bei allen Teilnehmern zu einer Präferenz für Produkte der Anbauverbände. Verschiedene Teilnehmer erklärten, Öko-Produkte anhand mehrerer Kriterien, wie Preis, Herkunft und Aussehen, auszuwählen, wobei die Höhe der Standards nachrangig sei. Einige Teilnehmer kannten keines der drei Logos, für andere Teilnehmer fungierten Demeter und Bioland ähnlich wie das Bio-Siegel schlicht als Erkennungsmerkmal für Öko-Produkte. Im Vergleich zu Bioland und Naturland schien Demeter aufgrund der anthroposophischen Ausrichtung unter den Teilnehmern noch am ehesten als einzigartig wahrgenommen zu werden. Bioland, den größten deutschen Anbauverband, assoziierten einige Teilnehmer zwar mit strengeren Richtlinien und Kontrollen, nicht aber mit einem besonderen Image. Naturland wiederum war

nur einzelnen Teilnehmern bekannt und wurde somit in allen Fokusgruppen relativ wenig kommentiert. Insgesamt schienen viele Teilnehmer nicht zu wissen, dass hinter Bioland, Demeter und Naturland private Vereine mit Mitgliedern stehen, so dass die Logos teilweise als Marken oder Firmen bezeichnet und in einem Atemzug mit Handelsmarken genannt wurden.

Vor dem Hintergrund der neuen, obligatorischen EU-Kennzeichnung müssen die Anbauverbände ihr Profil stärken, damit Hersteller und Händler die Logos der Anbauverbände weiterhin auf Produktpackungen und Preisschildern ausloben. Bei vielen Produkten mit einer Handelsmarke wird jetzt schon darauf verzichtet, die Logos der Anbauverbände zu verwenden. Dieser Trend könnte sich verstärken, falls die neue EU-Kennzeichnung großes Vertrauen unter Verbrauchern erlangt. Zur besseren Abgrenzung gegenüber anderen Öko-Produkten sollten die Anbauverbände daher ihre Standards deutlicher als bisher von den Vorgaben der EG-Öko-Verordnung abheben und vor allem besser kommunizieren. Von betrieblichen Ausnahmegenehmigungen, die es nach wie vor bei deutschen Öko-Verbänden zahlreich gibt, sollte dann aber abgesehen werden, weil nur so konkrete Unterschiede zu Produkten nach EG-Öko-Verordnung Verbrauchern gegenüber glaubhaft kommuniziert werden können.

7 Product labelling in the market for organic food: Consumer preferences and willingness-to-pay

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7.1 Abstract

Product labelling with organic certification logos is a tool for signalling consumers that a product is a certified organic product. In many European countries, several different organic labelling schemes exist in the market. The aim of this paper is to elicit whether consumers prefer certain organic labelling schemes over others, to give recommendations for market actors in the organic sector. By means of choice experiments and structured interviews with 2,441 consumers of organic food in six European countries, consumer preferences and willingness-to-pay (WTP) for different organic logos were analysed. The results of the random parameter logit models showed that the WTP differed considerably between the tested logos. Consumer perceptions of organic labelling schemes turned out to be of subjective nature and in many cases not based on objective knowledge. We conclude that it is advisable to label organic products with well-known organic certification logos that consumers trust. Organisations owning an organic labelling scheme should put effort into measures for increasing consumer awareness of the logo and forming consumer perceptions and attitudes regarding the underlying scheme in terms of standards and control regime.

7.2 Introduction

In the market for organic food, consumer trust is a delicate issue since consumers are not able to verify whether a product is an organic product, not even after consumption. Organic products must be produced according to organic principles, which refer to the production process rather than to the end-product (Golan et al. 2001:128). In information economics, product attributes like these are called credence attributes. Unlike search attributes (e.g. price, colour) and experience attributes (e.g. taste, durability), which consumers can evaluate prior and after consumption respectively, credence attributes involve a high level of uncertainty from the consumer perspective (Darby and Karni 1973:68f.). Consumer trust in the product

integrity of credence goods is of crucial importance, in particular if the credence attribute entails a price premium, like it is the case with organic food (Jahn et al. 2005:69). An instrument to gain consumer trust in credence goods is third-party certification of the supply-side (Roe and Sheldon 2007:1021). Organic certification has a long tradition in many European countries. Product labelling with organic certification logos is used to signal consumers at the point-of-sale that a product is a certified organic product.

In the European Union (EU), only those products can be labelled and sold as organic³⁰ food which comply with the principles of organic production, certification and labelling of Regulation (EC) No 834/2007 (and respective implementing regulations). Since July 2010, all prepacked organic products produced and sold in the EU must be labelled with the new mandatory EU logo (Regulation (EC) No 834/2007).³¹ The new logo replaced the old voluntary EU logo. Besides the EU logo, there are several other voluntary organic certification logos in many European countries, which are owned by different kinds of organisations. These can be differentiated into governmental logos on the one hand and logos of private organisations on the other hand. Governmental logos are found in some but not in all European countries (e.g. Danish ‘Ø’ logo, German ‘Bio-Siegel’). Private organisations with own organic certification logos are farmers’ and organic sector associations (e.g. Demeter, Bio Suisse, Soil Association), control bodies (e.g. Ecocert) and other private organisations.

Organic certification logos target the final consumer (Jahn et al. 2005:56). From a marketing perspective, the variety of different organic logos in the market raises the question whether consumers prefer products with certain organic certification logos over others. Furthermore, it is of interest how consumer preferences are influenced by consumer perceptions and attitudes regarding organic labelling schemes. These questions are not only relevant for organisations owning an organic labelling scheme, but also for producers, processors and retailers in the organic market. For the supply side, it is important to know which organic certification logos are most effective on product packages and in marketing communication measures. Since all organic products must now be labelled with the mandatory EU logo, other organic logos can only be used additionally. Space on product packages is, however, often limited in particular on the front side. Furthermore, some organic certification logos are based directly on the mandatory principles of Regulation (EC) No 834/2007 (e.g. EU logo, German Bio-Siegel),

³⁰ This also refers to the respective translated terms of ‘organic’ in the different EU languages, such as ‘Bio’, ‘Öko’, ‘biologico’, ‘eco’, ‘øko’.

³¹ A transition period is granted until 2012 (Regulation (EU) No 271/2010).

while other organic logos indicate that additional requirements regarding the production and/or control process going beyond the mandatory EU principles are met (e.g. Demeter, Danish 'Ø'). Fulfilling further requirements might involve more effort for producers and processors. Knowing which organic logos are preferred by consumers might thus be useful for suppliers to decide upon whether they should seek certification according to another organic scheme in addition to the mandatory certification according to Regulation (EC) No 834/2007.

To the author's knowledge, little scientific evidence exists regarding consumer preferences for different organic certification logos in Europe. While several studies investigated the price premium that consumers were willing to pay for organic food, most of these studies either used a single organic logo or the word 'organic' to distinguish organic from conventional products (see e.g. Napolitano et al. 2010, Hoogland et al. 2007, Scarpa et al. 2007). A study of consumer preferences in the United States found that consumers were willing to pay a higher price premium for the USDA organic logo than for a generic organic label (Van Loo et al. 2011). A study with focus group discussions conducted by the authors of this study suggested that European consumers might prefer certain organic certification logos over others (Janssen and Hamm 2011b). However, the qualitative study did not allow for any quantitative analysis.

The objective of this contribution was to investigate consumer preferences and willingness-to-pay for different organic certification logos in six European countries to give recommendations for market actors in the organic sector. By means of choice experiments and structured interviews it was determined whether and which organic certification logos were preferred by consumers. Furthermore, it was analysed how the logo choice was influenced by consumer perceptions and attitudes regarding different organic logos and by consumers' buying frequency of organic food.

The contribution is organised as follows: In Section 7.3, the theoretical framework of product labelling in credence good markets is discussed with reference to third-party certification and organic logos. In Section 7.4, the survey design and the econometric model of choice analysis are outlined. In Section 7.5, the results of the model estimations are presented and discussed. In Section 7.6, recommendations for market actors in the organic sector are made and conclusions are drawn for product labelling in credence goods markets.

7.3 Product labelling in credence good markets

Credence good markets like the market for organic food feature a high degree of information asymmetry, since consumers are not able to verify whether or not a product was produced according to the promised characteristics (Darby and Karni 1973:68f.). Due to the uneven distribution of information between the supply side and the consumer side, credence good markets are prone to fraud and opportunistic behaviour in the supply chain and might thus suffer from a lack of consumer trust (Darby and Karni 1973:68f.). One way to overcome the dilemma of information asymmetry is product labelling based on third-party certification (Roe and Sheldon 2007:1021). Neutral certifiers, which are accredited by competent authorities, guarantee regular inspections of the processes within the supply chain and ensure compliance with the respective production standards (Jahn et al. 2005:56). Organic labelling schemes usually have an own logo which certified producers and processors can use to label their products, so that consumers are able to identify certified products at the point-of-sale (Roe and Sheldon 2007:1021).

The underlying assumption of third-party certification is that consumers have greater trust in independent certifiers than in private producers and processors (Golan et al. 2001:130f.). However, with regard to organic food, several studies found that some consumers were sceptical about the integrity of organic products, which prevented them from buying more organic food (Aertsens et al. 2009, Hughner et al. 2007, Krystallis et al. 2008, Padel and Foster 2005, Lea and Worsley 2005, Aarset et al. 2004). Several authors suggest that consumer trust in the underlying scheme is the prerequisite for third-party certification to diminish the dilemma of information asymmetry in the producer-consumer relationship (Albersmeier et al. 2010:71, Jahn et al. 2005:70, Naspetti and Zanolli 2005:396, Golan et al. 2001:130f.). Our contribution investigates this aspect in the context of organic certification logos. At the point-of-sale, organic certification is signalled to consumers by product labelling, either just with a generic label (i.e. the prefix 'organic') or with additional organic certification logos. We elicit whether certain organic certification logos are more successful than others in overcoming the dilemma of information asymmetry inherent in credence goods.

7.4 Methods

To analyse consumer preferences and willingness-to-pay (WTP) for different organic certification logos, choice experiments accompanied by structured interviews were conducted with 2,441 consumers of organic food in the six European countries Czech Republic (CZ), Denmark (DK), Germany (DE), Italy (IT), Switzerland (CH) and United Kingdom (UK). The

data was analysed with random parameter logit models. The quantitative study was preceded by a qualitative study with focus group discussions conducted in the same countries by the authors of this study and their partner organisations, in which consumer perceptions and attitudes regarding organic labelling schemes were explored (Janssen and Hamm 2011b). The qualitative results were used for the survey design and model specification of the present quantitative study.

Choice experiments can be used to determine what consumers are willing to pay for different product attributes (Gao and Schroeder 2009:795). In choice experiments, participants are asked to make a choice out of a set of different product alternatives (Lusk and Schroeder 2004:469). One advantage of this method is that choice experiments are more similar to a real buying situation compared to other methods for analysing WTP (e.g. contingent valuation, auctions) (Lusk and Schroeder 2004:467). Choice experiments are based on Random Utility Theory (Thurstone 1987) postulating that an individual who makes a choice among different alternatives strives to maximise utility. The individual thus chooses the one alternative that provides him/her with the highest utility (Louviere et al. 2000:2f., McFadden 1974:106f.). In accordance with Lancaster's Consumer Theory (Lancaster 1966), it is assumed that the utility of a product stems from the different product attributes.

7.4.1 Survey design

7.4.1.1 Choice experiments

In the present study, the choice experiments were conducted with two different kinds of products: organic apples and eggs. These two products were chosen since they fulfil the following criteria. Firstly, it was intended to investigate both a plant and an animal product. Secondly, many consumers regularly buy apples and eggs. Thirdly, these products are available from domestic production in the study countries and they are widely available in organic quality. Fourthly, they can be sold as non-branded products.³²

The four product alternatives within a choice set looked identically but were marked with different organic labels and prices. In each study country, four different organic labels were tested (three organic certification logos plus a generic label with the written prefix 'organic' without a logo, see Table 13). The choice experiments were designed as so-called labelled

³² In the present research, it was not desired to investigate consumer preferences for brands. Existing organic brands are often related to particular organic certification logos, so that consumers might have been confused when being presented with non-existing combinations of brands and organic certification logos. However, this aspect is further discussed in the final section.

experiments, i.e. each organic label was present in each choice set. In addition, the participants were also free to refrain from buying any of the offered alternatives ('no-buy option'). The no-buy option was included to make the buying decision more realistic. Previous studies showed that forced choice might lead to biased results (Dhar and Simonson 2003:157f.).

Table 13: Organic logos tested in the choice experiments

Country	Label 1	Label 2	Label 3	Label 4
CH	Bio Suisse ¹ 	Fake logo ² 	Demeter ³ 	
CZ	Old EU logo 	Governmental logo 	Demeter ³ 	
DE	Old EU logo 	Governmental logo 	Demeter ³ 	Generic labelling with the prefix 'organic' ⁷ without logo
DK	Old EU logo 	Governmental logo 	Demeter ³ 	
IT	Old EU logo 	CCPB ⁴ 	Demeter ³ 	
UK	Old EU logo 	Soil Association ⁵ 	OF&G ⁶ 	

¹ Umbrella organisation of Suisse famers' associations.

² Referring to the Suisse governmental organic regulation.

³ International farmers' association.

⁴ CCPB=Certificazione e Controllo Prodotti Biologici. Italian control body.

⁵ Soil Association=British organic sector organisation.

⁶ OF&G=Organic Farmers & Growers. British control body.

⁷ 'Bio', 'Öko', 'biologico', 'øko' respectively without logo.

The selection of organic logos used in the experiments was based on the consideration that different kinds of organic certification logos should be tested: 1. EU logo, 2. governmental logos, 3. private logos, 4. prefix 'organic' without a logo. Please note that the old voluntary EU logo was used in the experiments since the survey was conducted prior to the introduction of the new mandatory EU logo. In each country, only those logos were included which existed in the market and could be used on domestic products. The only exception is Switzerland, where only two common Swiss organic certification logos were found in the market at the time of writing (Bio Suisse and Demeter). To have a similar experimental design with four product stimuli per choice set in each study country, a fake logo was created referring to the

Swiss organic regulation. Due to the absence of a governmental logo in Italy and the UK, a second private logo was included here.

Four different price levels were tested. The relative price levels were the same in all countries: 0.8, 1.0, 1.2, 1.4. The absolute prices used in the experiments (Table 14) were based on the average market price of organic apples/eggs in the respective survey regions one month before the experiments were conducted (the average market price equals price level 1.0).

Table 14: Prices in the choice experiments

Product	Price levels	Prices ¹							
		CH	CZ	DE	DK	IT ²			UK
						Ancona	Bari	Milano	
Apples	0.8	3.18 €	1.36 €	2.19 €	2.04 €	2.33 €	2.14 €	2.58 €	2.23 €
	1.0	3.96 €	1.69 €	2.69 €	2.55 €	2.91 €	2.68 €	3.22 €	2.79 €
	1.2	4.75 €	2.03 €	3.19 €	3.06 €	3.49 €	3.22 €	3.86 €	3.36 €
	1.4	5.54 €	2.37 €	3.79 €	3.57 €	4.07 €	3.75 €	4.51 €	3.92 €
Eggs	0.8	2.70 €	1.45 €	1.49 €	2.42 €	1.81 €	1.97 €	1.77 €	1.94 €
	1.0	3.38 €	1.81 €	1.89 €	3.02 €	2.26 €	2.46 €	2.21 €	2.39 €
	1.2	4.07 €	2.17 €	2.29 €	3.63 €	2.71 €	2.95 €	2.65 €	2.91 €
	1.4	4.75 €	2.54 €	2.69 €	4.23 €	3.16 €	3.44 €	3.09 €	3.36 €

¹ Prices in Euro are based on the exchange rates by the European Central Bank, Quarter 1, 2010. The prices refer to one kilogram of apples and six eggs respectively.

² In Italy, the market prices for organic apples and eggs differed considerably between the three cities where the survey was conducted, so different absolute prices were used in the three cities.

The experimental design for the systematic variation of the price levels across the four label alternatives was based on an orthogonal fractional factorial design with 16 different choice sets for apples and eggs respectively (developed with the software package SPSS). The sample was divided into eight blocks, so that each participant was presented with two choice sets of organic apples and two choice sets of organic eggs.

The choice experiments were designed to resemble a real buying situation. Unlike in other studies with choice experiments (e.g. Loureiro and Umberger 2007, Lockshin et al. 2006, Lusk and Schroeder 2004), the participants were offered real organic apples and eggs instead of pictures or descriptions of products (see Figure 6). Typical product information, which was identical across the alternatives, was shown on the price tags (apples: variety, domestic origin; eggs: egg size, domestic origin). Furthermore, the participants were instructed that they would have to pay for the chosen products just like in a real shop to reduce the hypothetical bias (Lusk and Schroeder 2004:480).

Figure 6: Set-up of the choice experiments¹

¹ Example from Germany

7.4.1.2 Structured interviews

In the structured interviews conducted after the choice experiments, data was collected on factors that were hypothesised to influence consumer preferences and WTP for organic certification logos.

Consumer attitudes towards the tested logos

It was hypothesised that a consumer's preference for an organic certification logo is influenced by the way he/she perceives and evaluates the logo and the underlying scheme. The preceding qualitative study suggested that consumer attitudes towards an organic certification logo were related to a number of elements, particularly trust in the logo, credibility of the logo, and perceptions of the underlying standards and control system. Moreover, logo awareness acted as a prerequisite for being able to evaluate a certification logo and the underlying scheme. In accordance with the literature (Solomon et al. 2006:138f.), it was thus revealed that an attitude towards an organic certification logo was composed of affective (trust, credibility) and cognitive elements (logo recognition, perceptions of standards and control), both closely intertwined. It was therefore decided to use a multi-item battery for measuring consumer perceptions and attitudes towards each of the tested logos. Each item was phrased as a seven-point semantic differential scale with opposite pairs of phrases at the endpoints and a neutral midpoint. The items are presented in Table 15. As suggested in the literature, a "don't know" category was included since the pre-test showed that many participants might not have sufficient experience with some of the logos to form a judgement (Aaker et al. 2010:254).

Buying frequency of organic food

It was hypothesised that the extent to which a consumer buys organic food influences his/her preferences for organic certification logos. More frequent buyers of organic food were expected to be more familiar with organic logos that are mainly found in specialised organic food shops. Many conventional supermarket chains have their own organic brands and often do not prominently display voluntary organic certification logos. In the structured interviews, the participants were therefore asked to estimate their organic budget share (i.e. the share of organic products in the total expenditure for food and beverages) by means of ten answer categories (0-10%, 11-20%, 31-40%, etc., 91-100%).

Finally, the following socio-demographic characteristics were collected: Gender, age, household size, level of education and net household income.

Table 15: Label ratings in the interviews

Dimension	Interview question	Answer categories
Awareness	Please rate each of the labels on the following scale.	Scale from 1 to 7 with: 1 = This label is completely unknown to me. 7 = This label is well-known to me.
Trust	Please rate each of the labels on the following scale.	Scale from 1 to 7 with: 1 = I completely trust this label. 7 = I do not trust this label at all. Additional category "don't know"
Credibility	Please rate each of the labels on the following scale.	Scale from 1 to 7 with: 1 = This label does not stand for real organic products. 7 = This label stands for real organic products. Additional category "don't know"
Organic standards	How strict are the organic standards behind the label?	Scale from 1 to 7 with: 1 = below average 4 = average 7 = above average Additional category "don't know"
Control system	How strict is the control system behind the label?	Scale from 1 to 7 with: 1 = below average 4 = average 7 = above average Additional category "don't know"

7.4.2 Econometric models**7.4.2.1 Basic RPL models and WTP (Model 1)**

The data collected in the choice experiments were analysed with random parameter logit (RPL) models (also called mixed logit models). RPL models represent a generalised form of traditional multinomial logit (MNL) models. In MNL models, the utility of choosing

alternative i out of a choice set of J alternatives is composed of the observed utility V_i and the random error term ε_i which captures the unobserved utility. In our case, the observed utility depends on the product attribute $PRICE$ with the associated β_{PRICE} coefficient and an alternative specific constant (ASC_i) representing the logo coefficient. The utility function is linear in parameters:

$$(1) \quad U_{label1} = V_{label1} + \varepsilon_{label1} = ASC_{label1} + \beta_{PRICE} PRICE + \varepsilon_{label1}$$

$$U_{label2} = V_{label2} + \varepsilon_{label2} = ASC_{label2} + \beta_{PRICE} PRICE + \varepsilon_{label2}$$

$$U_{label3} = V_{label3} + \varepsilon_{label3} = ASC_{label3} + \beta_{PRICE} PRICE + \varepsilon_{label3}$$

$$U_{label4} = V_{label4} + \varepsilon_{label4} = \beta_{PRICE} PRICE + \varepsilon_{label4}$$

$$U_{No-buy} = V_{No-buy} + \varepsilon_{No-buy} = ASC_{No-buy} + \varepsilon_{No-buy}$$

Based on the utility functions, the probability ($Prob$) that alternative i is chosen out of a choice set of J alternatives is given by:

$$(2) \quad Prob_i = \frac{\exp V_i}{\sum_j^J \exp V_j}$$

Unlike the utility functions, the probability functions are not linear in parameters. This has to be kept in mind when interpreting the model estimates for the β coefficients and $ASCs$.

The mean WTP for a logo was based on Model 1 which included only product-related parameters (unlike Model 2 and 3 below). The mean WTP was calculated by dividing the logo coefficient by the price coefficient, as suggested by Lusk and Schroeder (2004:473):

$$(3) \quad WTP_i = -ASC_i / \beta_{PRICE}$$

This WTP measure provides the *additional* WTP for apples/eggs with a certain logo compared to organic apples/eggs without a logo, since we defined the $ASCs$ in relation to the alternative without a logo (=label 4) in the above utility functions. The WTP was based on relative price levels (0.8, 1.0, 1.2, 1.4) in order to make the WTP measures comparable across the study countries. The values of the WTP measures provide the WTP in percent of price level 1.0 which equals the average market price.

Unlike traditional MNL models which assume the random error terms to be independently and identically distributed across the alternatives, RPL models are more flexible and allow for preference heterogeneity (Hensher and Greene 2003:136f.). While MNL models estimate

parameters that are fixed in the population, the estimated coefficients in RPL models can vary across individuals (Hensher and Greene 2003:136f.). For these so-called random parameters both the mean and the standard deviation are estimated according to a predetermined probability distribution. For each parameter, it can be determined whether the parameter is random or fix by checking whether the model provides a significant estimate of the standard deviation. A significant standard deviation suggests the parameter is random, a non-significant standard deviation suggests the parameter is fix in the population (Hensher et al. 2005:633). Regarding the probability distribution of a random parameter, the researcher has to make an assumption about the shape of the distribution (e.g. normal, lognormal, uniform, triangular) (Hensher and Greene 2003:136f.).

During the process of RPL model specification, we checked all *ASCs* for a significant standard deviation to determine whether they were random or fix. We assumed the random *ASCs* to be normally distributed. The generic price coefficient was estimated as a fix parameter, since random price parameters often result in an overestimation of the WTP. This is due to the fact that the price parameter is the denominator in the WTP calculation, i.e. below average values of the price coefficient cause disproportionately high WTP measures compared to above average values. One way to solve this problem is to keep the price coefficient fix; then the WTP follows the same distribution as the nominator (Rigby et al. 2009:283, Layton and Brown 2000:619, Revelt and Train 1998:650).³³

7.4.2.2 RPL models with logo attitude scale (Model 2)

Consumer perceptions and attitudes regarding the tested organic logos were integrated into the RPL models as follows (see Section 7.4.1.2 for the underlying hypothesis). Due to the inclusion of the answer category “don’t know”, the original data was nominal scaled.³⁴ Therefore, the five rating items were transformed into dichotomous variables which equalled ‘one’ in case of a high rating (the two highest scores) and ‘zero’ otherwise. The five dichotomous items for one logo were tested for reliability by means of Cronbach’s alpha to determine whether summated scales could be created.³⁵ With one exception, the summated scales for each logo exhibited Cronbach’s alpha values of greater than 0.7 suggesting a good reliability (Hair et al. 2010:125).³⁶ A summated scale for each logo was then calculated which equalled the sum of the five dummy-coded items. The scales could thus take on whole

³³ A new kind of models called ‘WTP space’ was recently developed to overcome the problem of implausible WTP distributions in RPL models (Scarpa et al. 2008). However, WTP space models are not yet available in commercial software packages.

numbers between zero and five. Finally, RPL models based on the following utility function including a parameter for the attitude scale (*AttitudeScale*) were estimated (the procedure was adapted from Louviere et al. (2000:295f.):

$$(4) \quad U_i = V_i + \varepsilon_i = ASC_i + \beta_{PRICE} PRICE + \beta_{AScale} AttitudeScale + \varepsilon_i$$

7.4.2.3 RPL models with ‘Organic budget share’ (Model 3)

For random parameters it is possible to reveal whether other variables (called covariates, e.g. characteristics of the consumer) cause a systematic variation around the mean (Hensher et al. 2005:650f.). This is done by estimating interaction terms between covariates and random parameters. A significant interaction term indicates that the covariate causes a systematic variation around the mean of the random parameter. In this case the covariate (partly) explains the heterogeneity in preference. In our case, it was tested whether the observed heterogeneity in preference for some logos was related to the consumers’ buying frequency of organic food (see Section 7.4.1.2 for the underlying hypothesis). The variable ‘organic budget share’ was therefore integrated into the basic RPL models (Model 1) as a covariate and it was tested whether it caused a systematic variation around the mean of the random *ASCs*. In a step-wise process, we estimated interaction terms with all random *ASCs*. Non-significant interaction terms were excluded and the model was re-estimated as suggested in the literature (Hensher et al. 2005:661f.).

7.4.3 Sampling and description of the sample

Data was collected face-to-face in the Czech Republic (CZ), Denmark (DK), Germany (DE), Italy (IT), Switzerland (CH) and United Kingdom (UK) in February and March 2010 after a pre-test with 15 participants per country. In each country, around 400 consumers of organic food took part in the study. The choice experiments and interviews were conducted at two kinds of shops/locations: 1. conventional supermarkets and/or shopping centres and

³⁴ “Don’t know” answers are sometimes treated as missing values. However, in this case more than 60% of the observations in our data set would have been lost.

³⁵ For dichotomous variables, Cronbach’s alpha is equivalent to the Kuder-Richardson coefficient (Cortina 1993:98/99).

³⁶ The only exception was the scale for logo 2 in Denmark with a Cronbach’s alpha of 0.625, which is still acceptable for exploratory research (Hair et al. 2010:125).

2. specialised organic food shops. The shares of choice experiments conducted at each kind of shop approximately reflected the market share of that kind of shop in the respective country.³⁷

The participants were recruited based on quota sampling for age and gender using a structured screening questionnaire. The country-specific quotas for the two age groups ('18 to 44' and '45 to 75 years') reflected the shares of these groups in the total population. The quota for the share of the younger age group ranged from 43% in Italy to 60% in the Czech Republic. Regarding gender, the quotas reflected the buying behaviour of households in each country. The quota for the share of women ranged from 60% in the UK to 70% in Italy. It was intended to reveal the preferences of consumers who regularly buy the tested products in organic quality to ensure that the results are relevant for the organic market. Therefore, two screening questions were used: First, participants had to be responsible for the food purchase in their household; second, they had to buy organic apples *and* eggs at least once a month (based on self-assessment).

The socio-demographic characteristics of the sample are presented in Table 16. In all countries, the age and gender quotas were fulfilled with a deviation of less than three percentage points. The level of education was generally high in the sample, in particular in Italy. However, this result is in accordance with previous studies suggesting that the share of people with a college or university degree is, on average, higher among consumers of organic food compared to the rest of the population (Zander and Hamm 2010:499, Wier et al. 2008:415). In all countries, the mean household size was slightly above average compared to the population.

³⁷ The share of choice experiments conducted at conventional supermarkets were 87% in CH, 50% in CZ, 75% in DE, 100% in DK, 50% in IT and 75% in UK (the remaining share was conducted at specialised organic food shops). It has to be kept in mind that many consumers are frequent customers of different kinds of shops. Even in Denmark and Switzerland where (almost) all choice experiments were conducted at conventional supermarkets, more than 40% of the participants stated to (also) buy at organic food shops.

Table 16: Description of the sample: Socio-demographic characteristics

		CH	CZ	DE	DK	IT	UK
Gender	N	395	400	405	401	427	411
	Female (%)	61.5	65.8	65.7	71.0	70.3	71.0
	Male (%)	38.5	34.2	34.3	29.0	29.7	29.0
Age	N	397	400	405	401	427	411
	18-44 years (%)	47.1	61.0	50.1	46.6	42.4	51.8
	45-75 years (%)	52.9	39.0	49.9	53.4	57.6	48.2
	Mean age in years	45.1	40.3	44.1	46.3	46.2	45.6
Education¹	N	394	400	398	401	427	411
	No formal qualification (%)	0.3	2.8	0.0	3.0	0.0	5.6
	GCSE ² (%)	35.8	8.5	25.1	2.7	1.6	12.4
	A level ³ (%)	29.7	49.3	33.2	32.4	11.0	15.8
	College or university degree (%)	34.3	39.5	41.7	61.8	87.4	66.2
Household size	N	396	400	396	401	426	410
	Mean	2.4	2.8	2.5	2.5	2.8	2.7
Household net income (monthly)	N	377	393	379	400	426	406
	< 600 € (%)	6.6	33.1	12.1	3.8	4.9	4.9
	600 € to <1,200 € (%)	11.7	47.1	17.9	12.0	14.3	10.6
	1,200 € to <1,800 € (%)	9.8	14.0	18.7	9.3	21.4	10.3
	1,800 € to <2,400 € (%)	9.3	3.6	13.2	13.0	16.7	14.5
	2,400 € to <3,000 € (%)	12.2	} 2.3 ⁴	11.3	12.5	13.1	10.8
	3,000 € to <3,600 € (%)	13.5	8.7	10.3	10.1	12.1	
	3,600 € to <4,200 € (%)	9.5	8.4	7.3	5.4	6.9	
	4,200 € to <4,800 € (%)	7.7	1.8	8.8	4.9	9.4	
	4,800 € to <5,400 € (%)	6.4	2.9	10.8	2.3	4.7	
	5,400 € or more (%)	13.3		4.7	12.5	6.8	15.8

¹ The listed categories are taken from the UK questionnaire. Equivalent terms were used in the other countries.

² General Certificate of Secondary Education (appr. 10 years of school).

³ Approximately 12 years of school.

⁴ In CZ, the following income categories were used in the interviews: <300 €; 300 € to <600 €; 600 € to <900 €; 900 € to <1,200 €; 1,200 € to <1,500 €; 1,500 € to <1,800 €; 1,800 € to <2,100 €; 2,100 € to <2,400 €; 2,400 € to <2,700 €; 2,700 € or more.

Table 17 contains information about participants' stated buying behaviour for organic food in the sample. The share of participants who estimated their organic budget share (i.e. the share of organic products in their total expenditure for food and beverages) to be above 50% was the highest in Denmark and Germany (with around half of the participants ascribing themselves to that group) and the lowest in the Czech Republic (15%).

Table 17: Description of the sample: Buying behaviour for organic food

		Share of participants in %					
		CH	CZ	DE	DK	IT	UK
Organic budget share of the participants¹	≤50%	56.3	85.3	49.5	47.9	55.3	63.2
	>50%	43.7	14.8	50.5	52.1	44.7	36.8
Total		100.0	100.0	100.0	100.0	100.0	100.0
N		396	400	388	401	421	410

¹ Share of organic products in consumers' total expenditures for food and beverages in %.

7.5 Results and discussion

Separate RPL models were estimated for apples and eggs with the software package NLOGIT 4.0. The models were estimated by simulated maximum likelihood using Halton draws with 2,000 replications.³⁸ The final RPL model estimates are shown Table 18. All models are statistically significant at the 99.99% confidence level (Chi-square statistics). The model fits vary across the countries with the highest model fits observed in Denmark and the lowest in Italy. In all sets of models, the egg model has a Log Likelihood function value closer to zero compared to the apple model, suggesting the egg models have a better fit. One explanation could be that in the choice experiments, slight variations in the look of the apples could not be completely ruled out whereas the eggs looked very much alike. In all models, the price coefficient is significant and of the expected negative sign.

³⁸ Please note that the following ‘no-buy cases’ were excluded from the choice analysis: Participants who stated to not have chosen a product because they disliked the look, shape, colour, size, variety or smell of all offered alternatives.

Table 18: RPL models on consumer preferences for organic certification logos

	Apple models			Egg models				
		Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	
CZECH REPUBLIC	N	782	782	782	N	776	776	776
Parameters	RP¹				RP¹			
Price	Fix	-4.36***	-4.35***	-4.35***	Fix	-4.79***	-4.78***	-4.80***
ASC EU logo	RP	0.59**	0.53**	0.59**	RP	1.11***	1.05***	1.11***
ASC Governmental logo	RP	2.45***	1.63***	1.58***	RP	2.56***	1.82***	1.98***
ASC Demeter	Fix	0.37**	0.78***	0.38**	RP	0.58***	0.95***	0.57***
ASC No-buy	Fix	-7.06***	-6.42***	-7.05***	Fix	-7.61***	-7.03***	-7.63***
Attitude-Scale ²	Fix	–	0.44***	–	Fix	–	0.40***	–
Standard deviations of parameter distributions								
ASC EU logo		2.05***	1.91***	2.05***		1.36***	1.25***	1.37***
ASC Governmental logo		3.16***	2.82***	3.13***		2.49***	2.01***	2.47***
Interaction term with the covariate ‘Organic budget share’								
x Governmental logo		–	–	0.25**		–	–	0.17**
Log Likelihood		-778.64	-748.21	-775.66		-748.80	-718.82	-746.87
McFadden Pseudo <i>R</i> ²		0.38	0.40	0.38		0.40	0.42	0.40
DENMARK	N	788	788	788	N	796	796	796
Parameters	RP¹				RP¹			
Price	Fix	-6.43***	-6.19***	-6.39***	Fix	-8.19***	-8.24***	-8.12***
ASC EU logo	RP	0.88***	0.53**	0.87***	Fix	1.64***	1.34***	1.62***
ASC Governmental logo	RP	3.35***	1.77***	3.36***	RP	4.40***	2.91***	4.39***
ASC Demeter	RP	0.88***	0.79***	-1.42**	RP	1.78***	1.58***	-0.20
ASC No-buy	Fix	-9.05***	-7.87***	-9.00***	Fix	-10.43***	-9.63***	-10.37***
Attitude-Scale ²	Fix	–	0.56***	–	Fix	–	0.55***	–
Standard deviations of parameter distributions								
ASC EU logo		0.94*	1.07**	0.94*		–	–	–
ASC Governmental logo		2.34***	1.73***	2.40***		2.43***	2.25***	2.45***
ASC Demeter		2.05***	1.09***	1.69***		2.13***	1.50***	1.86***
Interaction term with the covariate ‘Organic budget share’								
x Demeter		–	–	0.42***		–	–	0.36***
Log Likelihood		-684.68	-628.33	-669.92		-614.27	-565.43	-603.89
McFadden Pseudo <i>R</i> ²		0.46	0.50	0.47		0.52	0.56	0.53
GERMANY	N	772	772	740	N	770	770	738
Parameters	RP¹				RP¹			
Price	Fix	-3.33***	-3.24***	-3.33***	Fix	-2.27***	-2.23***	-2.44***
ASC EU logo	Fix	0.03	-0.05	0.03	Fix	0.48**	0.38*	0.50**
ASC Governmental logo	RP	1.69***	0.44**	1.73***	RP	2.08***	0.72***	2.79***
ASC Demeter	RP	1.61***	0.24	-0.41	RP	2.38***	0.82***	0.90**
ASC No-buy	Fix	-34.56	-34.56	-33.27	Fix	-33.37	-33.52	-33.00
Attitude-Scale ²	Fix	–	0.44***	–	Fix	–	0.48***	–
Standard deviations of parameter distributions								
ASC Governmental logo		1.03***	0.92***	1.03***		1.03***	0.97***	1.04***
ASC Demeter		1.90***	1.01***	1.90***		1.33***	0.45	1.19***
Interaction terms with the covariate ‘Organic budget share’								
x Governmental logo		–	–	–		–	–	-0.12**
x Demeter		–	–	0.35***		–	–	0.26***
Log Likelihood		-805.06	-747.83	-746.20		-776.52	-691.15	-705.68
McFadden Pseudo <i>R</i> ²		0.35	0.40	0.37		0.37	0.44	0.41

	Apple models			Egg models				
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3		
ITALY	N	854	854	842	N	844	844	832
Parameters	RP¹				RP¹			
Price	Fix	-2.30***	-2.19***	-2.31***	Fix	-2.74***	-2.50***	-2.79***
ASC EU logo	RP	1.84***	0.63***	1.82***	RP	2.31***	0.98***	2.28***
ASC CCPB	RP	1.10***	0.57***	1.62***	RP	1.52***	0.87***	2.13***
ASC Demeter	RP	0.95***	0.87***	-0.55	RP	1.03***	0.84***	-0.51
ASC No-buy	Fix	-5.44***	-4.71***	-5.43***	Fix	-5.37***	-4.47***	-5.42***
Attitude-Scale ²	Fix	–	0.56***	–	Fix	–	0.59***	–
Standard deviations of parameter distributions								
ASC EU logo		1.83***	1.28***	1.92***		2.50***	1.77***	2.64***
ASC CCPB		1.20***	1.01***	1.13***		1.81***	1.85***	1.83***
ASC Demeter		2.36***	1.06***	2.14***		2.31***	1.11***	2.06***
Interaction terms with the covariate ‘Organic budget share’								
x CCPB		–	–	-0.10*		–	–	-0.13*
x Demeter		–	–	0.29***		–	–	0.30***
Log Likelihood		-987.59	-884.50	-955.27		-933.92	-851.41	-902.87
McFadden Pseudo <i>R</i> ²		0.28	0.35	0.30		0.31	0.37	0.33
SWITZERLAND	N	772	772	772	N	778	778	776
Parameters	RP¹				RP¹			
Price	Fix	-3.49***	-3.40***	-3.53***	Fix	-3.45***	-3.37***	-3.43***
ASC Fake logo	Fix	0.62***	0.15	0.61***	RP	0.79***	0.41*	0.78***
ASC Bio Suisse	RP	1.90***	0.12	1.32***	RP	2.64***	0.68***	1.95***
ASC Demeter	RP	1.16***	0.04	-1.41***	RP	1.07***	-0.11	-1.86***
ASC No-buy	Fix	-7.12***	-6.76***	-7.17***	Fix	-33.48	-33.85	-33.67
Attitude-Scale ²	Fix	–	0.51***	–	Fix	–	0.58***	–
Standard deviations of parameter distributions								
ASC Fake logo		–	–	–		0.90*	0.60	0.98**
ASC Bio Suisse		1.84***	1.78***	1.89***		1.80***	1.33***	1.77***
ASC Demeter		2.07***	0.89***	1.48***		3.06***	2.16***	2.78***
Interaction terms with the covariate ‘Organic budget share’								
x Bio Suisse		–	–	0.12*		–	–	0.15**
x Demeter		–	–	0.52***		–	–	0.58***
Log Likelihood		-835.91	-757.04	-800.64		-777.08	-707.18	-755.58
McFadden Pseudo <i>R</i> ²		0.33	0.39	0.36		0.38	0.43	0.40
UNITED KINGDOM	N	790	790	788	N	786	786	786
Parameters	RP¹				RP¹			
Price	Fix	-2.87***	-2.84***	-2.86***	Fix	-4.33***	-4.28***	-4.33***
ASC EU logo	Fix	0.23*	0.40***	0.24*	Fix	0.23	0.50***	0.23
ASC Soil Ass.	RP	0.75***	0.38**	0.30	RP	1.18***	0.56***	1.18***
ASC OF&G	RP	0.95***	0.69***	0.96***	RP	1.55***	1.13***	1.55***
ASC No-buy	Fix	-7.70***	-7.36***	-7.68***	Fix	-7.11***	-6.54***	-7.11***
Attitude-Scale ²	Fix	–	0.20***	–	Fix	–	0.33***	–
Standard deviations of parameter distributions								
ASC Soil Ass.		1.57***	1.29***	1.56***		2.12***	1.69***	2.12***
ASC OF&G		1.13***	1.17***	1.14***		1.88***	1.82***	1.88***
Interaction term with the covariate ‘Organic budget share’								
x Soil Assn.		–	–	0.09*		–	–	³
Log Likelihood		-939.50	-925.82	-935.83		-856.91	-832.63	-856.91
McFadden Pseudo <i>R</i> ²		0.26	0.27	0.26		0.32	0.34	0.32

Statistical significance at level ***<0.01, **<0.5, *<0.1.

– Term was not estimated in the model.

¹ ‘RP’ stands for random parameters, ‘Fix’ stands for non-random (fixed) parameters.

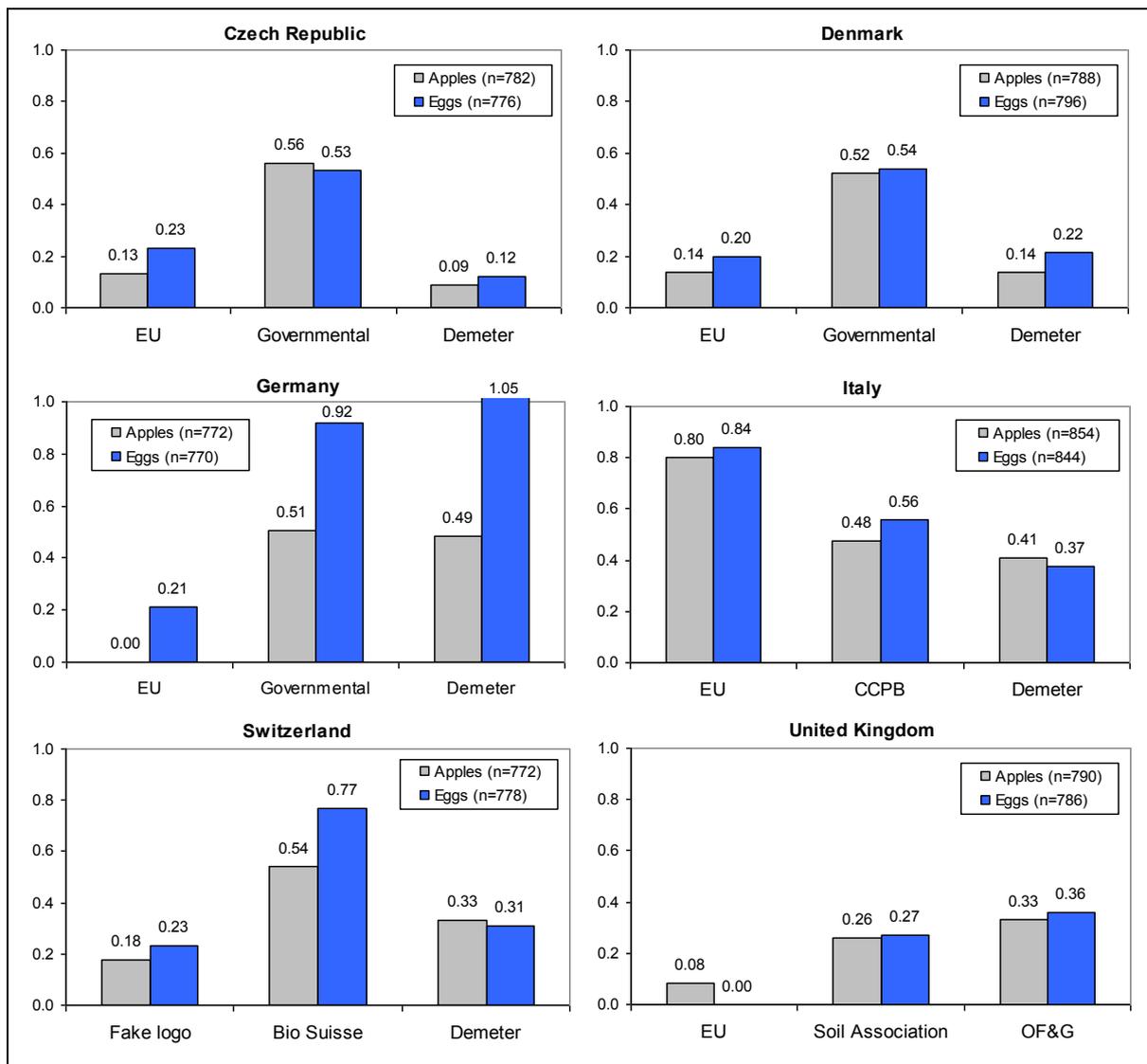
² Attitude-Scale: Summated scale of consumer perceptions and attitudes regarding organic certification logos.

³ In the egg models, no significant interaction terms were found with the covariate ‘Organic budget share’, therefore the results of Model 3 and Model 1 are identical.

7.5.1 Willingness-to-pay for different organic logos

Figure 7 and Table 19 show the additional WTP for products with a certain organic logo compared to similar products without a logo (just marked with the prefix ‘organic’). The values of the WTP measures provide the WTP in percent of price level 1.0 (price level 1.0 equals the average market price). The *ASCs* of several logos have a significant standard deviation around the mean and were estimated as random parameters resulting in heterogeneity in the WTP for these logos.

Figure 7: Mean additional WTP for organic logos¹



¹ Reference category: Organic products without a logo (generic label with the prefix ‘organic’). Mean additional WTP in percent of the average market price (see Table 19).

Table 19: Additional WTP for organic logos

Country	Organic logos ²	Additional WTP ¹			
		Apples		Eggs	
		Mean	Standard deviation	Mean	Standard deviation
Czech Republic	Old EU logo	0.13	0.27	0.23	0.14
	Governmental logo	0.56	0.55	0.53	0.38
	Demeter logo	0.09	0.00 ⁺	0.12	0.00 ⁺
Denmark	Old EU logo	0.14	0.04	0.20	0.00 ⁺
	Governmental logo	0.52	0.25	0.54	0.20
	Demeter logo	0.14	0.17	0.22	0.14
Germany	Old EU logo	0.00	–	0.21	0.00 ⁺
	Governmental logo	0.51	0.14	0.92	0.21
	Demeter logo	0.49	0.38	1.05	0.34
Italy	Old EU logo	0.80	0.50	0.84	0.63
	CCPB logo	0.48	0.23	0.56	0.36
	Demeter logo	0.41	0.68	0.37	0.51
Switzerland	Fake logo	0.18	0.00 ⁺	0.23	0.08
	Bio Suisse logo	0.54	0.34	0.77	0.32
	Demeter logo	0.33	0.38	0.31	0.62
United Kingdom	Old EU logo	0.08	0.00 ⁺	0.00	–
	Soil Assn. logo	0.26	0.34	0.27	0.33
	OF&G logo	0.33	0.20	0.36	0.28

¹ Reference category: Organic products without a logo (generic label with the prefix ‘organic’). The WTP measures are based on Model 1 with relative price levels (0.8, 1.0, 1.2, 1.4). The additional WTP is shown in percent of the average market price. For example, in Germany the additional WTP for apples with the governmental logo compared to organic apples without a logo amounted to 51% of the average market price.

² See Table 13 for a description of the logos.

⁺ WTP measures with a standard deviation of zero indicate that the *ASC* of the respective logo was estimated as a fixed parameter so that the mean WTP was also a fixed parameter.

A significant positive additional mean WTP³⁹ was observed for almost all logos, even for the fake logo tested in Switzerland. That means consumers clearly preferred products labelled with organic logos over organic products without a logo. However, the price premium that consumers were willing to pay differed considerably between the tested logos. In Switzerland, the Czech Republic, Denmark and Italy there was *one* logo with a considerably higher WTP compared to the other logos. Those were the Bio Suisse logo in Switzerland, the Czech and Danish governmental logos and the EU logo in Italy. In Germany and the UK, there were *two* logos with a relatively high WTP, namely the logo of the farmers’ association Demeter and the governmental logo in Germany and the logos of the Soil Association and the certification body ‘Organic Farmers & Growers’ in the UK.

³⁹ In the following description, the terms ‘additional WTP’ and ‘price premium’ refer to the *mean* additional WTP compared to similar products without a logo.

A comparison of the WTP for different kinds of logos across the countries revealed the following picture:

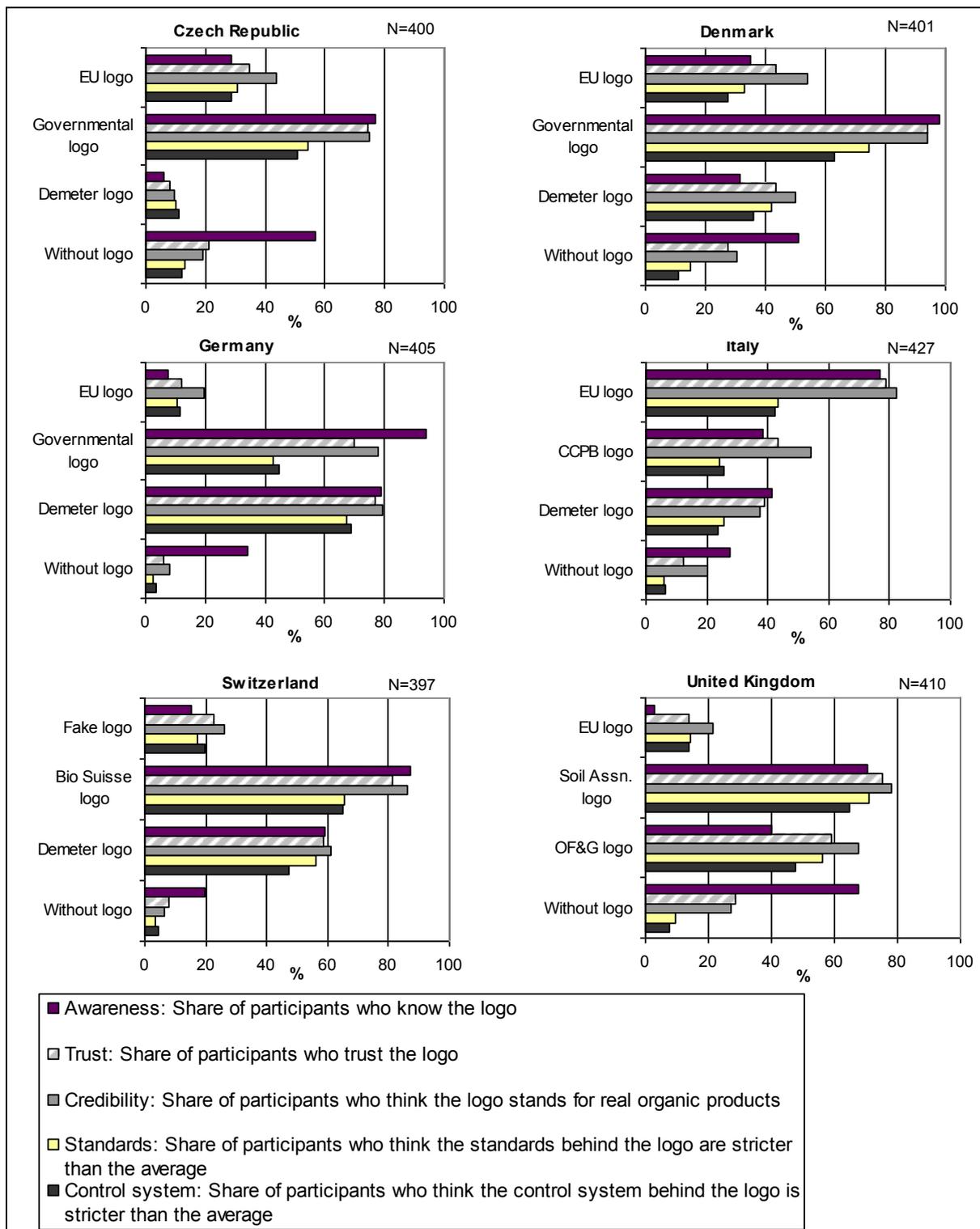
- Old EU logo: The WTP for the old EU logo was relatively low or equal to zero in the Czech Republic, Germany, Denmark and the UK. In contrast, the old EU logo had the highest WTP of all logos tested in Italy.
- Governmental logos: In the Czech Republic and Denmark, the governmental logo featured the highest WTP of all tested logos. In Germany, the WTP for the governmental logo and the Demeter logo were both equally high for apples; for eggs the WTP for the governmental logo was slightly lower than for the Demeter logo.
- Private logos (logos of farmers' and organic sector associations, umbrella organisations and certification bodies): In Switzerland and the UK, the highest WTP was observed for a private logo. However, both countries do not have a governmental logo and the old EU logo was not commonly used. The Demeter logo featured a high WTP only in Germany, whereas in the Czech Republic, Denmark, Italy and Switzerland, the WTP for the Demeter logo was considerably lower than for the logo with the highest WTP.

The results for apples and eggs were relatively similar in all countries except for Germany, where the WTP for the three logos was considerably higher for eggs than for apples. Similarly, in Switzerland the additional WTP for the Bio Suisse logo was higher for eggs than for apples. An explanation for the German and Swiss results could be the lower absolute prices for eggs than for apples in the experiments, so that the absolute price difference between the tested price levels was lower for eggs.

7.5.2 Factors influencing consumer preferences for organic logos

7.5.2.1 Attitudes regarding organic logos

The RPL model estimates (Table 18, Model 2) show that the logo attitude scale has a significant coefficient with a positive sign in all models. Thus, a higher rating of an organic logo in terms of awareness, trust, credibility, standards and control system increased the probability that this logo was chosen. The results of the logo ratings are shown in Figure 7, to allow further insights into the relation between these measures and the observed WTP.

Figure 8: Consumer perceptions and attitudes regarding different organic logos¹

¹ See Table 13 for a description of the logos. 'Without logo' refers to a generic label with the prefix 'organic' without a certification logo.

A considerable share of participants knew organic products without a logo but the great majority did not find these products trustworthy and credible, which was why products with a certification logo were mostly preferred (Figure 8). This result corresponds with the so-called unfolding theory in the literature suggesting that consumers infer from the absence of a label

that the product does not possess the respective attributes (Golan et al. 2001:129). As mentioned in the introduction, a study from the United States also found that consumers clearly preferred the USDA logo over products just labelled with the prefix 'organic' (Van Loo et al. 2011).

Furthermore, the present findings illustrate that logo awareness alone might not sufficiently explain consumer preferences for organic certification logos; consumer perceptions and attitudes regarding the scheme behind the logo also play an important role. In Germany, the governmental logo was known to a greater share of participants than the Demeter logo, but the Demeter logo got higher ratings regarding standards and control, explaining why the WTP for the Demeter logo equalled or slightly exceeded the WTP for the governmental logo. In the UK, the Soil Association logo was known by a larger share of people than the OF&G logo and also the other ratings were higher. However, this fact was *not* reflected in the WTP measures. The interviewees reported that several participants commented on the appealing design of the OF&G logo, which might have influenced the logo choice. This aspect was not explicitly investigated in our study but it might be worth exploring in the UK.

Our results further show that consumer perceptions of what stands behind an organic certification logo are of subjective nature and in many cases not based on objective facts. For instance in Germany, consumer perceptions of the governmental logo, the old EU logo, and a generic label without a certification logo were very different, even though the three labels indicate exactly the same, namely organic production according to Regulation (EC) No 834/2007. Similarly, in Italy the WTP for the old EU logo was much higher than for the generic label without a logo. Discrepancies between consumer perceptions and objective knowledge are a well-documented phenomenon in the literature (Alba and Hutchinson 2000:123f.). Several studies found that consumers have a low level of factual knowledge about organic production standards and certification (Sawyer et al. 2009, McEachern and Warnaby 2008, Hoogland et al. 2007). Consumer perceptions are mostly limited to a comparison between 'strict' and 'low' standards (Janssen and Hamm 2011b).

7.5.2.2 Consumers' buying frequency of organic food

In each country, significant interaction terms of the logo coefficients (*ASCs*) with the covariate 'organic budget share' were found (Table 18, Model 3). Except for two logos, all interaction terms are positive indicating a higher WTP among frequent buyers of organic food compared to less frequent buyers. This finding seems very plausible and corresponds with the study from the United States (Van Loo et al. 2011). In the following description, only interaction terms which were significant in both product models (apples and eggs) are mentioned. A common finding across Switzerland, Germany, Denmark and Italy is that consumers with a higher organic budget share had a higher preference for products of the farmers' association Demeter than consumers with a lower organic budget share. Regarding the other private logos a mixed picture was found. In Switzerland Bio Suisse products were preferred more the higher the organic budget share, whereas in Italy products with the CCPB logo were preferred more the lower the organic budget share. For the private logos in the UK, the model estimates did not provide an interaction term that was significant for apples *and* eggs. The results regarding the governmental logos in the Czech Republic, Germany and Denmark are also diverse: Only in the Czech Republic, significant interaction terms were found in both product models. The Czech governmental logo was preferred more by consumers with a higher organic budget share. Preference heterogeneity regarding the EU logo was observed in Denmark, Italy and the Czech Republic but no significant interaction term with the covariate was found here (in Germany and the UK, the *ASC* of the EU logo proved to be fix in the population, so no preference heterogeneity was detected here).

7.5.3 Limitations of the study

Previous research showed that organic certification logos might not be the only source of consumer trust in the integrity of organic products (Janssen and Hamm 2011b, Naspetti and Zanolli 2009:258). Other sources of trust could be manufacturer and private brands as well as trust in the farmer or owner of an organic food shop. These aspects were not investigated in the choice experiments. Thus our results regarding consumer preferences for organic certification logos are mostly valid for products like fruit and vegetables, meat and eggs that are not labelled with a well-known brand. This aspect is further elaborated in the final section.

The study was conducted prior to the introduction of the new mandatory EU logo. Our results regarding the old EU logo cannot be directly transferred to the new EU logo, since the new logo is mandatory. In a few years, the new logo will probably reach a higher level of consumer awareness than the old logo had when the study was conducted. It would be

interesting to repeat the investigation once the new EU logo is well-known among the population.

7.6 Conclusions

According to our results, very few consumers trusted the generic labelling with the prefix 'organic' without a certification logo. For almost all tested organic certification logos, the WTP was significantly higher than for the generic labelling. That even holds true for a fake logo investigated in Switzerland. However, the WTP differed considerably between the tested logos. The highest price premiums were recorded for logos that were well-known and trusted with perceived strict organic standards and a strict control system. Based on our findings, recommendations for market actors in the organic sector are now derived. Furthermore, conclusions are drawn regarding the theoretical framework of credence goods and third-party certification. Lastly, the role of organic certification logos is critically discussed.

Recommendations for market actors in the organic sector

Consumers in the study countries clearly prefer certain organic certification logos over others. At the time of writing, it remains to be seen how quickly the new mandatory EU logo will gain consumer awareness in the population. However, it is likely that it will take some time until the new logo is widely trusted in those countries where the former voluntary EU logo was not very common. In these countries, it thus seems advisable to *additionally* label organic products with an organic logo that consumers know and trust, at least in a transition period. According to our findings, there were great differences between countries as to which kinds of organic logos were preferred by consumers. In Denmark and the Czech Republic, consumers were willing to pay the highest price premium for the governmental logo. In Germany, a high WTP was recorded for the logo of the farmers' association Demeter and the governmental logo. In Italy, the old EU logo reached the highest WTP. In Switzerland, the logo of the farmers' umbrella organisation Bio Suisse was clearly preferred. In the UK, the WTP was the highest for the logos of the Soil Association and the certification body 'Organic Farmers & Growers'. In some countries, the organic logos preferred by consumers are attached to further requirements in addition to the principles of EU Regulation (EC) 834/2007. However, the present results suggest that the effort of fulfilling additional requirements might be worth for

producers and processors, in order to label their products with those logos preferred by consumers.⁴⁰

Our findings showed that consumer preferences for some organic certification logos were influenced by consumers' buying frequency of organic food. A number of logos attracted a higher WTP among frequent buyers of organic food compared to occasional buyers. These findings can be used by organic producers and processors for choosing an organic labelling scheme as well as distribution channel for their products. Retailers can use the information likewise. For instance if they wish to attract more frequent buyers of organic food, they could list products with respective organic logos preferred by frequent buyers.

Credence goods and third-party certification

Our findings illustrate that product labelling based on third-party certification does not automatically overcome the dilemma of information asymmetry inherent in credence goods. Rather, consumer perceptions and attitudes regarding the logo that represents the underlying scheme play the central role at the point-of-sale. In our study, different logos which indicate the same were evaluated differently by consumers, so that the WTP was higher for some logos than for others. Thus, for a certification scheme to be successful, consumer awareness of the corresponding logo and positive attitudes towards the underlying scheme are of crucial importance. We recommend that organisations owning a labelling scheme for consumer goods invest in marketing communication and public relation for increasing consumer awareness of the logo and forming consumer attitudes towards the certification scheme behind it.

Communicating process-related characteristics of credence goods to consumers is certainly not easy, in particular in the food sector. Previous research confirmed that consumers know little about agricultural practices and food production (Naspetti and Zanolini 2009:263, Sawyer et al. 2009:60, Hoefkens et al. 2009:13, Hoogland et al. 2007:55). This dilemma highlights the importance of identifying those aspects of a labelling scheme that are relevant to consumers

⁴⁰ For instance, the Danish governmental logo is a control logo which requires that the latest preparation of the product (packaging and/or labelling) was undertaken by a company in Denmark under the inspection of the Danish governmental control authorities (Bekendtgørelse om økologiske fødevarer m.v. No 1258; Fødevarestyrelsens vejledning om økologiske fødevarer m.v.). In the Czech Republic, the product must have been certified by a control body authorised by the Ministry of Agriculture (KEZ, Biokont, AbCert) in order to carry the Czech governmental logo (Act on Organic Farming No 242/2000 Coll.). In the UK, the standards of the Soil Association exceed the EU organic principles in some respects (Soil Association Ltd. 2010). The logos of the inspection body OF&G can only be displayed by operators controlled by these inspection bodies. The Demeter logo preferred by frequent buyers in Germany indicates that the anthroposophical standards of Demeter are fulfilled (Demeter e.V. 2011, 2010). Similarly, the farmers' umbrella organisation Bio Suisse has own organic standards exceeding the EU principles (Bio Suisse 2011).

and easy to communicate. In the case of organic food, several studies showed that consumers are particularly interested in animal welfare (Zander and Hamm 2010:502, Hughner et al. 2007:102). Another reason for buying organic food frequently mentioned by consumers is that they desire products free of pesticide residues (Cranfield et al. 2009:114, Naspetti and Zanolli 2009:258, Hughner et al. 2007:101, Yiridoe et al. 2005:195). Findings like these provide hints for successful marketing messages for shaping consumer perceptions of what stands behind an organic certification logo.

Critical appreciation of the role of organic certification logos

The present study of consumer preferences for organic certification logos highlights the importance of understanding the consumer perspective on the organic food regime. Consumer perceptions of organic standards, certification and control are of subjective nature and in many cases not based on objective knowledge. It needs to be admitted that any organic certification logo which is neither mandatory nor already widely known among consumers will face severe difficulties in trying to attract consumer preferences. In the end, the decision upon the use of voluntary organic certification logos for product labelling lies with private processors and retailers. Processors and retailers, however, are primarily interested in promoting their own brand as a unique selling proposition to differentiate their products from other organic products. From the perspective of processors and retailers, organic certification logos only serve as tools for gaining consumer trust but they do not offer a unique selling proposition.

This circumstance will most likely have consequences for the design of product packages and the use of voluntary organic certification logos. Since July 2012, the mandatory EU logo and indication of origin must be displayed. More importantly, however, processors and retailers want to attract attention to their own brand label. Given that space on product packages is limited, particularly on the front side, voluntary organic certification logos therefore run the risk of losing importance – provided that the mandatory EU logo will gain consumer trust. This development will make it easier for processors and retailers to focus their efforts on establishing their own brands as unique selling propositions. Consequently, only those voluntary organic certification logos that consumers perceive as exceptional will maintain a position in the market.

8 Consumer attitudes towards a mandatory EU logo for organic food

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8.1 Abstract

Purpose: In July 2010, a mandatory EU logo for organic food was introduced to strengthen the organic sector by making the identification of organic products easier for consumers. The present study analyses how consumers in five EU countries view a mandatory EU logo for organic food and gives recommendations for agrarian decision-makers and market actors in the organic sector.

Design/methodology/approach: The study is based on a combination of qualitative and quantitative methods to provide a comprehensive picture of consumer views. Focus group discussions were conducted with consumers in the Czech Republic, Denmark, Germany, Italy and the United Kingdom. A subsequent survey with 2,042 participants was carried out to quantify consumer views on key issues and analyse country differences. Finally, the results of the qualitative and quantitative study were brought together.

Findings: While the introduction of a mandatory EU logo for organic food was generally welcomed in all countries, trust in the underlying production standards and the inspection system was not very pronounced (except in Italy). We conclude that the introduction of the new EU logo should be supported by communication campaigns to make clear what the new logo stands for and remove unfounded consumer concerns regarding the downscaling of standards and the trustworthiness of the inspection system.

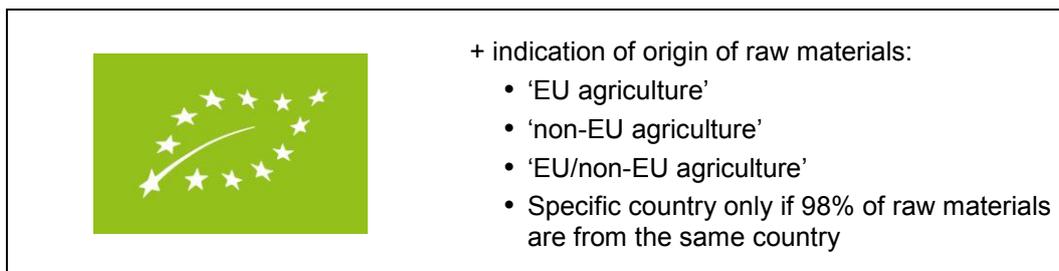
Originality: To the authors' knowledge, no previous studies exist on consumer views on a mandatory EU logo for organic food. The recommendations drawn from our findings can help to reach the objectives connected with the introduction of the mandatory EU logo.

8.2 Introduction

A food product can be labelled organic if it complies with the principles for organic production, processing, labelling and control. In the European Union (EU), these principles are defined by Regulation (EC) No 834/2007. Organic products are thus mainly characterised

by process-related attributes which consumers are not able to verify neither during purchase nor after consumption of the product (Jahn et al. 2005:55). Therefore, product labelling plays a central role in the organic market (Golan et al. 2001:119). Regulation (EC) No 834/2007 came into force on January 2009 substituting Regulation (EEC) 2092/91. The new regulation introduced a change regarding the labelling of organic food (see Figure 9): Since July 2010, all prepacked organic products produced within the EU must carry the new mandatory EU logo for organic food.⁴¹ The new logo replaced the former EU logo whose use was optional. As a further change, the new mandatory logo must be accompanied by an indication of the origin of the raw materials: 'EU Agriculture', 'non-EU Agriculture' or 'EU/non-EU Agriculture' (Regulation (EC) No 834/2007). In the case where all agricultural raw materials have been farmed in the same country, the terms 'EU' and 'non-EU' can be replaced or supplemented by the name of that country (Regulation (EC) No 834/2007).

Figure 9: New mandatory EU logo for organic food



The new EU logo for organic food is targeted at final consumers. Its main purpose is to make the identification of organic products easier for consumers (Regulation (EU) No 271/2010). The new labelling regulations constitute a novelty in the labelling practice in all EU countries in two respects: Before July 2010, only voluntary organic logos existed; moreover, it was not mandatory to indicate where the raw materials come from. The proposal of a mandatory EU logo and indication of origin was discussed controversially within the organic sector upon announcement of the draft regulation (see e.g. Blake 2009:19), but to date little is known about consumer views on the issue. Consumer trust, however, is of crucial importance for an organic label to be effective (Jahn et al. 2005:70). The present study analyses consumer views towards a mandatory EU logo and indication of origin for organic food in five European countries (Czech Republic, Denmark, Germany, Italy and United Kingdom) by a combination of qualitative and quantitative methods. The aim is to get insights into the positive and negative aspects that consumers connect with such a label. The overall objective of the study

⁴¹ A transition period is granted for product packages and labels produced before 1 July 2010. All packaging and labels manufactured after that date shall feature the new EU logo (Regulation (EU) No 271/2010).

is to give recommendations for agrarian decision-makers and market actors in the organic sector.

The paper is organised as follows: Section 8.3 outlines the economic background of organic certification and labelling and gives an overview of existing organic logos. Section 8.4 describes the methods of data collection and data analysis. Section 8.5 presents the results which are discussed in Section 8.6. Final recommendations are made in Section 8.7.

8.3 Background of organic certification and labelling

Product labelling is a central feature of the organic market, since consumers are not able to verify whether or not a product has been produced according to organic principles, neither during the purchase process nor after consumption (Jahn et al. 2005:55). Products of this kind are called credence goods in information economics (Darby and Karni 1973:68f.). Due to the high degree of information asymmetry – i.e. information is distributed unequally among producers and consumers – the organic market is prone to opportunistic behaviour in the supply chain such as fraud, since chances of being uncovered are low (McCluskey 2000:5, Darby and Karni 1973:68f.). Consumer trust in the product integrity is therefore a critical issue in the organic market, in particular since the credence attribute ‘organic’ often involves a significant price premium (Jahn et al. 2005:54, McCluskey 2000:5).

Product labelling based on third-party certification represents an instrument for gaining consumer trust in credence goods markets (McCluskey 2000:2). A neutral certifier, which is accredited by a competent authority, guarantees regular inspections of the processes within the supply chain and ensures compliance with the respective standards. This is signalled to final consumers by product labelling (Roe and Sheldon 2007:1020, Golan et al. 2001:131). However, several authors point out that third-party certification diminishes the dilemma of information asymmetry in the producer-consumer relationship *only if* consumers trust the certification scheme (Albersmeier et al. 2010:71, Jahn et al. 2005:70, Golan et al. 2001:131). In other words, third-party certification involves a shift of the credence attribute from the producer to the certifier. This is also confirmed by several studies on organic food consumption which found that scepticism and uncertainty towards organic logos and certification schemes prevented consumers from buying more organic food (Aertsens et al. 2009, Krystallis et al. 2008, Hughner et al. 2007, Padel and Foster 2005, Lea and Worsley 2005, Aarset et al. 2004). Consumers often lack knowledge on organic certification and agricultural practices (Aertsens et al. 2009, Sawyer et al. 2009:60, Hoogland et al. 2007:55). The success of a product label based on third-party certification like the EU logo for organic

food thus largely depends on the following crucial factors: Consumers need to, firstly, recognise the logo and know what it stands for, secondly, trust the underlying certification scheme, and thirdly, appreciate the product characteristics that the scheme delivers.

Recent research on consumer preferences for organic food revealed interesting developments that might also have implications for product labelling and organic certification in the future. The following studies highlight the increased need of consumers for easy access to information on credence characteristics of organic production. Zander and Hamm (2010) showed that organic consumers are increasingly interested in additional ethical values of organic products, such as stricter animal welfare standards, regional production and fair prices for farmers. Ness et al. (2010) and Janssen et al. (2009) suggest that new consumers could be attracted to organic products by product information (e.g. product labelling) on the single benefits incorporated in organic production, such as the rejection of the use of pesticides and artificial additives.

Voluntary organic certification labels have been on the market for several decades in many European countries. Prior to the introduction of the mandatory EU logo for organic food, the labelling practice differed across the EU countries: The former voluntary EU logo was used frequently only in a few, mainly Mediterranean countries, whereas it was almost not used by producers in the majority of EU countries. Similarly, the use of governmental and private organic certification logos was very different across the EU countries. The five countries chosen for this study (Czech Republic, Denmark, Germany, Italy and United Kingdom) represent different organic labelling ‘traditions’ and stages of organic market development (the following information on the use of organic logos refers to the situation prior to the introduction of the mandatory EU logo; the market data are taken from Padel et al. 2009):

- In the Czech Republic, the market for organic food is still relatively small but growing fast. The Czech Republic has a prominent governmental logo. The former EU logo for organic food was rarely used by Czech producers.
- Denmark as the European country with the highest per capita expenditures on organic food has a very prominent governmental logo. Besides, the former EU logo was relatively common.
- Germany – the largest market for organic food in the EU – also has a prominent governmental logo. In addition, logos of farmers’ associations have a long tradition (in particular Demeter, Bioland and Naturland). The former EU logo for organic food was rarely used by German producers.

- In Italy – a net exporter of organic products – the most frequently used organic logo was the former EU logo. In addition, numerous logos of private organisations are found.
- The United Kingdom is the second largest market for organic food in the EU. There is no governmental logo but several private organic certification logos, of which the logo of the Soil Association is the most common one. The former EU logo for organic food was rarely used by British producers.

To date, it remains to be seen how frequently producers and retailers will use governmental and private organic certification logos in addition to the mandatory EU logo in the future. Partly, this will probably depend on the level of consumer acceptance of the new mandatory EU logo.

8.4 Data and methods

To the authors' knowledge, there are no previous studies on consumer views on a mandatory EU logo for organic food. The present study was therefore based on a combination of qualitative and quantitative methods to get a more comprehensive picture of the area of enquiry, by making use of the strengths of both fields (Bryman 2008:609). With qualitative methods which are characterised by more depth and greater richness of context (Aaker et al. 2010:162f.) it was identified which issues and concerns matter to consumers regarding a mandatory EU logo for organic food and why this is the case. For this purpose, focus group discussions were conducted with consumers in the five EU countries Czech Republic (CZ), Denmark (DK), Germany (DE), Italy (IT), and United Kingdom (UK). The data was analysed with qualitative content analysis. A quantitative survey was then carried out by structured written interviews with 2,042 consumers in the five countries to quantify and statistically test consumer views on key issues that were raised in the focus group discussions. In the final step, the results of the two approaches were brought together in a combined analysis.

8.4.1 Qualitative methods of data collection and analysis

In the field of consumer research, the method of focus group discussions is typically applied to investigate attitudes, opinions, product preferences and purchase motives (Aaker et al. 2010:167f.). Focus group discussions encourage group interaction and mutual stimulation among the participants, which is the main advantage of the method compared to qualitative individual interviews, since a broader spectrum of different opinions can be revealed (Bryman 2008:485f., Finch and Lewis 2006:171f.). However, due to the dynamic nature of group processes, focus group discussions also bear a number of risks and require careful group

facilitation, e.g. if individual participants dominate the discussion (Finch and Lewis 2006:182f.). Furthermore, it needs to be acknowledged that focus group discussions are not suited for research topics that might cause discomfort among participants in a group context (Bryman 2008:489).

The discussion guideline for the present study contained two main sections. In the first section, the participants were asked for their views on the introduction of a new mandatory EU logo for organic food. In the second section, the focus was on the indication of origin of the raw materials. Since the study took place prior to the final decision on the design of the new logo, the participants were not confronted with a picture of the new EU logo itself. Instead they were informed that a common mandatory logo would be introduced. A total of three focus groups was conducted in each study country in May and June 2009. Altogether, 149 consumers of organic food participated in the focus group discussions. The screening criteria and recruitment quotas are listed in Table 20. The composition of the groups is summarised in Table 21.

Table 20: Screening criteria and recruitment quotas for the qualitative and quantitative study

Screening criteria / Quotas	Operationalisation																									
	Qualitative study	Quantitative study																								
Screening criterion: Organic food consumption	Self-assessed index of organic food consumption (scale from 0 to 14 points) based on the organic consumption propensity in seven product groups (answer categories 'almost never' (0), 'sometimes' (1) and 'almost always' (2); numbers in brackets show the points assigned to the categories). Consumers with less than 3 points were excluded from participating in the study.	Purchase of organic apples <i>and</i> organic eggs at least once or twice a month (based on self-assessment).																								
Screening criterion: Responsibility for food purchase in household	Participants had to be responsible for the food purchase in their household (at least half of the purchases; based on self-assessment).																									
Screening criterion: Occupation, profession	People were excluded when they lived on a farm, they or someone else in their household worked in the agricultural sector, in the area of food processing, market research, or at one of the partner organisations.	Not applied.																								
Quotas: Age	Country-specific quotas; reflect the distribution of the two age groups '18 to 44 years' and '45 to 75 years' within the population of the study country (quotas in %):																									
	<table border="1"> <thead> <tr> <th></th> <th>CZ</th> <th>DE</th> <th>DK</th> <th>IT</th> <th>UK</th> </tr> </thead> <tbody> <tr> <td>18-44 years</td> <td>60.0</td> <td>46.4</td> <td>49.5</td> <td>43.0</td> <td>51.7</td> </tr> <tr> <td>45-75 years</td> <td>40.0</td> <td>53.6</td> <td>50.5</td> <td>57.0</td> <td>48.3</td> </tr> <tr> <td>Total</td> <td>100.0</td> <td>100.0</td> <td>100.0</td> <td>100.0</td> <td>100.0</td> </tr> </tbody> </table>			CZ	DE	DK	IT	UK	18-44 years	60.0	46.4	49.5	43.0	51.7	45-75 years	40.0	53.6	50.5	57.0	48.3	Total	100.0	100.0	100.0	100.0	100.0
	CZ	DE	DK	IT	UK																					
18-44 years	60.0	46.4	49.5	43.0	51.7																					
45-75 years	40.0	53.6	50.5	57.0	48.3																					
Total	100.0	100.0	100.0	100.0	100.0																					
Quotas: Gender	Country-specific quotas; reflect the buying behaviour of households (quotas in %):																									
	<table border="1"> <thead> <tr> <th></th> <th>CZ</th> <th>DE</th> <th>DK</th> <th>IT</th> <th>UK</th> </tr> </thead> <tbody> <tr> <td>Female</td> <td>67.0</td> <td>65.0</td> <td>70.0</td> <td>70.0</td> <td>70.0</td> </tr> <tr> <td>Male</td> <td>33.0</td> <td>35.0</td> <td>30.0</td> <td>30.0</td> <td>30.0</td> </tr> <tr> <td>Total</td> <td>100.0</td> <td>100.0</td> <td>100.0</td> <td>100.0</td> <td>100.0</td> </tr> </tbody> </table>			CZ	DE	DK	IT	UK	Female	67.0	65.0	70.0	70.0	70.0	Male	33.0	35.0	30.0	30.0	30.0	Total	100.0	100.0	100.0	100.0	100.0
	CZ	DE	DK	IT	UK																					
Female	67.0	65.0	70.0	70.0	70.0																					
Male	33.0	35.0	30.0	30.0	30.0																					
Total	100.0	100.0	100.0	100.0	100.0																					
Quotas: Number of participants	Number of participants per focus group between 8 and 15.	A minimum of 400 participants per country (= a minimum of 2,000 participants in total).																								

Table 21: Composition of the focus group discussions (number of participants)

Country	Gender		Age		Total
	Women	Men	18-44 years	45-75 years	
CZ	19	8	19	8	27
DE	22	14	20	16	36
DK	18	9	15	12	27
IT	21	9	13	17	30
UK	17	12	15	14	29
All	97	52	82	67	149

The data collected in the focus group discussions was analysed with qualitative content analysis (Mayring 2003) in a multi-stage process outlined in Table 22. The analysis of the focus group discussions revealed several positive aspects as well as consumer concerns regarding the introduction of a mandatory EU logo. The participants' comments could be

grouped into four main topics: a) Mandatory EU logo for organic food, b) Standards and inspection system behind the new logo, c) Indication of origin of the raw materials, d) Attitudes towards the EU. For the quantitative survey, a statement battery was developed with a total of ten statements covering the four topics.

Table 22: Procedure of qualitative data analysis

Step	Level	Description
1.	Country-level, National partners	Basis: Transcripts of the focus group discussions in national language. Purpose: To get an overview of the occurring themes in each study country. Outcome = basis for subsequent step: National summary reports in English language, organised according to the main questions of the discussion guideline.
2.	Cross-country, centralised*	Purpose: To create a common basis for data analysis in the five study countries to make the results comparable. Outcome = basis for subsequent step: Category system for qualitative content analysis adapted from Gläser and Laudel (2006) and Ritchie et al. (2006) with a list of themes and subthemes extracted from the national summary reports.
3.	Country-level, National partners	Purpose: To analyse the national results in more depth in a similar way in all countries. Outcome = basis for subsequent step: Detailed national reports structured according to the category scheme.
4.	Cross-country, centralised* with feedback from national partners	Purpose: Comparison of the national results to identify similarities and differences. Outcome: Report on the cross-country results.

* Conducted by the authors of this paper.

8.4.2 Quantitative methods of data collection and analysis

Structured written interviews were conducted with 2,042 consumer of organic food. In the beginning of the self-administered questionnaire, the participants were provided with background information on the new mandatory EU logo and the indication of origin for organic food (see Figure 10). The participants were then asked to indicate their level of agreement with statements on different aspects of the new labelling regulations. A seven-point Likert-scale was used with 1 ‘I strongly disagree’, 4 ‘I neither agree nor disagree’ and 7 ‘I strongly agree’ (with 2 and 3 as well as 5 and 6 in-between). The last section of the questionnaire contained questions about the participants’ buying behaviour with regards to organic food and socio-demographic characteristics. Among others, the participants should estimate the share of organic products in their total expenditure for food and beverages on a ten-point scale (with 1 = 0 to 10%, 2 = 11 to 20% etc. up to 10 = 91 to 100%).

Figure 10: Information provided to participants in the written questionnaire

From July 2010 on, there will be a new logo for organic food in all the member states of the European Union. The new logo replaces the old EU organic logo. All prepacked organic products that are produced or processed in the EU must carry the new mandatory logo. What the logo will look like has not yet been finally decided. In addition to the new EU organic logo, further organic logos can be used.

Next to the new logo, it must be declared where the agricultural raw materials of which the product is composed have been farmed. That will probably look like this:

- “EU Agriculture” if farmed in the EU,
- “non-EU Agriculture” if farmed outside the EU and
- “EU/non-EU agriculture” if the agricultural raw materials have been farmed partly in the EU and partly outside the EU.
- In the case where all agricultural raw materials have been farmed in the same country, the name of this country can be indicated.

A pre-test was conducted with 20 participants per country in January 2010 and as a result some statements were reworded. The quantitative interviews took place in February and March 2010 in stores with an organic food range. Customers were approached by staff members and/or students of the partner organisations. The screening criteria and recruitment quotas are listed in Table 20. The composition of the sample is presented in Table 23. Some cases had to be excluded from the sample after data collection since the screening criteria were not fulfilled, so that the composition of the final sample slightly deviates from the quotas in some countries (the deviation is less than four percentage points).

The data analysis was based on descriptive statistics and an analysis of variance (ANOVA) to determine whether the statement means are significantly different in the five study countries. With the Levene’s test it was first determined that equality of variance could not be assumed across the countries. Consequently, the Welch-value (instead of the F-value) was used in the overall test of differences in variance. With the post-hoc test Tamhane’s T2 it was then determined which country means are significantly different from each other (confidence level 95%).

Since the new mandatory EU logo was introduced to make the recognition of organic products easier for consumers, it is of particular interest how the new logo is viewed by consumers who do not frequently buy organic products. A correlation analysis between the nine statements on participants’ attitudes towards a new mandatory EU logo and their propensity of organic food consumption was therefore conducted using the Pearson correlation coefficient (confidence level 95%).

Table 23: Description of the sample

	N	CZ 400	DE 403	DK 401	IT 427	UK 411
Gender						
	Female	65.8%	65.8%	71.0%	70.3%	71.0%
	Male	34.2%	34.2%	29.0%	29.7%	29.0%
Age						
	Mean age in years	40.3	44.0	46.3	46.2	45.6
	18-44 years	61.0%	50.1%	46.6%	42.4%	51.8%
	45-75 years	39.0%	49.9%	53.4%	57.6%	48.2%
Education ¹						
	No formal qualification	2.8%	–	3.0%	–	5.6%
	GCSE ²	8.5%	25.0%	2.7%	1.6%	12.4%
	A level ³	49.3%	33.3%	32.4%	11.0%	15.8%
	College/university degree	39.5%	41.7%	61.8%	87.4%	66.2%
Household size (mean)		2.8	2.5	2.5	2.8	2.7
Household net income (monthly)						
	< 600 €	33.1%	12.2%	3.8%	4.9%	4.9%
	600 € to <1,200 €	47.1%	18.0%	12.0%	14.3%	10.6%
	1,200 € to <1,800 €	14.0%	18.8%	9.3%	21.4%	10.3%
	1,800 € to <2,400 €	3.6%	13.0%	13.0%	16.7%	14.5%
	2,400 € to <3,000 €	} 2.3% ⁴	11.4%	12.5%	13.1%	10.8%
	3,000 € to <3,600 €		8.8%	10.3%	10.1%	12.1%
	3,600 € to <4,200 €		8.5%	7.3%	5.4%	6.9%
	4,200 € to <4,800 €		1.9%	8.8%	4.9%	9.4%
	4,800 € to <5,400 €		2.7%	10.8%	2.3%	4.7%
	5,400 € or more		4.8%	12.5%	6.8%	15.8%

¹ These categories are taken from the questionnaire in the UK. In the other countries equivalent terms were used.

² General Certificate of Secondary Education (appr. 10 years of school).

³ Approximately 12 years of school.

⁴ In CZ, the following income categories were used in the questionnaire (which better suit the lower level of income in CZ compared to the other study countries): <300 €; 300 € to <600 €; 600 € to <900 €; 900 € to <1,200 €; 1,200 € to <1,500 €; 1,500 € to <1,800 €; 1,800 € to <2,100 €; 2,100 € to <2,400 €; 2,400 € to <2,700 €; 2,700 € or more.

8.4.3 Combined analysis of qualitative and quantitative results

The comparative analysis of the qualitative and quantitative results was based on the four topics mentioned in Section 8.4.1. For each topic, the results of the two approaches were compared to identify similarities, differences and contradictions, and to analyse how the findings supplement each other, i.e. how the results of one method help to explain the results of the other.

8.5 Results

The presentation of results is organised around the four topics a) Mandatory EU logo for organic food, b) Standards and inspection system behind the EU logo, c) Indication of origin of the raw materials, d) Attitudes towards the EU. Finally, the results of the correlation analysis between participants' attitudes and their propensity of organic food consumption are presented. The statement means of the quantitative survey differentiated by country and the results of the ANOVA can be seen in Table 24.

Table 24: Country comparison of the statement means

Statements ¹	Statement means ²					ANOVA Welch-value ³
	CZ	DE	DK	IT	UK	
1. It is a good idea to have an EU-wide logo for certified organic products.	5.52 ^a (1.69)	5.72 ^a (1.78)	5.62 ^a (1.83)	6.51 ^b (1.26)	5.12 ^c (1.80)	65.03***
2. Without a mandatory EU organic logo, some food products are hard to identify as organic at the point of sale.	4.31 ^a (2.20)	5.43 ^b (2.04)	5.23 ^b (1.88)	6.06 ^c (1.80)	4.18 ^a (2.07)	10.10***
3. There are more than enough organic logos already and a new, mandatory organic logo will just add complexity to the market.	3.15 ^{a, b} (1.84)	3.32 ^{a, b} (2.11)	3.44 ^{b, c} (1.81)	2.95 ^a (2.09)	3.76 ^c (1.95)	38.02***
4. It is a good idea to have the same minimum standards for organic products all over the EU.	5.52 ^a (1.74)	6.19 ^{b, c} (1.45)	6.05 ^c (1.52)	6.40 ^b (1.46)	5.72 ^a (1.67)	36.16***
5. I have great trust in the inspection system behind an EU-wide organic logo.	4.76 ^a (1.69)	4.18 ^b (1.85)	4.36 ^b (1.66)	5.17 ^c (1.73)	3.78 ^d (1.53)	41.37***
6. I have great trust in the organic standards behind an EU-wide organic logo.	4.87 ^a (1.66)	4.30 ^b (1.86)	4.47 ^b (1.63)	5.20 ^c (1.73)	3.91 ^d (1.65)	20.76***
7. For food products, I think the indication “EU” or “non-EU”, without the country of origin, is sufficient.	2.01 ^a (1.81)	1.81 ^a (1.67)	2.49 ^b (2.04)	2.00 ^a (1.85)	2.64 ^b (1.99)	14.72***
8. I welcome the fact that the new EU organic logo differentiates between “EU agriculture” and “non-EU agriculture”.	5.10 ^a (2.05)	5.54 ^b (1.74)	5.39 ^{a, b} (1.64)	6.52 ^c (1.24)	5.20 ^a (1.62)	48.69***
9. The EU generates nothing but bureaucracy.	4.01 ^{a, b} (1.90)	3.78 ^b (1.78)	3.18 ^c (1.59)	3.24 ^c (1.97)	4.30 ^a (1.80)	29.58***

¹ The statement battery contained 10 statements, of which one was excluded from data analysis since it was misunderstood by many participants.

² The level of agreement was measured on a seven-point Likert-scale with 1 ‘I strongly disagree’, 4 ‘I neither agree nor disagree’ and 7 ‘I strongly agree’.

³ The ANOVA was based on the Welch-test since equality of variances in the different countries could not be assumed (based on Levene’s test for equality of variances).

(The standard deviation is specified in brackets.)

^{a, b, c, d} Statement means with different letters are significantly different between the countries ($p < 0.05$, ANOVA post-hoc tests Tamhane’s T2).

*** Differences in variance significant at the level $p < 0.001$.

Mandatory EU logo for organic food

In the focus group discussions, the introduction of a new mandatory EU logo for organic food was both welcomed and contested. On the one side it was suggested that a mandatory logo would make the recognition of organic products easier, whereas other people found the existing organic logos were sufficient and questioned the need for a new label. Yet, others feared that a new logo could even cause consumer confusion and “label overkill”. These different views were raised in all countries except Italy, where the discussion focused on other aspects of the new logo. In the Czech Republic, Denmark and Germany, many participants

explicitly welcomed that it is possible to use other organic logos in addition to the mandatory EU logo. It became apparent that a contrary regulation would have been opposed. In the Czech Republic and Denmark, the participants referred to the respective governmental logo which they wanted to be displayed on products, whereas in Germany the farmers' association logos were mentioned in this context. Some people explained they had no objections to the new EU logo but would mainly orient themselves by the existing logos when buying organic products.

The results of the quantitative survey show the following picture: In all countries, the great majority of participants welcomed to have an EU-wide logo for certified organic products (statement 1). The support was significantly the strongest in Italy (mean=6.5), slightly lower in Germany (mean=5.7), Denmark (mean=5.6) and the Czech Republic (mean=5.5), and the lowest in the UK (mean=5.1). A more diverse picture was found for statement 2 "without a mandatory EU organic logo, some food products are hard to identify as organic at the point of sale": In Italy, more than 70% of the participants strongly agreed with this view (mean=6.1), and also the participants in Germany (mean=5.4) and Denmark (mean=5.2) slightly agreed (but significantly less), whereas in the Czech Republic (mean=4.3) and the UK (mean=4.2), the answers were distributed more evenly across the whole spectrum of the Likert-scale. In particular, the observed difference between Germany and Denmark on the one hand and the Czech Republic on the other is interesting in this context, given there are prominent governmental organic logos in all three countries. In view of the high level of agreement with statement 1, it is remarkable that, on average, the participants only slightly disagreed with or tended to be undecided on statement 3 "there are more than enough organic logos already and a new mandatory organic logo will just add complexity to the market" (IT mean=3.0, CZ mean=3.2, DE mean=3.3, DK mean=3.4, UK mean=3.8). The statement on the additional use of other organic logos was misunderstood by many participants, so that it was excluded from the data analysis.

Production standards and inspection system behind the EU logo

The focus group discussions revealed interesting consumer views and perceptions of the production standards and the inspection system behind a mandatory EU logo for organic food. Notably, these topics were brought into the discussion by the participants themselves; the moderators only asked for opinions on the new labelling. In all countries except Italy, it was assumed that the production standards behind the new EU logo would be lower than the respective domestic standards. In the perception of the participants, the downscaling of

standards would be necessary in order to accommodate all EU countries under one certification scheme. In addition, concerns were raised in all countries except Denmark as to how EU-wide standards could be ‘policed’, i.e. how trustworthy the inspection system would be. Nevertheless, it was generally welcomed in all countries to have common EU-wide minimum standards for organic production and control, as long as each member state would be free to have stricter national regulations. It became apparent that many participants lacked knowledge on organic production and certification of organic food, and admitted to feel uncertain. In fact, many wrong assumptions about the level of production standards and the inspection system at EU level were made, e.g. that standards would be lowered and a new logo would mean the introduction of a new inspection system. This is interesting given that the production and control of organic products has already been regulated at EU level since 1991 (Regulation (EEC) 2092/91 and Regulation (EC) No 834/2007 respectively). The only novelty introduced in July 2010 was the mandatory labelling.

The results of the quantitative survey confirm that in all countries, it was largely welcomed to have the same minimum standards all over the EU (statement 4), particularly in Italy (mean=6.4), Germany (mean=6.2) and Denmark (mean=6.1), and significantly less in the UK (mean=5.7) and the Czech Republic (mean=5.5). However, the level of agreement with the statements on trust in the inspection system (statement 5) and the organic standards (statement 6) behind an EU logo was significantly lower in all countries. In Italy and the Czech Republic, still around 60% of participants indicated to trust the inspection system (IT mean=5.2, CZ mean=4.8) and the standards (IT mean=5.2, CZ mean=4.9), whereas more than half of the participants in Denmark, Germany and the UK either tended to be undecided or did not have trust in the inspection system (DK mean=4.4, DE mean=4.2, UK mean=3.8) and the standards (DK mean=4.5, DE mean=4.3, UK mean=3.9). The above mentioned findings from the focus group discussions are particularly valuable to help explain these reservations present among a considerable share of participants.

Mandatory indication of origin of the raw materials

In the focus group discussions, the mandatory indication of origin of the raw materials was subject of lively discussions in all study countries. There was a high level of scepticism surrounding the more generic indications ‘EU agriculture’ and ‘non-EU agriculture’ in the Czech Republic, Denmark, Germany and the UK. Interestingly, the current practice of country-of-origin labelling – namely the absence of any indication of origin on many multi-ingredient products – was not questioned in any of the focus groups. Only in Italy, the generic

indications were generally seen as helpful additional information compared to the status quo. Nevertheless, in all countries the indication of a specific country was clearly preferred, foremost since organic products from particular EU countries were trusted less than others. Besides, environmental reasons were mentioned in the UK, Denmark and Germany: It was emphasised that the country of origin shows how far a product has been transported.

In accordance with the focus group results, in the quantitative survey the great majority of participants in all countries rejected the statement “the indication ‘EU’ or ‘non-EU’, without the country of origin, is sufficient” (statement 7) (DE mean=1.8, IT mean=2.0, CZ mean=2.0, DK mean=2.5, UK mean=2.6). On the other hand, the participants in all countries – foremost in Italy (mean=6.5) – welcomed the fact that the new EU logo differentiates between ‘EU agriculture’ and ‘non-EU agriculture’ (statement 8). At first glance, this result seems contradictory. However, in the focus group discussions it became apparent that the participants tended to trust organic products from outside the EU less than EU products, while at the same time stressing that there were great differences between EU countries.

Attitudes towards the EU

In the focus group discussions in the Czech Republic, Germany and the UK, some participants expressed a high level of scepticism surrounding the EU as the institution behind the new label. It was speculated that the new mandatory EU logo would lead to more troublesome administration and bureaucracy, which would be more costly and more difficult for involved subjects. In the quantitative survey, the attitude towards the EU was measured with statement 9 “the EU generates nothing but bureaucracy”. On average, the participants in Italy (mean=3.2) and Denmark (mean=3.2) slightly disagreed with this view, whereas the participants in Germany (mean=3.8), the Czech Republic (mean=4.0) and the UK (mean=4.3) were either undecided on or slightly agreed with this view.

Correlation between participants’ attitudes and their propensity of organic food consumption

As can be seen in Table 25, only in Germany and the UK more than one statement correlates with the propensity of organic food consumption. All significant correlation coefficients are rather low (value of <0.2). In Germany, consumers with a lower organic consumption propensity (short: occasional organic consumers) have greater trust in the inspection system (statement 5) and the standards (statement 6) behind the new EU logo than frequent organic consumers. Besides, occasional organic consumers stronger agreed that it is a good idea to have an EU-wide logo (statement 1) and the same minimum standards (statement 4) for certified organic products. Interestingly, regarding the latter issue the opposite association was

found in the UK: Having the same minimum standards all over the EU was less welcomed among occasional than among frequent organic consumers. However, agreement with this statement was generally very high in all countries (see Table 24). The British occasional organic consumers did not have as many objections towards the indications ‘EU’ and ‘non-EU’ without the country of origin (statement 7), and did not favour the differentiation between ‘EU agriculture’ and ‘non-EU agriculture’ (statement 8) as much as the frequent organic consumers.

Table 25: Correlations between participants’ attitudes and organic consumption propensity

Statements	Pearson Correlation Coefficient				
	CZ	DE	DK	IT	UK
1. It is a good idea to have an EU-wide logo for certified organic products.	-0.072	-0.146**	-0.051	0.001	0.027
2. Without a mandatory EU organic logo, some food products are hard to identify as organic at the point of sale.	-0.076	-0.057	-0.046	-0.078	-0.077
3. There are more than enough organic logos already and a new, mandatory organic logo will just add complexity to the market.	0.071	0.010	-0.174***	0.004	-0.007
4. It is a good idea to have the same minimum standards for organic products all over the EU.	-0.088	-0.105*	-0.058	-0.042	0.121*
5. I have great trust in the inspection system behind an EU-wide organic logo.	-0.023	-0.179***	-0.081	0.001	0.009
6. I have great trust in the organic standards behind an EU-wide organic logo.	-0.030	-0.192***	0.001	-0.040	-0.029
7. For food products, I think the indication “EU” or “non-EU”, without the country of origin, is sufficient.	-0.109*	-0.043	-0.020	-0.113*	-0.129**
8. I welcome the fact that the new EU organic logo differentiates between “EU agriculture” and “non-EU agriculture”.	0.060	-0.052	0.028	-0.054	0.110*
9. The EU generates nothing but bureaucracy.	0.007	-0.015	-0.023	-0.031	-0.008

Significant correlations are flagged with * $p < 0.05$, ** $p < 0.01$ and *** $p < 0.001$.

8.6 Discussion

The new mandatory EU logo for organic food was introduced to strengthen and support the organic sector in Europe by making the identification of organic products easier for consumers (Regulation (EU) No 271/2010). To what extent this objective will be met largely depends on how the logo is perceived by consumers. Our findings suggest that consumer acceptance of the new logo is different across the EU countries. Two significantly distinct countries could be identified: Italy and the UK. In Italy, the new EU logo was basically welcomed without reservation, whereas in the UK, both support and scepticism towards a

mandatory EU logo were present. In Denmark, Germany and the Czech Republic trust in the standards and the inspection system behind the EU logo was higher than in the UK but still not particularly pronounced. It is now discussed whether the observed country differences in consumer attitudes could relate to differences in the organic markets of the five countries and the general level of scepticism towards the EU. The aim is to identify factors explaining the country differences which could also be used to draw conclusions for other countries not included in this study.

- Interestingly, the per capita expenditure on organic food does not seem to explain the observed country differences in consumer attitudes: Among the study countries, Denmark has by far the highest per capita expenditure followed by Germany, the UK, Italy and the Czech Republic (in this order) (FiBL and AMI 2010).
- Comparing the common organic logos in the different countries provides interesting insights. In Italy, the former EU logo was widely used and neither a governmental nor a dominant private organic logo exists, which could explain the positive attitude of Italian consumers towards a new mandatory EU logo. Denmark, Germany and the Czech Republic have in common that they have well-known governmental organic logos. In the UK, on the contrary, only private organic logos were common prior to the introduction of the new EU logo.
- The general level of scepticism towards the EU is considerably the highest in the UK among all EU countries (TNS Opinion & Social 2009:29). The results of our study are thus not surprising. However, the differences between Italy on the one hand and the Czech Republic, Denmark and Germany on the other cannot be explained by this aspect.

While on average, consumers in all countries welcomed the introduction of a mandatory EU logo for organic food, some consumers did not actually see any advantages, in particular in the Czech Republic and the UK. Moreover, concerns regarding a new logo causing confusion were also present. Most importantly, however, the level of trust in the standards and the inspection system behind the new logo was not very high (except in Italy). In accordance with previous studies we found that many participants lacked knowledge on organic production and certification (Aertsens et al. 2009:1050, Hoefkens et al. 2009:13, Sawyer et al. 2009:60, Krystallis et al. 2008:180, Hoogland et al. 2007:55), entailing uncertainty and scepticism as to what the new EU logo stands for. According to Verbeke (2008:287), product information – like a logo – can only have a favourable impact on food choice if consumers have a sufficient level of knowledge about the subject at hand. The fact that many participants did not know

what to expect from the new EU logo might thus be problematic. In our study, the lack of knowledge gave rise to concerns regarding the production standards and the inspection system behind the new EU logo. It became particularly apparent that consumers did not view the EU as a homogenous entity in terms of trust in the integrity of organic products. Therefore the indications of origin 'EU agriculture' and 'non-EU agriculture' were almost unanimously rejected and it remains to be seen how consumers will react to the combination of the new EU logo with these indications of origin. The observed consumer scepticism towards the new EU logo seems to be closely linked to the fact that the EU logo covers a variety of very diverse countries. This aspect needs to be taken very seriously in promotion campaigns on the new EU logo. Interestingly, most of the expressed concerns were based on wrong assumptions and hence unfounded. According to the Thomas theorem (Thomas and Thomas 1928), however, the subjective interpretation of a situation guides individual behaviour; thus for the success of the new EU logo it does not play a role whether or not concerns are founded as long as they are present.

8.7 Conclusions and recommendations

Our findings suggest that for achieving the objective of strengthening the organic sector (Regulation (EU) No 271/2010), it might not be enough to simply launch a new mandatory organic logo without any supportive communication measures, in particular since the new logo (a stylised leaf composed of stars) is not self-explanatory and does not clearly refer to organic production. Besides, the EU regulation does not stipulate how prominently the EU logo must be placed on product packages (for instance, it is possible to display the logo at the back) (Regulation (EU) No 271/2010). It thus remains to be seen how quickly the new logo will gain consumer awareness. Further, it is of great importance that the logo is understood correctly by consumers. The experience with the introduction of other organic logos like the USDA organic label showed that consumer expectations might not be congruent with the standards that the label represents (Conner and Christy 2002:50). We therefore conclude that consumer trust should be strengthened by communication campaigns explaining what the new logo stands for and why it is a benefit, in particular in those countries where the former voluntary EU logo for organic food was not very common. We recommend that both the EU and national governments launch communication campaigns targeted at final consumers. Our findings show that a mandatory EU logo for organic food has the potential to increase consumer demand and thus strengthen the organic sector, in particular since in the UK and Germany the objections towards the new EU logo were less profound among occasional than

among frequent organic consumers. However, the new EU logo can only be successful if consumer concerns are removed and the logo gains high consumer trust – otherwise the new EU logo might just cause additional bureaucracy. Public financial support for the new EU logo is strongly recommended and also justified since organic agriculture contributes to public welfare by preserving natural resources and contributing to rural development, which is recognised by EU legislation (Regulation (EC) No 834/2007). As the experience with voluntary national governmental logos for organic food like the German ‘Bio-Siegel’ and the Danish ‘Ø’ has shown, public support for the promotion of an organic logo can have positive synergy effects with the private sector since it can encourage producers and retailers to prominently place the logo on product packages and price tags, which in turn raises consumer awareness.

Given the above mentioned country differences, communication campaigns on the new EU logo should be tailored to specific country conditions. In Germany, for instance, it should be highlighted that the new EU logo is equivalent to the German governmental logo ‘Bio-Siegel’. In Denmark and the Czech Republic, it should be communicated that the new EU logo and the governmental logo are based on the same production standards. An aspect that should be emphasised in all countries is that the logo guarantees EU-wide regular inspection of production processes, since our study showed that consumers know little about organic certification. The challenge is therefore to communicate to consumers what the new EU logo for organic food actually indicates and to remove (unfounded) consumer concerns.

9 Discussion and conclusions

In this chapter, the findings of this dissertation are discussed and conclusions are drawn for different groups of actors. The first subchapter discusses the results with regard to three thematic aspects: Firstly, the findings about consumer perceptions, attitudes, preferences and willingness-to-pay regarding organic certification logos are contrasted with previous studies. Secondly, the present findings are related to the theoretical framework of product labelling in the case of credence goods. Thirdly, merits and limitations of the present study are discussed. The second subchapter discusses the implications of the present findings for different actors in the organic sector. Conclusions are drawn for (i) public and private owners of organic certification logos, (ii) producers, processors and retailers and (iii) future scientific research.

9.1 Discussion

9.1.1 Organic labelling schemes from the consumer perspective

To address the overarching aim of giving recommendations for owners of organic certification logos and market actors in the organic sector, this dissertation was based on two main objectives:

- Firstly, consumer perceptions, attitudes, preferences and willingness-to-pay (WTP) regarding different *voluntary organic labelling schemes* were explored and analysed, in order to (i) determine which organic logos are most successful in attracting consumer preferences in form of a high WTP, (ii) reveal key factors that influence consumer preferences and WTP for organic logos, and (iii) identify potential added values important to consumers that organic labelling schemes could incorporate to differentiate their logo from other organic logos.
- Secondly, consumer perceptions and attitudes towards a *mandatory EU logo and indication of origin for organic food* were explored and analysed, in order to (i) get insights into positive aspects that consumers associate with the new mandatory labelling, and (ii) identify potential issues that might hinder consumer trust of the new labelling. The findings of this dissertation are now summarised and contrasted with previous studies on related topics.

Regarding the first objective, the present findings show that organic certification logos play an important role in the buying decision of consumers. The results suggest that consumers have a low level of trust in organic products *without* a certification logo. Interestingly, almost

all tested organic certification logos reached a significantly higher willingness-to-pay than a generic label without a certification logo (prefix 'organic'). That even holds true for a fake logo investigated in Switzerland. This result corresponds with the so-called unfolding theory in the literature suggesting that consumers infer from the absence of a label that the product does not possess the respective attributes (Golan et al. 2001:129). In accordance with the present results, a study from the United States found that consumers clearly preferred the USDA logo over products just labelled with the prefix 'organic' (Van Loo et al. 2011).

Further, the present research showed that the WTP differed considerably between the tested organic logos. The highest price premiums were recorded for logos that were well-known and perceived as trustworthy with strict organic standards and a strict control system. In Denmark, Italy, Switzerland and the Czech Republic, there was *one* logo with a significantly higher WTP compared to other tested logos, whereas in Germany and the UK, *two* logos reached an equally high WTP. Remarkably, different kinds of organic logos were preferred across the countries. In Denmark and the Czech Republic, consumers were willing to pay the highest price premium for the governmental logo. In Germany, a high WTP was recorded for the logo of the farmers' association Demeter and the governmental logo. In Italy, the old EU logo reached the highest WTP. In Switzerland, the logo of the farmers' umbrella organisation Bio Suisse was clearly preferred. In the UK, the WTP was the highest for the logos of the Soil Association and the certification body 'Organic Farmers & Growers'. These findings reflect the different regulatory frameworks and ways of how the organic sector evolved in different European countries. In Denmark and the Czech Republic, the governmental logos were introduced already in 1989 and 1993 respectively, whereas the organic markets in Germany and the UK had long been characterised by a variety of different private farmers' associations and certification bodies, which resulted in a variety of different organic logos in the market. Unlike in Italy with a similarly wide range of private organic organisations, the voluntary former EU logo was not frequently used in Germany and the UK. In Switzerland, in contrast, the private umbrella organisation Bio Suisse successfully unified the variety of organic organisations under a common logo.

In the present study, it turned out that consumer preferences for an organic labelling scheme were influenced by attitudes towards the scheme. In all countries, the inclusion of a logo-attitude-scale into the RPL models of logo choice resulted in a better model fit (see Section 7.5). In accordance with the literature on consumer behaviour (see Section 3.3.1) and previous studies on organic food consumption (e.g. by Pieniak et al. 2010, Aertsens et al. 2009, Arvola et al. 2008, Gracia and de Magistris 2008), positive attitudes significantly increased the

probability that a particular scheme was chosen. Consumer attitudes towards organic labelling schemes proved to be composed of affective and cognitive elements with trust playing a central role. This aspect is further discussed below in the context of future scientific research.

Regarding the second objective, the results of the present research suggest that consumer trust in the new mandatory EU logo for organic food might differ between the Member States. In Italy, the new EU logo was basically welcomed without reservation, whereas in the UK, both support and scepticism towards a mandatory EU logo were present. In Denmark, Germany and the Czech Republic trust in the standards and the inspection system behind the EU logo was higher than in the UK but still not particularly pronounced. It became apparent that the EU was not viewed as a homogenous entity in this respect. The indications of origin 'EU agriculture' and 'Non-EU agriculture' without reference to a particular country were generally rejected. Consumers in all countries except for Italy were particularly unaware about the fact that organic production had already been regulated at EU level since 1991. It can thus be concluded that in countries where the former voluntary EU logo was not very common, consumers might be uncertain as to what the new logo indicates in terms of organic production standards and the underlying control system. As discussed in Chapter 8 (Section 8.7), the fact that many participants did not know what to expect from the new EU logo might be problematic, since an organic logo can only have a favourable impact on food choice if consumers are sufficiently informed about its meaning (Verbeke 2008:287).

A theme that runs through all parts of the present research is the finding that many consumers had a low level of factual knowledge about organic production standards and certification. This circumstance is confirmed by previous studies (Pieniak et al. 2010:586, Hoefkens et al. 2009:13, McEachern and Warnaby 2008:422, Sawyer et al. 2008:614, Hoogland et al. 2007:55, Botonaki et al. 2006:88, Spiller 1999:58) and mentioned by some authors as a barrier to (increased) organic food consumption (Aertsens et al. 2009:1050, Hughner et al. 2007:104). Furthermore, the present findings showed that consumer perceptions of organic logos were of subjective nature and not necessarily based on objective facts. A very interesting example of false consumer beliefs is the result that many participants in the mistakenly thought that certain organic logos indicate domestic origin (see Figure 13, Annex p. 173). The discrepancy between subjective consumer beliefs and objective knowledge is a well-documented phenomenon in consumer literature (Alba and Hutchinson 2000) and also found in previous studies on organic food (Pieniak et al. 2010). The present findings emphasise that consumer misconceptions of some of the tested organic logos deserve

particular attention by the respective logo owners, as discussed in the recommendations for organisations owning an organic certification logo in Section 9.2 below.

9.1.2 Product labelling and credence goods

This section relates the present findings to the theoretical framework of product labelling in the case of credence goods and highlights the important role of consumer communication in this context.

The present research illustrates that third-party involvement in product labelling does not automatically overcome the dilemma of information asymmetry inherent in credence goods. Rather, consumer perceptions and attitudes regarding the logo representing the certification scheme play the central role at the point-of-sale. In this study, different logos which indicate the same were evaluated differently by consumers. For a labelling scheme to be successful, consumer awareness of the corresponding logo and positive attitudes towards the underlying standards and control regime are thus of crucial importance.

The present results on consumer attitudes towards a mandatory EU logo illustrate that the credibility of a voluntary label depends on the credibility of the third-party organisation involved in the labelling scheme, which was discussed in Chapter 2 (Section 2.2) (Albersmeier et al. 2010:71, Jahn et al. 2005:70, Golan et al. 2001:134). It became apparent that several participants did not have trust in the EU as the institution behind the logo. Insofar, product labelling indeed involves a shift of the credence attribute from the producer side to the third-party organisation (Albersmeier et al. 2010:71, Moussa and Touzani 2008:528).

The results of the qualitative study suggest that some consumers associate certain organic certification logos with a high level of product quality. It can thus be concluded that some organic certification logos serve as a quality cue. In marketing literature, the term quality cue refers to product attributes that act as surrogate indicators of quality for consumers (Grunert 2005:376). Organic certification logos represent an extrinsic cue, i.e. a product-related attribute not part of the physical product (unlike intrinsic cues such as taste, ingredients, colour) (Richardson et al. 1994:29). Extrinsic cues play an important role when intrinsic attributes are difficult to evaluate, which is particularly the case with credence attributes (Grunert 2005:376, Fotopoulos and Krystallis 2003:1352). Based on the present findings it can be concluded that an organic certification logo does not *per se* act as a quality cue. Rather, the logo must be known and trusted by consumers.

In view of the present findings, it seems advisable that organisations owning a certification logo for consumer goods put effort into increasing consumer awareness of the logo and forming consumer attitudes towards the scheme behind it, in order to maintain that their logo successfully influences the buying behaviour of consumers. It can thus be concluded that concepts of information economics and marketing need to be brought together in order to make product labelling of credence goods successful. The subject of marketing communication surrounding organic certification logos was *not* explicitly investigated in the present research. However, findings from previous research on product labelling can be transferred to the case of organic certification logos. According to other studies, communicating process-related characteristics of credence goods to consumers is not a trivial task, in particular in the food sector (McEachern and Warnaby 2008:422, Grunert 2005:386). The fact that many food purchases fall under habitual decision-making represents a great challenge in the context of food product marketing. Any organic logo can only be effective if “consumers are willing to pay attention to the information and process it for subsequent use in their decision making” (Verbeke 2005:361). Gaining new customers for any kind of organic product or label may thus take “special marketing effort, such as in-store displays, free samples, etc., to break through the barriers of habitual behaviour” (Grunert 2005:386).

A further challenge is the circumstance that consumers generally know little about agricultural practices and food production (Hoefkens et al. 2009:13, Naspetti and Zanolli 2009:263, Sawyer et al. 2009:60, Hoogland et al. 2007:55). This dilemma highlights the importance of investigating in marketing communication for raising consumer awareness (Spiller 1999:78). Organisations owning an organic logo need to identify those aspects of their labelling scheme that are relevant to consumers and easy to communicate. A study on different food standard labels in the United Kingdom showed that consumers found it difficult to obtain information on production standards behind the labels. The authors conclude that the preferred communication format for this type of information is the in-store leaflet (McEachern and Warnaby 2008:421). Other studies provide evidence that information provision about organic food production at the point-of-sale increases consumers’ willingness to purchase organic products (Abrams et al. 2010:372, Soler and Gil 2002:685). Marketing measures at the point-of-sale thus seem to be a promising tool for promoting organic labelling schemes. Another possibility is a focus on strategic public relations, as recommended by several authors in the context of organic (Zander et al. 2010:33, McEachern and Warnaby 2008:422) and environmentally friendly products (Spiller 1996:168f.).

9.1.3 Merits and limitations of the present research

The present research represents a valuable contribution to the understanding of consumer behaviour with regards to organic certification logos. Foremost, little prior scientific evidence existed before the present study was conducted regarding consumer preferences for different organic logos and attitudes towards a new mandatory EU logo. Within the present research, hypotheses were both developed and tested. Knowledge was generated on consumer preferences and willingness-to-pay for organic labelling schemes. These findings are useful for organisations owning an organic certification logo as well as for producers, processors and retailers in the organic market. Furthermore, the analysis of consumer perceptions and attitudes enabled conclusions on factors influencing consumer preferences, which is particularly helpful for organisations owning an organic certification logo.

However, it also needs to be recognised that the present research exhibits a number of limitations which can be illustrated by the framework of Stimulus-Organism-Response models on consumer behaviour introduced in Chapter 3 (Section 3.2):

- *Sampling*

Concerning the investigated sample of consumers, it needs to be recognised that only selected European countries were represented in the study. Furthermore, the quantitative study was not based on a representative sample of the population of organic food consumers, due to budget constraints and managerial considerations. However, it also has to be mentioned that little is known about the population of organic food consumers. Nevertheless, non-buyers of organic food were not included in the study at all. Thus the results do not allow any conclusions regarding the preferences of potential *new* consumer segments for organic food.

- *Stimuli*

With regards to stimuli, a number of limitations need to be discussed. Firstly, the choice experiments only included three organic certification logos per country. Yet, all relevant organic certification logos were subject of the qualitative study. A comparison between the results of the qualitative and the quantitative study regarding consumer preferences for those logos investigated in both studies, however, suggests that the qualitative study serves as a good indicator for overall tendencies. Nevertheless, the conclusions drawn for those logos *not* included in the quantitative study need to be taken with some care and interpreted as tendencies. Secondly, the choice sets in the experiments did not contain any conventional (i.e. non-organic) reference alternative which is often found in supermarkets.

Several participants in the focus group discussions reported to consider both, organic and conventional products, when choosing a product. The tested choice sets did thus not necessarily correspond with the *consideration sets* of these consumers. In reality, the observed price premiums for organic logos might thus be lower due to competing conventional alternatives. Thirdly, the influence of product attributes other than organic certification logos and price on food choice was not investigated. The findings thus do not allow any conclusions regarding the *relative* importance of organic certification logos compared with other attributes such as brand, taste, origin, etc. The important role of brands in the organic food market is further discussed in the final section of this dissertation. Lastly, the stimulus used in the analysis of consumer attitudes towards a mandatory EU logo also features a major limitation, namely that the *design* of the new EU logo was not subject of investigation. The stimulus was a written explanation about the introduction of the mandatory EU logo.

- *Organismic processes*

Among the organismic processes influencing consumer behaviour, important aspects such as values, norms and emotions were not investigated at all, in order to keep the survey duration per person to a managerial length and reduce the cognitive burden involved for participants. Regarding consumer perceptions and attitudes regarding organic labelling schemes, only selected items – which proofed to be important in the eyes of consumers in the focus group discussions – were included in the quantitative study. Further dimensions such as ‘quality’ and ‘authenticity’ mentioned by single participants in the focus group discussions were not included, for the same reason as above. The general limitations of the chosen methods of consumer research to measure perceptions, attitudes, preferences and WTP have already been discussed in Chapter 4. At this stage, it should be emphasised that also choice experiments tend to underestimate consumer price sensitivity and overestimate willingness-to-pay (Fotopoulos and Krystallis 2003:1371).

Regarding the mandatory EU logo, the analysis focussed on consumer perceptions and attitudes. As discussed in Chapter 3, these constructs might not always have a direct influence on actual buying behaviour. Further, the research was conducted at a time when consumers had generally no prior knowledge about the introduction of the mandatory EU logo. They had not yet been subject to any information campaign about the logo that could have influenced their attitudes. The present findings regarding the new EU logo can thus

not necessarily be transferred to future years but are limited to the situation at the time of writing.

- *External factors and response*

External factors influencing consumers' decision-making such as situational conditions at the point-of-sale could not be investigated with the chosen methods of data collection. Lastly, concerning the response side of S-O-R models it needs to be admitted that *actual* buying behaviour of consumers in the real world was not analysed.

Overall, it needs to be acknowledged, however, that many of the limitations mentioned here are valid for most consumer studies based on surveys and experiments. As discussed in Chapter 4 (Section 4.3), the present design of the choice experiments incorporated a number of elements that increased external validity of WTP measures not necessarily found in other studies, such as non-hypothetical payment, the use of real product stimuli and the inclusions of a 'no-buy' option.

9.2 Conclusions

The findings of the present dissertation yield implications for different actors in the organic sector. In this final section, conclusions are drawn for (i) public and private owners of organic labelling schemes (EU Commission with the EU logo, government authorities with own logos, private organisations with own logos), (ii) producers, processors and retailers of organic food, and (iii) future scientific research. The dissertation closes with a critical appreciation of the role of voluntary organic certification logos in the future.

9.2.1 Public and private owners of organic labelling schemes

The present findings show that it is of crucial importance for any organic labelling scheme to raise consumer awareness of the logo and shape consumer perceptions of the underlying scheme in terms of standards and control. Organisations owning a certification logo should invest in marketing communication and public relations in order to maintain that their logo successfully influences the buying behaviour of consumers.

9.2.1.1 EU Commission with the EU logo

The mandatory EU logo for organic food was introduced to strengthen the organic sector by making the recognition of organic products easier for consumers across the EU (Regulation (EC) No 834/2007, Regulation (EU) No 271/2010). The results of the present dissertation suggest that the extent to which this objective will be reached might differ between the

Member States. In countries where the former voluntary EU logo was not very common, consumers might be uncertain as to what the new logo indicates in terms of organic production standards and the underlying control system (see Section 8.7). It is of great importance that the logo is understood correctly by consumers. The EU regulation stipulates a minimum size of the logo but it is not regulated where the logo must be placed on product packages (Regulation (EU) No 271/2010). For instance, it is possible to display the logo at the back of a package. It thus remains to be seen how quickly the new logo will gain consumer awareness.

The present results provide evidence that there was at least one organic logo in each country that consumers trusted and preferred. In all study countries except for Italy, the former EU logo was *not* among the most preferred logos (see Section 7.5). Given that there are already logos in place which enable consumers to recognise organic products, it seems necessary to briefly discuss as to how the mandatory EU logo could contribute to strengthening the organic sector. Above all, it must not be overlooked that *different* logos were preferred across the study countries. This circumstance has far reaching implications for organic producers and processors with export activities to EU Member States. For instance, the preferred logos in Denmark, the Czech Republic and the UK are attached to requirements that exceed those of Regulation (EC) No 834/2007. However, for producers and processors it is very costly to get certified according to several different organic schemes. From the perspective of export-oriented operators in the organic market – which hold a considerable market share – it thus seems desirable to achieve a high level of consumer trust in the EU logo in order to facilitate intra-EU trade. As a result, overall sales with organic products in the EU might increase for the sake of the sector as a whole.

It is therefore recommended that consumer trust in the new EU logo should be strengthened by promotion campaigns explaining what the new logo stands for and why it is a benefit, in particular in those countries where the former voluntary EU logo was not very common. The current promotion fund for the new logo should thus be increased. Promotion campaigns should be jointly financed by the EU and national governments. Public financial support for the promotion of the EU logo may have positive synergy effects with the private sector (producers, processors, retailers), as the experience with voluntary national governmental logos for organic food like the Danish ‘Ø’ logo and the German ‘Bio-Siegel’ has shown: Public promotion campaigns would lead to increased consumer awareness of the EU logo, which would encourage private sector companies to prominently place the logo on product packages, price tags and advertising material, which in turn would raise consumer awareness

and trust in the logo. Public financial support for the promotion of the new EU logo is justified since organic agriculture contributes to public welfare by preserving natural resources and contributing to rural development (Regulation (EC) No 834/2007).

Promotion campaigns on the new EU logo should not *per se* refer to the former voluntary EU logo, given the low recognition and willingness-to-pay for this logo in all study countries except for Italy. It should be communicated that the logo guarantees compliance with uniform EU-wide standards controlled under governmental supervision. Furthermore, country specific characteristics of the organic market should be taken into account. For instance in Germany it should be emphasised that the new EU logo and the German governmental logo Bio-Siegel are equivalent. In Denmark and the Czech Republic, it should be communicated that the new EU logo and the governmental logo are based on the same production standards.

Lastly, the present findings confirm that consumers clearly prefer selected organic logos over others. It can therefore be concluded that it was a good decision to withdraw the initial EU Commission's proposal to prohibit the use of governmental and private organic certification logos alongside the EU logo (Blake 2009:19).

9.2.1.2 Government authorities with own organic labelling schemes

Three EU countries with a governmental organic labelling scheme were represented in this study. In Denmark and the Czech Republic, consumers were willing to pay a high price premium for the governmental logo, whereas the willingness-to-pay for the former EU logo and the logo of the farmers' association Demeter was rather low. In Germany, in contrast, a high willingness-to-pay was recorded for the governmental logo as well as for the logo of the farmers' association Demeter.

In the Czech Republic, Denmark and Germany, the production standards behind the governmental logo correspond with the EU standards. While the German Bio-Siegel can be used on request on all products complying with EU Regulation 834/2007 (Öko-Kennzeichengesetz), the governmental logos in the Czech Republic and Denmark specify some further requirements.⁴² Given the high WTP for the governmental logos in Denmark and the Czech Republic, it seems advisable to continue the use of the governmental logos in the

⁴² In the Czech Republic, the product must have been controlled by a control body authorised by the Ministry of Agriculture (KEZ, Biokont, AbCert) in order to carry the Czech governmental logo (Act on Organic Farming No 242/2000 Coll.). The Danish governmental logo is a control logo which requires that the latest preparation of the product (packaging and/or labelling) was undertaken by a company in Denmark under the inspection of the Danish governmental control authorities (Bekendtgørelse om økologiske fødevarer m.v. No 1258; Fødevarestyrelsens vejledning om økologiske fødevarer m.v.).

foreseeable future. In Germany, consumers who are frequent buyers of organic food preferred the Demeter logo over the governmental logo, while the opposite was true for less frequent buyers. Therefore, it is advisable to display the governmental logo in addition to the mandatory EU logo, at least in a transition period. Assuming that the EU logo will gain consumer trust within the next years, the Bio-Siegel will then be dispensable, since it indicates exactly the same as the EU logo.

9.2.1.3 Private organisations with own organic labelling schemes

Recognition and willingness-to-pay (WTP) for organic logos of private organisations differed considerably between the study countries. In Denmark, Italy and the Czech Republic, the WTP for private logos was rather low compared to the logos with the highest WTP. In Switzerland and the UK, in contrast, private logos reached the highest WTP. Both latter countries do not have a governmental logo and unlike in Italy, the former voluntary EU logo was not common in the UK. In Germany, the WTP for the Demeter logo was high but on a similar level as the WTP for the governmental logo, even though farmers' associations have a long tradition in Germany.

The introduction of the mandatory EU logo for organic food raises the question regarding the fundamental purpose of private organic logos. It needs to be discussed from the consumer perspective whether it is actually desirable to have additional private organic certification logos in the market. On the one hand, label overflow and information overload are reported in the literature to cause consumer confusion (Verbeke 2005:361), which can act as a barrier to increased purchase of organic products (e.g. by Langer et al. 2008). On the other hand, the present results suggest that consumer trust in the mandatory EU logo might not be very pronounced in some countries (see Chapter 8). Some consumers prefer organic standards that exceed the EU requirements (e.g. Demeter) or organic logos of particular control bodies (e.g. 'Organic Farmers & Growers') (see Chapter 7). Besides, in some EU countries such as the United Kingdom, consumer trust in private entities and regulations is generally higher than in governmental entities, let alone EU regulations (TNS Opinion & Social 2009:29). In these countries, the organic sector relies on well-known private organic logos. In addition, it needs to be recognised that the organic movement originated in private organisations. Furthermore, any private organisation is free to launch an organic certification logo (as long as the underlying requirements comply with EU requirements). It therefore seems advisable to give recommendations for private organisations as to how they could position their organic certification logo in the market. The issue of consumer confusion can be mitigated even in the

presence of several logos, however, provided that each logo is clearly targeted at a particular market segment and promoted by key information (Verbeke 2005:361).

However, assuming that the new EU logo will gain a high level of consumer trust, it is questionable whether many private organic certification logos will still be used for product labelling ten years from now (see Section 2.3). Marketing theory suggests that producers, processors and retailers might display an organic logo of a private organisation in addition to the mandatory EU logo only if the additional logo is recognised by consumers as a signal for an ‘added value’, i.e. the private scheme stands out clearly against the EU requirements. For those private organisations who still want their certification logo to be displayed on product packages it is therefore recommended that they put effort into raising consumer awareness of their logo and forming perceptions of the scheme behind it. Private organisations that are not successful in identifying an added value need to keep in mind that it is not desirable from the consumer perspective to have a confusing variety of seemingly similar organic certification logos in the market.

Regarding potential added values, two kinds of private organisations need to be distinguished, namely private organisations with own standards on the one hand and control bodies on the other hand. The logos of many *control bodies* simply indicate that the product was controlled by the respective body, but otherwise no difference to the EU logo exists. Such a logo is only likely to stay in the market provided that the control body enjoys particular trust among consumers, which requires considerable effort for raising consumer awareness.

Private organisations with own organic standards (farmers’ and organic sector associations) potentially have more possibilities to differentiate their scheme from the EU logo. In the present dissertation, a number of potential added values were identified that private schemes with own organic standards could incorporate so that – in the eyes of consumers – these schemes differentiate themselves from the mandatory EU logo (see Chapter 5):

a) Stricter production standards

EU regulation (EC) No 834/2007 only sets *minimum* standards for organic production and processing, which may be exceeded or supplemented by other organic labelling schemes. The present research suggests that some consumers prefer particular organic labelling schemes because of perceived stricter production standards. Defining stricter production standards could thus be a promising strategy for private standard owners to differentiate themselves from the mandatory EU logo. However, communication with consumers is extremely important in this context. According to previous studies, consumers know little

about organic production methods (Naspetti and Zanolli 2009:263). A differentiation strategy based on stricter production standards must therefore focus on those aspects that are, firstly, important in the eyes of consumers and, secondly, easy to communicate. For example, previous studies showed that European consumers place high importance on animal welfare (Spiller et al. 2010:74, Zander and Hamm 2010:502, Hughner et al. 2007:102).

b) Domestic / regional / local origin

The present results regarding the new mandatory indication of origin (EU agriculture, non-EU agriculture, EU/non-EU agriculture) provide evidence that consumers clearly prefer *precise* indications. The EU is not viewed as a homogenous entity. Other studies confirm that regional/local origin of food products is increasingly important to consumers in the context of organic food (Zander and Hamm 2010:502, Cranfield et al. 2009:114, Stolz et al. 2009:176). Implementing criteria regarding the origin of the raw materials could thus be a promising strategy for private organic labelling schemes to offer a unique selling proposition to consumers. In the present study, the results from the non-EU country Switzerland with a high WTP for the Bio Suisse logo show that an organic logo which also indicates a *domestic* origin can be very successful. However, the geographical boundaries for such an indication of origin need to be carefully chosen (Stockebrand et al. 2009:37). In smaller countries, the indication could refer to the country as such, whereas in larger countries, smaller areas like regions or counties might be more appropriate (Zander et al. 2010:28).

The aspects mentioned here emerged from the analysis of consumer perceptions of voluntary organic labelling schemes within this dissertation. Further potential differentiation strategies for private standard owners might be found in other research on organic food. Just to mention two examples, a study on additional ethical attributes of organic food showed that organic consumers in Austria, Germany, Switzerland and United Kingdom are particularly interested in 'fair prices for farmers' (Zander and Hamm 2010:501). Another aspect of food production currently discussed intensively is carbon emission labelling (Vanclay et al. 2011:153f.). Translating fair prices or carbon emission standards into a certification scheme is certainly not an easy task but could be a promising niche strategy for selected private standard owners.

For all strategies mentioned here, communication with consumers is of key importance, since previous research showed that consumers have a low level of knowledge about agriculture and food production methods (Pieniak et al. 2010:586, Hoefkens et al. 2009:13, McEachern and Warnaby 2008:422, Sawyer et al. 2008:614, Hoogland et al. 2007:55, Botonaki et al.

2006:88, Spiller 1999:58). Moreover, communication measures focussing on differences between a private scheme and other organic schemes are only credible if private organisations stop allowing exemptions from their own requirements for single operators.

Lastly, it needs to be mentioned that the success of private organic certification logos might differ across EU countries. As outlined in Chapter 1, the EU covers a variety of different domestic organic markets. It can be speculated that the critical mass of consumers appreciating stricter requirements than those behind the EU logo is probably easier to reach in further developed organic markets. In emerging organic markets, in contrast, it might be more appropriate to primarily promote organic products in general, rather than highlighting differences among several organic logos.

9.2.2 Producers, processors and retailers

According to the present findings, organic certification logos play an important role in the buying decision of consumers. The price premium that consumers were willing to pay differed considerably between the tested organic logos. The highest price premiums were recorded for logos that were well-known, trusted and perceived to have strict organic standards and a strict control system. Different kinds of organic logos were preferred across the countries. In Denmark and the Czech Republic, consumers were willing to pay the highest price premium for the governmental logo. In Germany, a high willingness-to-pay (WTP) was recorded for the logo of the farmers' association Demeter and the governmental logo. In Italy, the old EU logo reached the highest WTP. In Switzerland, the logo of the farmers' umbrella organisation Bio Suisse was clearly preferred. In the UK, the WTP was the highest for the logos of the Soil Association and the certification body 'Organic Farmers & Growers'.

According to the present results, it might take some time until the new EU logo will be widely known and trusted in the population in those countries where the former voluntary EU logo was not very common. In these countries, it thus seems advisable to additionally label organic products with a well-known organic logo, at least in a transition period. In some countries, the organic logos preferred by consumers are attached to further requirements in addition to the principles of EU Regulation (EC) 834/2007.⁴³ However, the present results suggest that the

⁴³ For instance, the Danish governmental logo is a control logo which requires that the latest preparation of the product (packaging and/or labelling) was undertaken by a company in Denmark under the inspection of the Danish governmental control authorities (Bekendtgørelse om økologiske fødevarer m.v. No 1258; Fødevestyrelsens vejledning om økologiske fødevarer m.v.). In the Czech Republic, the product must have been controlled by a control body authorised by the Ministry of Agriculture (KEZ, Biokont, AbCert) in order to carry the Czech governmental logo (Act on Organic Farming No 242/2000 Coll.). In the UK, the standards of the Soil Association exceed the EU principles in some respects (Soil Association Ltd. 2010). The logo of the

effort of fulfilling additional requirements might be worth for producers and processors, in order to label their products with those logos preferred by consumers.

The results provide evidence that consumer preferences for certain organic certification logos vary among different consumer segments. A number of logos attracted a higher WTP among frequent buyers of organic food and customers of organic food shops compared to less frequent buyers and non-customers of organic food shops. These findings can be used by organic producers and processors for choosing an organic labelling scheme and/or distribution channel for their products.

9.2.3 Future scientific research

Based on the present study, recommendations are now made for research areas that emerged from the present findings concerning the method of choice experiments on the one hand and the topic of organic labelling schemes on the other hand.

Regarding the method of choice experiments, the following research need was identified. In the present study, it was aimed to create an experimental set-up which resembled a real purchase situation. Real products were therefore used as stimuli instead of written descriptions of product attributes. The realistic experimental set-up required considerable effort in terms of material and space needed, since data was collected at the point-of-sale. The number of choice sets per person had to be limited to four. Interviewer observations of how participants behaved during the process of product choice suggest that the realistic set-up made it easy for participants to come to a buying decision. However, to the author's knowledge there is no empirical evidence proving that this procedure generally increases external validity. It would thus be interesting to investigate in future research whether a realistic experimental set-up in fact leads to significantly different WTP measures. For this purpose, the results of choice experiments conducted with product descriptions should be compared to those conducted with real products.

Regarding the topic of organic labelling schemes, the following areas of research deserve further investigation. The introduction of a mandatory logo for organic food represents a novelty in Europe. The present study was conducted prior to this significant change. It is therefore recommended to conduct a similar study once the new logo is established in the

inspection body OF&G can only be displayed by operators controlled by these inspection bodies. The Demeter logo preferred by frequent buyers in Germany indicates that the anthroposophical standards of Demeter are fulfilled (Demeter e.V. 2011, 2010). Similarly, the farmers' umbrella organisation Bio Suisse has own organic standards exceeding the EU principles (Bio Suisse 2011).

market, for instance a few years after the end of the transition period which runs until July 2012. Then it will be possible to evaluate whether the introduction of the mandatory EU logo contributed to its objective of strengthening the organic market. Furthermore, it would be interesting to determine in what way the introduction of the mandatory logo changed consumer preferences for voluntary logos. In addition to the consumer side, the perspective of producers, processors and retailers should then be investigated. These actors play a crucial role in determining which voluntary organic certification logos are commonly found in the market.

Furthermore, the present study confirms that consumer trust plays a pivotal role in the purchase of organic food. The findings suggest that trust in organic labelling schemes is related to consumer perceptions of the underlying production standards and the control regime as well as trust in the organisation behind the scheme. However, further aspects – which emerged from the focus group discussions but were not investigated in the quantitative study – are likely to be important in this context. A better understanding of how consumer trust in organic labelling schemes is composed and influenced would help to design promotion campaigns for organic food and reduce potential purchase barriers.

Lastly, the present findings highlight the need for knowledge on how to successfully *communicate* process-related credence attributes of food products to consumers. For this purpose, store tests could be conducted testing different formats of information provision (e.g. leaflets, displays, on-package information). It could then be analysed how information at the point-of-sale influences sales of promoted products as well as consumer perceptions and attitudes towards organic labelling schemes.

9.2.4 Critical appreciation of the role of organic certification logos

The dissertation closes with an outlook on the future role of organic certification logos by reflecting on the interests of private processors and retailers of organic food from a marketing perspective.

The study of consumer preferences for organic certification logos within this dissertation highlights the importance of understanding the consumer perspective on the organic food regime. Consumer perceptions of organic standards, certification and control are of subjective nature and in many cases not based on objective knowledge. It needs to be admitted that any organic certification logo which is neither mandatory nor already widely known among consumers will face severe difficulties in trying to attract consumer preferences. In the end, the decision upon the use of voluntary organic certification logos for product labelling lies

with private processors and retailers. Processors and retailers, however, are primarily interested in promoting their own brand as a unique selling proposition to differentiate their products from other organic products. From the perspective of processors and retailers, organic certification logos only serve as tools for gaining consumer trust but they do not offer a unique selling proposition.

This circumstance will most likely have consequences for the design of product packages and the use of voluntary organic certification logos. Since July 2010, the mandatory EU logo and indication of origin must be displayed. More importantly, however, processors and retailers want to attract attention to their own brand label. Given that space on product packages is limited, particularly on the front side, voluntary organic certification logos therefore run the risk of losing importance – provided that the mandatory EU logo will gain consumer trust. This development will make it easier for processors and retailers to focus their efforts on establishing their own brands as unique selling propositions. Consequently, only those voluntary organic certification logos that consumers perceive as exceptional will maintain a position in the market.

10 Summary

10.1 English summary

Product labelling with organic certification logos is a tool to raise consumer trust in the integrity of organic food products. Since July 2010, all prepacked organic products produced in the European Union (EU) must carry the mandatory EU logo for organic food (Regulation (EC) 834/2007). Voluntary organic certification logos have a long tradition in most European countries. It can be differentiated between governmental logos (which exist in some but not in all European countries) and logos of private organisations such as farmers' and organic sector associations and control bodies. The introduction of a *mandatory* EU logo raises the question whether voluntary organic certification logos should additionally be used for product labelling. The use of additional voluntary organic certification logos would be beneficial for processors and retailers only provided that consumers prefer products with certain voluntary logos. To the author's knowledge, little previous empirical findings exist on consumer perceptions, attitudes, preferences and willingness-to-pay regarding *different* organic labelling schemes. Furthermore, little is known about consumer attitudes towards the mandatory EU logo. The present dissertation was therefore concerned with two main objectives: Firstly, to explore and analyse consumer perceptions, attitudes, preferences and willingness-to-pay (WTP) regarding *different voluntary organic labelling schemes*; secondly, to investigate consumer perceptions and attitudes towards a *mandatory EU logo and indication of origin for organic food*. The overarching aim was to give recommendations for owners of organic certification logos and market actors in the organic sector regarding consumer-related aspects of organic labelling schemes.

In this dissertation, the objectives were addressed by a combination of qualitative and quantitative methods of consumer research in the six study countries Czech Republic, Denmark, Germany, Italy, Switzerland and United Kingdom. In the qualitative study, focus group discussions were conducted with consumers of organic food to explore the spectrum of consumer perceptions and attitudes. The data was analysed with qualitative content analysis. In the subsequent quantitative study, choice experiments were carried out to determine consumer preferences and WTP for different voluntary organic certification logos. The choice data was analysed with random parameter logit models. By means of structured interviews with rating scales, consumer perceptions and attitudes were quantified.

Regarding the first objective, the present dissertation found that consumers had a low level of trust in organic products *without* a certification logo. Almost all tested organic certification

logos – even a fake logo investigated in Switzerland – reached a significantly higher WTP than a generic organic label without a logo. However, the WTP differed considerably between the tested logos. The highest price premiums were recorded for well-known logos that were perceived as trustworthy with strict organic standards and a strict control system. Interestingly, different kinds of organic logos were preferred across the countries. In Denmark and the Czech Republic, consumers were willing to pay the highest price premium for the governmental logo. In Germany, in contrast, a high WTP was recorded for the governmental logo *and* the logo of the farmers' association Demeter. In Italy, the old EU logo reached the highest WTP. In Switzerland, the logo of the farmers' umbrella organisation Bio Suisse was clearly preferred. In the United Kingdom, the WTP was the highest for the logos of the Soil Association and the certification body 'Organic Farmers & Growers'.

Regarding the second objective, it was found that consumer trust in the new mandatory EU logo for organic food differed between the Member States. In countries where the former voluntary EU logo was not very common, consumers were uncertain as to what the new logo indicates in terms of organic production standards and control. It became apparent that the EU was not viewed as a homogenous entity in this respect. The indications of origin 'EU agriculture' and 'Non-EU agriculture' without reference to a particular country were generally rejected.

Overall, the present research showed that many consumers had a low level of factual knowledge about organic production standards and certification. Consumer perceptions of organic logos were of subjective nature and not necessarily based on objective facts.

For the theoretical framework of product labelling of credence goods, the present study showed that third-party involvement in product labelling does not automatically overcome the dilemma of information asymmetry surrounding credence goods. At the point-of-sale, subjective consumer perceptions and attitudes regarding a labelling scheme are decisive. Foremost, the credibility of a voluntary label depends on the credibility of the third-party organisation behind the labelling scheme. Organisations owning a certification logo for consumer goods should put effort into increasing consumer awareness of the logo and forming consumer attitudes towards the scheme behind it, in order to maintain that their logo successfully influences the buying behaviour of consumers.

Based on the present findings, conclusions are drawn for different actors in the organic sector:

To strengthen consumer trust in the *new mandatory EU logo*, it is recommended that promotion campaigns should be carried out to explain what the logo indicates and why it is a

benefit, in particular in those countries where the former voluntary EU logo was not very common. Promotion campaigns on the new EU logo should not *per se* refer to the former voluntary EU logo. Instead, country specific characteristics of the organic market should be taken into account.

Regarding the investigated *governmental logos*, a high level of consumer trust was recorded. It is therefore recommended that their use should be continued, at least in a transition period. While the governmental logos in the Czech Republic and Denmark are attached to some further requirements beyond the EU Regulation, the German Bio-Siegel can be used on request on all products complying with the EU Regulation. Provided that the EU logo will gain consumer trust in the future, the Bio-Siegel will thus be dispensable.

For the tested *organic certification logos of private organisations*, consumer recognition and WTP differed considerably between the study countries. With a mandatory EU logo – provided that it will gain an acceptable level of consumer trust – it is questionable whether many private organic certification logos will still be used for product labelling in the future. Private organisations thus need to identify a clear ‘added value’ to differentiate their labelling scheme from the minimum requirements behind the EU logo. Ultimately, it is of crucial importance to communicate the added value to consumers.

According to the present results, *producers, processors and retailers* should label organic products with a well-known organic logo that consumers trust. In those countries where the former voluntary EU logo was not very common, it might take some time until the new EU logo will meet these requirements. It is thus recommended to additionally label organic products with a well-known organic logo, at least in a transition period.

For future scientific research, a number of research areas emerged from this dissertation. In the present study, effort was made to create a realistic experimental set-up in the choice experiments. Nevertheless, it remains unclear whether this procedure actually increased external validity. It is therefore recommended to investigate the influence of a realistic experimental set-up on the measured WTP. Regarding the topic of organic labelling schemes, the following research topics were identified. Firstly, the present study was conducted prior to the introduction of the mandatory EU logo. Consumer attitudes towards the new EU logo should therefore be analysed again once the logo is established in the market. Secondly, the issue of how to influence consumer trust in organic labelling schemes deserves further inquiry. Lastly, a better understanding of how to successfully communicate process-related credence attributes of food products to consumers is needed.

10.2 German summary

Die Auslobung von Öko-Zertifizierungszeichen zielt darauf ab, Verbrauchervertrauen in Öko-Lebensmittel zu gewinnen. Seit Juli 2010 müssen alle in der Europäischen Union (EU) hergestellten, abgepackten Öko-Lebensmittel mit dem verpflichtenden EU-Logo versehen sein (Verordnung (EG) Nr. 834/2007). Anders als zuvor muss direkt neben dem Logo einer der drei folgenden Hinweise zur Herkunft der landwirtschaftlichen Ausgangsstoffe erscheinen: „aus EU-Landwirtschaft“, „aus Nicht-EU-Landwirtschaft“ oder „aus EU-/Nicht-EU-Landwirtschaft“. Nur wenn mindestens 98% der Ausgangsstoffe aus demselben Land stammen, kann stattdessen das entsprechende Land genannt werden. In den meisten europäischen Ländern gibt es schon seit vielen Jahren *freiwillige* Öko-Zertifizierungszeichen für Lebensmittel. Grundsätzlich kann hier zwischen staatlichen Zeichen auf der einen und Zeichen von privaten Organisationen auf der anderen Seite unterschieden werden. Ein staatliches Zeichen wie das deutsche Bio-Siegel oder das dänische Ø-Logo gibt es in einigen, jedoch längst nicht in allen europäischen Ländern. Öko-Zertifizierungszeichen privater Organisationen wie Anbauverbände, Branchen- bzw. Dachorganisationen und Kontrollstellen sind hingegen in nahezu allen europäischen Ländern vertreten.

Grundsätzlich richten sich Öko-Zertifizierungszeichen in erster Linie an den Endverbraucher. Ihre Kernfunktion besteht darin, die Einhaltung definierter Standards zu kommunizieren. Durch die Einführung des *verpflichtenden* EU-Logos stellt sich die Frage nach der Funktion und Bedeutung zusätzlich ausgelobter, *freiwilliger* Öko-Zertifizierungszeichen. Die Verwendung freiwilliger Öko-Zertifizierungszeichen setzt häufig die Einhaltung von Richtlinien voraus, die über die EU-Mindeststandards hinausgehen, was in der Regel mit erhöhtem Aufwand verbunden ist. Weiterhin ist der Platz auf Produktpackungen, Preisschildern und Werbematerialien meist begrenzt. Die zusätzliche Auslobung eines freiwilligen Öko-Zeichens erscheint somit nur dann sinnvoll, wenn Verbraucher mit dem Zeichen einen Mehrwert verbinden, bspw. die Einhaltung strengerer Produktionsstandards, eine vermeintlich höhere Lebensmittelsicherheit oder einen anderen Qualitätsaspekt. Bisher liegen jedoch kaum Erkenntnisse darüber vor, inwieweit Verbraucher Unterschiede zwischen verschiedenen Öko-Kennzeichnungssystemen wahrnehmen und beurteilen. Ferner ist zu klären, wie Verbraucher der neuen, verpflichtenden EU-Kennzeichnung für Öko-Lebensmittel gegenüberstehen.

Zielsetzung der vorliegenden Dissertation war die Ableitung von Empfehlungen für verschiedene Akteure der Öko-Branche im Hinblick auf verbraucherbezogene Aspekte von

Öko-Kennzeichnungssystemen. Dabei standen die folgenden zwei Untersuchungsziele im Mittelpunkt:

1. Analyse von Wahrnehmung, Einstellungen, Präferenzen sowie Zahlungsbereitschaft von Verbrauchern hinsichtlich verschiedener *freiwilliger Öko-Kennzeichnungssysteme*.
2. Analyse von Verbrauchereinstellungen gegenüber der neuen, *verpflichtenden EU-Kennzeichnung für Öko-Lebensmittel*.

Die Untersuchungsziele der Arbeit wurden mit einer Kombination aus qualitativen und quantitativen Methoden der Konsumentenforschung bearbeitet. Zielgruppe der empirischen Forschungsarbeit waren Verbraucher von Öko-Lebensmitteln in den sechs europäischen Ländern Dänemark, Deutschland, Großbritannien, Italien, Schweiz und Tschechische Republik. In der qualitativen Studie mit Fokusgruppendifkussionen wurde zunächst das Spektrum an Einstellungen gegenüber verschiedenen Öko-Kennzeichnungssystemen explorativ erfasst und die hinter den Einstellungen stehenden Grundhaltungen aufgedeckt. Die gewonnenen Daten wurden mit der Methode der qualitativen Inhaltsanalyse ausgewertet. Darauf aufbauend wurden in der quantitativen Studie Choice Experimente durchgeführt, auf deren Grundlage mit Hilfe von Random Parameter Logit-Modellen die Zahlungsbereitschaft für Öko-Zeichen in den Produktkategorien Eier und Äpfel bestimmt wurde. In einem Single-Source-Ansatz wurden in anschließenden standardisierten Interviews mit Hilfe von Rating-Skalen Daten zu Verbrauchereinstellungen gesammelt.

Hinsichtlich des ersten Untersuchungsziels zeigte sich in der vorliegenden Arbeit, dass Verbraucher Öko-Produkten *ohne* Zertifizierungszeichen so gut wie gar nicht vertrauten. Fast alle getesteten Zeichen erzielten eine höhere Zahlungsbereitschaft als der allgemeine Schriftzug ‚Öko‘. Das gilt sogar für ein fiktives Zeichen, das in der Schweiz untersucht wurde. Jedoch fiel die Höhe der Zahlungsbereitschaft unter den getesteten Öko-Zertifizierungszeichen sehr unterschiedlich aus. Den höchsten Preisaufschlag zahlten Verbraucher für vertrauenswürdige Zeichen mit hohem Bekanntheitsgrad, bei denen sie die zugrundeliegenden Standards und das Kontrollsystem als überdurchschnittlich streng einschätzten. Interessanterweise unterschieden sich die Untersuchungsländer in der Art der von Verbrauchern bevorzugten Kennzeichnungssysteme. In Dänemark und der Tschechischen Republik war die Zahlungsbereitschaft für das jeweilige staatliche Öko-Zeichen am höchsten. In Deutschland hingegen erzielte das Zeichen des privaten Anbauverbands Demeter bei Äpfeln einen gleich hohen und bei Eiern einen höheren Preisaufschlag als das staatliche Bio-Siegel. In Italien konnte das EU-Logo die höchste Zahlungsbereitschaft verbuchen.

Verbraucher in der Schweiz zahlten den höchsten Preiszuschlag für das Zeichen des Dachverbands Bio Suisse, der alle Schweizer Anbauverbände vereint. In Großbritannien lagen zwei Logos von privaten Organisationen an der Spitze der Zahlungsbereitschaft, und zwar die Zeichen der Soil Association und der Kontrollstelle „Organic Farmers & Growers“.

Bezüglich des zweiten Untersuchungsziels ist zunächst festzuhalten, dass das Verbrauchervertrauen in die neue, verpflichtende EU-Kennzeichnung für Öko-Lebensmittel zwischen den Mitgliedstaaten sehr unterschiedlich ausfiel. In den Untersuchungsländern, in denen das ehemalige, freiwillige EU-Logo nicht sehr verbreitet war, herrschte auf Seiten der Verbraucher Unsicherheit bezüglich der zugrundeliegenden Produktionsstandards und Kontrollregelungen. Verbraucher sahen in der Europäischen Union als Geltungsbereich des Logos keine homogene Einheit hinsichtlich der Vertrauenswürdigkeit von Öko-Lebensmitteln. Die Herkunftsbezeichnungen „EU-Landwirtschaft“ und „Nicht-EU-Landwirtschaft“ wurden als zu ungenau empfunden und mithin abgelehnt.

In allen Teilen der Arbeit trat der geringe Kenntnisstand vieler Verbraucher bezüglich Öko-Standards und -Kontrolle zu Tage. Es wurde deutlich, dass viele Verbraucher zwar über subjektive Vorstellungen über Öko-Kennzeichnungssysteme verfügten, dieses vermeintliche Wissen jedoch nicht unbedingt objektiven Tatsachen entsprach.

Zur Theorie der Produktkennzeichnung bei Vertrauensgütern lassen die vorliegenden Ergebnisse den Schluss zu, dass Kennzeichnungssysteme mit Zertifizierung durch unabhängige Dritte nicht unbedingt das grundsätzliche Problem der Informationsasymmetrie beseitigen. Am Point-of-Sale ist vielmehr entscheidend, wie ein Zeichen von Verbrauchern subjektiv wahrgenommen und beurteilt wird. Die Glaubwürdigkeit eines Kennzeichnungssystems hängt maßgeblich von der Glaubwürdigkeit der dahinter stehenden Organisation ab. Organisationen mit eigenem Zertifizierungszeichen für Konsumgüter sollten Maßnahmen ergreifen, damit Verbraucher mit dem Zeichen vertraut sind und die dahinter liegenden Standards zu schätzen wissen.

Basierend auf den vorliegenden Untersuchungsergebnissen werden die folgenden Empfehlungen für unterschiedliche Akteure der Öko-Branche ausgesprochen:

Hinsichtlich der *verpflichtenden EU-Kennzeichnung* für Öko-Lebensmittel sollten Anstrengungen unternommen werden, unbegründete Bedenken auf Verbraucherseite auszuräumen und Verbrauchervertrauen zu gewinnen. Dazu bedarf es insbesondere in Ländern, in denen das ehemalige, freiwillige EU-Logo nicht sehr verbreitet war, möglichst breit angelegter Kommunikationsmaßnahmen, um Verbrauchern die Bedeutung und

Vorteilhaftigkeit des EU-Logos zu vermitteln. Angesichts des geringen Bekanntheitsgrads des ehemaligen EU-Logos in einigen EU-Ländern, sollten Kommunikationsmaßnahmen zum neuen Logo mithin nicht *per se* auf das ehemalige EU-Logo Bezug nehmen. Vielmehr sollte kommuniziert werden, dass das Zeichen für die Einhaltung EU-weit einheitlicher Standards steht. Darüber hinaus gilt es, auf länderspezifische Besonderheiten des Öko-Markts einzugehen. So sollte in Deutschland bspw. kommuniziert werden, dass hinter dem EU-Logo und dem deutschen Bio-Siegel exakt dieselben Anforderungen stehen.

Für alle untersuchten freiwilligen *staatlichen Öko-Zeichen* zeigte sich in der vorliegenden Studie ein hohes Maß an Verbrauchervertrauen, das sich auch in einer hohen Zahlungsbereitschaft niederschlug. Es wird daher empfohlen, den Einsatz staatlicher Zeichen – zumindest in einer Übergangsphase – in den entsprechenden Ländern zunächst fortzusetzen. Während die staatlichen Zeichen in Dänemark und der Tschechischen Republik an zusätzliche Anforderungen hinsichtlich der Kontrolle geknüpft sind, kann das deutsche Bio-Siegel auf Antrag auf allen Produkten verwendet werden, die den Vorgaben der EG-Öko-Verordnung genügen. Vorausgesetzt, das verpflichtende EU-Logo erreicht ein hohes Maß an Bekanntheit und Verbrauchervertrauen, so wird das Bio-Siegel im Prinzip entbehrlich.

Bezüglich der Zahlungsbereitschaft für die untersuchten *Öko-Zertifizierungszeichen privater Organisationen* waren in der vorliegenden Arbeit erhebliche Unterschiede zwischen den Untersuchungsländern zu verzeichnen. Mit der Einführung eines verpflichtenden EU-Logos erscheint es fraglich, ob private Öko-Zertifizierungszeichen in Zukunft eine breite Anwendung finden, zumindest sofern das EU-Logo ein akzeptables Maß an Verbrauchervertrauen gewinnt. Private Organisationen, die großen Wert darauf legen, dass Hersteller und Händler ihr Zertifizierungszeichen auch zukünftig zur Produktkennzeichnung verwenden, sollten ihr Kennzeichnungssystem eindeutig von den EU-Mindestanforderungen abheben. Letztendlich ist dann von entscheidender Bedeutung, dass dieser Mehrwert gezielt an Verbraucher kommuniziert wird.

Für *Hersteller, Verarbeiter und Händler* wird empfohlen, Öko-Zeichen zu verwenden, die einen hohen Bekanntheitsgrad aufweisen und von Verbrauchern als vertrauenswürdig eingeschätzt werden. In Ländern, in denen das ehemalige, freiwillige EU-Logo eine relativ geringe Verbreitung fand, wird es wahrscheinlich einige Zeit dauern, bis das neue EU-Logo diesen Anforderungen entspricht. Zumindest in einer Übergangsphase sollten hier demnach zusätzlich altbewährte Öko-Zeichen ausgelobt werden.

Für *zukünftige Forschungsarbeiten* wurden auf Grundlage der vorliegenden Dissertation zwei Themenfelder identifiziert. Hinsichtlich der Methode der Choice Experimente wurden in dieser Arbeit verschiedene Maßnahmen unternommen, den Versuchsaufbau einer realen Kaufsituation nachzuempfinden. Jedoch liegen nach Wissen der Autorin bisher keine gesicherten Erkenntnisse darüber vor, inwieweit die Verwendung echter Produkte im Gegensatz zu Produktbeschreibungen tatsächlich die externe Validität erhöht. Diese Fragestellung sollte Gegenstand zukünftiger Forschung zur Methode der Choice Experimente sein. Zum Thema Produktkennzeichnung mit Öko-Zertifizierungszeichen sollten die folgenden Fragen näher beleuchtet werden. Die vorliegende Studie wurde vor Einführung des verpflichtenden EU-Logos durchgeführt. Es wird daher empfohlen, Verbrauchereinstellungen zum neuen EU-Logo erneut zu analysieren, wenn sich das Zeichen im Markt etabliert hat. Zweitens bedarf es weiterer Erkenntnisse über Entstehung und Beeinflussung des komplexen Konstrukts von Verbrauchervertrauen in Öko-Kennzeichnungssysteme. Abschließend sollte näher untersucht werden, wie prozessbezogene Vertrauenseigenschaften von Lebensmitteln Verbrauchern gegenüber optimal kommuniziert werden sollten.

References

- Aaker, D.A., Kumar, V., Day, G.S. and Leone, R.P. (2010). *Marketing research*. 10th ed. New York, John Wiley and Sons.
- Aarset, B., Beckmann, S., Bigne, E., Beveridge, M., Bjorndal, T., Bunting, J., McDonagh, P., Mariojouis, C., Muir, J., Prothero, A., Reisch, L., Smith, A., Tveteras, R. and Young, J. (2004). The European consumers' understanding and perceptions of the "organic" food regime. The case of aquaculture. *British Food Journal* 106(2):93-105.
- Abrams, K., Meyers, C. and Irani, T. (2010). Naturally confused: consumers' perceptions of all-natural and organic pork products. *Agriculture and Human Values* 27(3):365-374.
- Act on Organic Farming No 242/2000 Coll. (Czech legislation).
- Aertsens, J., Verbeke, W., Mondelaers, K. and van Huylenbroeck, G. (2009). Personal determinants of organic food consumption: A review. *British Food Journal* 111(10):1140-1167.
- Ajzen, I. (2005). *Attitudes, personality and behavior*. 2nd ed. Berkshire, Open University Press.
- Akerlof, G.A. (1970). The market for "lemons": Quality uncertainty and the market mechanism. *Quarterly Journal of Economics* 84(3):488-500.
- Alba, J.W. and Hutchinson, J.W. (2000). Knowledge calibration: What consumers know and what they think they know. *Journal of Consumer Research* 27(2):123-156.
- Albersmeier, F., Schulze, H. and Spiller, A. (2010). System dynamics in food quality certifications: Development of an audit integrity system. *International Journal of Food System Dynamics* 1(1):69-81.
- Amir, O. and Levav, J. (2008). Choice construction versus preference construction: The instability of preferences learned in context. *Journal of Marketing Research* 45(2):145-158.
- Armstrong, G. and Kotler, P. (2009). *Marketing. An introduction*. 9th ed. Upper Saddle River, Pearson Prentice Hall.
- Arvola, A., Vassallo, M., Dean, M., Lampila, P., Saba, A., Lähteenmäki, L. and Shepherd, R. (2008). Predicting intentions to purchase organic food: The role of affective and moral attitudes in the Theory of Planned Behaviour. *Appetite* 50(2-3):443-454.
- Assael, H. (2004). *Consumer behavior. A strategic approach*. Boston, New York, Houghton Mifflin.
- Backhaus, K., Erichson, B., Plinke, W. and Weiber, R. (2008). *Multivariate Analysemethoden. Eine anwendungsorientierte Einführung*. 12th ed. Berlin, Heidelberg, Springer.
- Becker, T. (2005). Zur Bedeutung geschützter Herkunftsangaben. <http://opus.ub.uni-hohenheim.de/volltexte/2006/136/pdf/haa-nr12.pdf> (accessed 9 November 2009).
- Becker, T. (2009). European food quality policy: The importance of geographical indications, organic certification and food quality assurance schemes in European countries. *The Estey Centre Journal of International Law and Trade Policy* 10(1):111-130.
- Bekendtgørelse om økologiske fødevarer m.v. No 1258 of 12.12.2008.

- Ben-Akiva, M., Bradley, M., Morikawa, T., Benjamin, J., Novak, T., Oppewal, H. and Rao, V. (1994). Combining revealed and stated preferences data. *Marketing Letters* 5(4):335-350.
- Bioland e.V. (n.d.). Daten und Fakten zu Bioland und zum Ökolandbau. <http://www.bioland.de/presse/fakten.html> (accessed 11.08.2009).
- Bio Suisse (2011). Richtlinien für die Erzeugung, Verarbeitung und den Handel von Knospe-Produkten. http://www.bio-suisse.ch/media/de/pdf2011/Regelwerk/rl_2011_d.pdf (accessed 16.04.2011).
- Blackwell, R.D., Miniard, P.W. and Engel, J.F. (2006). *Consumer behavior*. 10th ed. Mason, Thomson.
- Blake, F. (2009). General analysis of the new regulation. In IFOAM EU Group (Ed.). *The new EU Regulation for Organic Food and Farming: (EC) No 834/2007. Background, assessment, interpretation*. Brussels, IFOAM EU Group, p. 18-21.
- Blank, R. (2007). Gruppendiskussionsverfahren. In Naderer, G. and Balzer, E. (Eds.). *Qualitative Marktforschung in Theorie und Praxis*. Wiesbaden, Gabler, p. 279-301.
- Bohnsack, R. and Przyborski, A. (2007). Gruppendiskussionsverfahren und Focus Groups. In Buber, R. and Holzmüller, H. (Eds.). *Qualitative Marktforschung. Konzepte, Methoden, Analysen*. Wiesbaden, Gabler, p. 491-506.
- Bonroy, O. and Constantatos, C. (2008). On the use of labels in credence goods markets. *Journal of Regulatory Economics* 33(3):237-252.
- Botonaki, A., Polymeros, K., Tsakiridou, E. and Mattas, K. (2006). The role of food quality certification on consumers' food choices. *British Food Journal* 108(2):77-90.
- Breidert, C., Hahsler, M. and Reutterer, T. (2006). A review of methods for measuring willingness-to-pay. *Innovative Marketing* 2(4):8-32.
- Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative Research* 6(1):97-113.
- Bryman, A. (2008). *Social research methods*. 3rd ed. Oxford, Oxford University Press.
- Bund Ökologische Lebensmittelwirtschaft (2006). Stellungnahme zum Vorschlag für eine Verordnung des Rates über die ökologische/biologische Erzeugung und die Kennzeichnung von ökologischen/biologischen Erzeugnissen vom Dezember 2005. http://www.boelw.de/uploads/media/pdf/Dokumentation/Stellungnahmen/Stellungnahme_Revision_EU-Oeko-VO_060201.pdf (accessed 12.08.2009).
- Burns, A.C. and Bush, R.F. (2010). *Marketing research*. 6th ed. Upper Saddle River, Pearson Prentice Hall.
- Butler, J.K. (1991). Towards understanding and measuring conditions of trust: Evolution of a condition of trust inventory. *Journal of Management* 17(3):643-663.
- Carlsson, F. and Martinsson, P. (2008). How Much is Too Much? An investigation of the effect of the number of choice sets, context dependence and the choice of bid vectors in choice experiments. *Environmental and Resource Economics* 40(2):165-176.
- Churchill, G.A. and Brown, T.J. (2007). *Basic marketing research*. 6th ed. Mason, Thomson.
- Cohen, J.B. and Reed, A. II (2006). A multiple pathway anchoring and adjustment (MPAA) model of attitude generation and recruitment. *Journal of Consumer Research* 33(1):1-15.

- Commission Regulation (EC) No 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control. Official Journal of the European Union, L250 (18.09.2008), p. 1-84.
- Commission Regulation (EU) No 271/2010 of 24 March 2010 amending Regulation (EC) No 889/2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007, as regards the organic production logo of the European Union. Official Journal of the European Union, L84 (31.03.2010), p. 19-22.
- Conner, D. and Christy, R. (2002). Consumer preferences for organic standards: Guiding demand-expansion strategies for organic food. *Journal of Food Distribution Research* 33(1):46-51.
- Cortina, J. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology* 78(1):98-104.
- 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, L189 (20.07.2007), p. 1-122.
- Council Regulation (EEC) No 2092/91 of 24 June 1991 on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs. Official Journal of the European Communities, L198 (22.06.1991), p. 1-15.
- Cranfield, J., Deaton, J. and Shellikeri, S. (2009). Evaluating consumer preferences for organic food production standards. *Canadian Journal of Agricultural Economics* 57(1):99-117.
- Cummings, R., Harrison, G. and Rutstrom, E. (1995). Homegrown values and hypothetical surveys: Is the dichotomous choice approach incentive-compatible? *American Economic Review* 85(1):260-266.
- Darby, M. and Karni, E. (1973). Free competition and the optimal amount of fraud. *Journal of Law and Economics* 16(1):67-88.
- Demeter e.V. (2010). Richtlinien für die Zertifizierung: „Demeter“ und „Biodynamisch“, Verarbeitung. 6th edn. <http://www.demeter.de/ebenenangleichung/zielgruppe/schnittmengen/leben-arbeiten/demeter-richtlinien/?MP=13-1491> (accessed 26.04.2011).
- Demeter e.V. (2011). Richtlinien für die Zertifizierung: „Demeter“ und „Biodynamisch“, Erzeugung. <http://www.demeter.de/ebenenangleichung/zielgruppe/schnittmengen/leben-arbeiten/demeter-richtlinien/?MP=13-1491> (accessed 26.04.2011).
- Demeter e.V. (n.d.). Mehr als der kleine Unterschied im Vergleich zu EU-Bio. <http://www.demeter.de/index.php?id=1498&MP=14-1492> (accessed 11.08.2009).
- Denzin, N. and Lincoln, Y. (2008). Introduction: The discipline and practice of qualitative research. In Denzin, N. and Lincoln, Y. (Eds.). *Strategies of qualitative inquiry*. 3rd edn. Thousand Oaks et al., Sage Publications, p. 1-44.
- DeShazo, J. (2002). Designing choice sets for stated preference methods: The effects of complexity on choice consistency. *Journal of Environmental Economics and Management* 44(1):123-143.
- Dhar, R. (1997). Consumer preferences for a no-choice option. *Journal of Consumer Research* 24(2):215-231.
- Dhar, R. and Simonson, I. (2003). The effect of forced choice on choice. *Journal of Marketing Research* 40(May):146-160.

- Diller, H. (2008). Preispolitik. 4th ed. Stuttgart, Kohlhammer.
- Evans, M., Jamal, A. and Foxall, G. (2006). Consumer behaviour. Chichester et al., John Wiley and Sons.
- FiBL and AMI (2010). Umsatz mit Bio-Lebensmitteln in Europa 2008. <http://www.marktundpreis.de/oekolandbaugbg/infografiken.asp> (accessed 26.08.2010).
- Finch, H. and Lewis, J. (2006). Focus groups. In Ritchie, J. and Lewis, J. (Eds.). Qualitative research practice. London, Sage Publications, p. 170-198.
- Flores, F. and Solomon, R. (1998). Creating trust. *Business Ethics Quarterly* 8(2):205-232.
- Foscht, T. and Swoboda, B. (2007). Käuferverhalten. Grundlagen, Perspektiven, Anwendungen. 3rd ed. Wiesbaden, Gabler.
- Fotopoulos, C. and Krystallis, A. (2003). Quality labels as a marketing advantage. The case of the "PDO Zagora" apples in the Greek market. *European Journal of Marketing* 37(10):1350-1374.
- Fødevarestyrelsens vejledning om økologiske fødevarer m.v. of July 2009.
- Gao, Z. and Schroeder, T.C. (2009). Effects of label information on consumer willingness-to-pay for food attributes. *American Journal of Agricultural Economics* 91(3):795-809.
- Gläser, J. and Laudel, G. (2006). Experteninterviews und qualitative Inhaltsanalyse. 2nd ed. Wiesbaden, VS Verlag für Sozialwissenschaften.
- Golan, E., Kuchler, F. and Mitchell, L. (2001). Economics of food labeling. *Journal of Consumer Policy* 24(2):117-184.
- Gracia, A. and Magistris, T. de (2008). The demand for organic foods in the South of Italy: A discrete choice model. *Food Policy* 33(6):386-396.
- Greenbaum, T.L. (2000). Moderating focus groups. A practical guide for group facilitation. Thousand Oaks et al., Sage Publications.
- Grolleau, G. and Caswell, J.A. (2006). Interaction between food attributes in markets: The case of environmental labeling. *Journal of Agricultural and Resource Economics* 31(3):471-484.
- Grunert, K.G. (2005). Food quality and safety: Consumer perception and demand. *European Review of Agricultural Economics* 32(3):369-391.
- Grunert, K.G., Juhl, H.J., Esbjerg, L., Boutrup Jensen, B., Bech-Larsen, T., Brunsø, K. and Øland Madsen, C. (2009). Comparing methods for measuring consumer willingness to pay for a basic and an improved ready made soup product. *Food Quality and Preference* 20(8):607-619.
- Hair, J., Black, W., Babin, B. and Anderson, R. (2010). Multivariate data analysis. 7th ed. Upper Saddle River, Pearson Prentice Hall.
- Hartmann, A. and Sattler, H. (2004). Wie robust sind Methoden zur Präferenzmessung? *Zeitschrift für betriebswirtschaftliche Forschung* 56(2):3-22.
- Hatanaka, M., Bain, C. and Busch, L. (2005). Third-party certification in the global agrifood system. *Food Policy* 30(3):354-369.
- Hensher, D.A., Rose, J.M. and Greene, W.H. (2005). Applied choice analysis. A primer. Cambridge, Cambridge University Press.
- Hensher, D.A. and Greene, W.H. (2003). The mixed logit model. The state of practice. *Transportation* 30(2):133-176.

- Hoefkens, C., Verbeke, W., Aertsens, J., Mondelaers, K. and van Camp, J. (2009). The nutritional and toxicological value of organic vegetables: Consumer perception versus scientific evidence. *British Food Journal* 111(10):1062-1077.
- Hoffman, E., Menkhous, D.J., Chakravarti, D., Field, R.A. and Whipple, G.D. (1993). Using laboratory experimental auctions in marketing research. A case study of new packaging for fresh beef. *Marketing Science* 12(3):318-338.
- Honkanen, P., Verplanken, B. and Olsen, S.O. (2006). Ethical values and motives driving organic food choice. *Journal of Consumer Behaviour* 5(5):420-430.
- Hoogland, C.T., de Boer, J. and Boersema, J.J. (2007). Food and sustainability: Do consumers recognize, understand and value on-package information on production standards? *Appetite* 49(1):47-57.
- Howard, J.A. and Sheth, J.N. (1969). *The theory of buyer behavior*. New York, John Wiley and Sons.
- Hughner, R.S., McDonagh, P., Prothero, A., Shultz II, C.J. and Stanton, J. (2007). Who are organic food consumers? A compilation and review of why people purchase organic food. *Journal of Consumer Behaviour* 6(2-3):94-110.
- Jacoby, J. (2002). Stimulus-Organism-Response reconsidered: An evolutionary step in modeling (consumer) behavior. *Journal of Consumer Psychology* 12(1):51-57.
- Jahn, G., Schramm, M. and Spiller, A. (2005). The reliability of certification: Quality labels as a consumer policy tool. *Journal of Consumer Policy* 28(1):53-73.
- Janssen, M. and Hamm, U. (2011a). Consumer preferences and willingness-to-pay for organic certification logos: Recommendations for actors in the organic sector. Report of the CERTCOST project. <http://www.certcost.org> (accessed 10.05.2011).
- Janssen, M. and Hamm, U. (2011b). Consumer perception of different organic certification schemes in five European countries. *Organic Agriculture* 1(1):31-43.
- Janssen, M., Heid, A. and Hamm, U. (2009). Is there a promising market 'in between' organic and conventional food? Analysis of consumer preferences. *Renewable Agriculture and Food Systems* 24(3):205-213.
- Jedidi, K. and Jagpal, S. (2009). Willingness to pay: Measurement and managerial implications. In Rao, V. R. (Ed.). *Handbook of pricing research in marketing*. Cheltenham, Edward Elgar, p. 37-60.
- Kroeber-Riel, W. and Weinberg, P. (2003). *Konsumentenverhalten*. 8th ed. München, Vahlen.
- Kroeber-Riel, W., Weinberg, P. and Gröppel-Klein, A. (2009). *Konsumentenverhalten*. 9th ed. München, Vahlen.
- Krystallis, A., Vassallo, M. and Chrysohoidis, G. (2008). Societal and individualistic drivers as predictors of organic purchasing revealed through a portrait value questionnaire (PVQ)-based inventory. *Journal of Consumer Behaviour* 7(2):164-187.
- Lamnek, S. (2005). *Gruppendiskussion*. 2nd ed. Weinheim, Beltz.
- Lancaster, K.J. (1966). A new approach to consumer theory. *Journal of Political Economy* 74(2):132-157.
- Langer, A., Eisend, M. and Kuß, A. (2008). Zu viel des Guten? Zum Einfluss der Anzahl von Ökolabels auf die Konsumentenverwirrtheit. *Marketing ZFP* 30(1):19-28.

- Layton, D.F. and Brown, G. (2000). Heterogeneous preferences regarding global climate change. *Review of Economics and Statistics* 82(4):616-624.
- Lea, E. and Worsley, T. (2005). Australians' organic food beliefs, demographics and values. *British Food Journal* 107(11):855-869.
- Lockshin, L., Jarvis, W., d'Hauteville, F. and Perrouy, J.P. (2006). Using simulations from discrete choice experiments to measure consumer sensitivity to brand, region, price, and awards in wine choice. *Food Quality and Preference* 17(3-4):166-178.
- Loureiro, M.L., McCluskey, J.J. and Mittelhammer, R.C. (2001). Assessing consumer preferences for organic, eco-labeled, and regular apples. *Journal of Agricultural and Resource Economics* 26(2):404-416.
- Loureiro, M.L. and Umberger, W.J. (2007). A choice experiment model for beef: What US consumer responses tell us about relative preferences for food safety, country-of-origin labeling and traceability. *Food Policy* 32(4):496-514.
- Louviere, J.J., Hensher, D.A. and Swait, J.D. (2000). *Stated choice methods. Analysis and application*. Cambridge, Cambridge University Press.
- Lusk, J.L. and Schroeder, T.C. (2004). Are choice experiments incentive compatible? A test with quality differentiated beef steaks. *American Journal of Agricultural Economics* 86(2):467-482.
- Magnusson, M.K., Arvola, A., Koivisto Hursti, U., Åberg, L. and Sjöden, P. (2001). Attitudes towards organic foods among Swedish consumers. *British Food Journal* 103(3):209-226.
- Mayerhofer, W. (2007). Das Fokusgruppeninterview. In Buber, R. and Holzmüller, H. (Eds.). *Qualitative Marktforschung. Konzepte, Methoden, Analysen*. Wiesbaden, Gabler, p. 477-490.
- Mayring, P. (2003). *Qualitative Inhaltsanalyse*. 8th ed. Weinheim, Beltz.
- Mayring, P. and Brunner, E. (2007). *Qualitative Inhaltsanalyse*. In Buber, R. and Holzmüller, H. (Eds.). *Qualitative Marktforschung. Konzepte, Methoden, Analysen*. Wiesbaden, Gabler, p. 669-680.
- McCluskey, J.J. (2000). A game theoretic approach to organic foods: An analysis of asymmetric information and policy. *Agricultural and Resource Economics Review* 29(1):1-9.
- McEachern, M.G. and Warnaby, G. (2008). Exploring the relationship between consumer knowledge and purchase behaviour of value-based labels. *International Journal of Consumer Studies* 32(5):414-426.
- McFadden, D. (1974). Conditional logit analysis of qualitative choice behaviour. In Zarembka, P. (Ed.). *Frontiers in Econometrics*. New York, Academic Press, p. 105-142.
- Meffert, H., Burmann, C. and Kirchgeorg, M. (2008). *Marketing. Grundlagen marktorientierter Unternehmensführung*. Wiesbaden, Gabler.
- Ministère de l'agriculture et de la pêche (2009). Rules governing the use of the "AB" mark. www.agencebio.org/upload/pagesEdito/fichiers/AB_mark_rules_2009.pdf (accessed 15.04.2011).
- Ministère de l'agriculture et de la pêche (2010). Cahier des charges concernant le mode de production biologique d'animaux d'élevage et complétant les dispositions des règlements (CE) no 834/2007 du Conseil et (CE) no 889/2008 de la Commission. Homologué par

- l'arrete interministériel du 5 janvier 2010, Official Journal of the French Republic (15.01.2010).
- Mitchell, R. and Carson, R. (1989). Using surveys to value public goods: The contingent valuation method. Washington, Resources for the Future.
- Moussa, S. and Touzani, M. (2008). The perceived credibility of quality labels: A scale validation with refinement. *International Journal of Consumer Studies* 32(5):526-533.
- Mruck, K. and Mey, G. (2007). Der Beitrag qualitativer Methodologie und Methodik zur Marktforschung. In Buber, R. and Holzmüller, H. (Eds.). *Qualitative Marktforschung. Konzepte, Methoden, Analysen*. Wiesbaden, Gabler, p. 21-46.
- Müller, M. and Hamm, U. (2001). Verbrauchereinstellungen beim Einkauf von Lebensmitteln in Mecklenburg-Vorpommern. *Schriftenreihe der Fachhochschule Neubrandenburg, Reihe A, Fachbereich Agrarwirtschaft und Landespflge*, Vol. 14.
- Napolitano, F., Braghieri, A., Piasentier, E., Favotto, S., Naspetti, S. and Zanolì, R. (2010). Effect of information about organic production on beef liking and consumer willingness to pay. *Food Quality and Preference* 21(2):207-212.
- Naspetti, S. and Zanolì, R. (2005). Consumers' knowledge of organic quality marks. In Köpke, U., Niggli, U., Neuhoﬀ, D., Cornish, P., Lockeretz, W. and Willer, H. (Eds.). *Researching sustainable systems. Proceedings of the 1st scientific conference of the International Society of Organic Agriculture Research (ISO FAR), 21-23 September 2005, Adelaide, South Australia*. Research Institute of Organic Agriculture FiBL, Frick, International Society of Organic Agriculture Research (ISO FAR), c/o Institute of Organic Agriculture University of Bonn, 394-396.
- Naspetti, S. and Zanolì, R. (2009). Organic food quality and safety perception throughout Europe. *Journal of Food Products Marketing* 15(3):249-266.
- Naturland e.V. (2009). Naturland. Verband für ökologischen Landbau e.V. http://www.naturland.de/ueber_naturland.html (accessed 11.08.2009).
- Ness, M.R., Ness, M., Brennan, M., Oughton, E., Ritson, C. and Ruto, E. (2010). Modelling consumer behavioural intentions towards food with implications for marketing quality low-input and organic food. *Food Quality and Preference* 21(1):100-111.
- Nieschlag, R., Dichtl, E. and Hörschgen, H. (2002). *Marketing*. Berlin, Duncker und Humblot.
- Öko-Kennzeichengesetz: Gesetz zur Einführung und Verwendung eines Kennzeichens für Erzeugnisse des ökologischen Landbaus vom 10. Dezember 2001, neugefasst durch Bekanntmachung vom 20. Januar 2009. In *BGBl. I*, p.78.
- Padel, S. and Foster, C. (2005). Exploring the gap between attitudes and behaviour: Understanding why consumers buy or do not buy organic food. *British Food Journal* 107(8):606-625.
- Padel, S., Schaack, D. and Willer, H. (2009). Development of the organic market in Europe. In Willer, H. and Kilcher, L. (Eds.). *The world of organic agriculture. Statistics and emerging trends 2009*. Bonn, IFOAM, Frick, FiBL, Geneva, ITC, 155-163.
- Papaoikonomou, E., Ryan, G. and Ginieis, M. (2011). Towards a holistic approach of the attitude behaviour gap in ethical consumer behaviours: Empirical evidence from Spain. *International Advances in Economic Research* 17(1):77-88.

- Pieniak, Z., Aertsens, J. and Verbeke, W. (2010). Subjective and objective knowledge as determinants of organic vegetables consumption. *Food Quality and Preference* 21(6):581-588.
- Pleon (2008). *Ökobarometer 2008. Repräsentative Bevölkerungsbefragung im Auftrag des Bundesministeriums für Ernährung, Landwirtschaft, und Verbraucherschutz.* http://www.oekolandbau.de/fileadmin/redaktion/dokumente/journalisten/publikationen/O_Ekobarometer_Ergebnisse_2008_barrierearm.pdf (accessed 11.08.2009).
- Przyborski, A. and Wohlrab-Sahr, M. (2008). *Qualitative Sozialforschung. Ein Arbeitsbuch.* München, Oldenbourg Verlag.
- Revelt, D. and Train, K. (1998). Mixed logit with repeated choices: Households' choices of appliance efficiency level. *Review of Economics and Statistics* 80(4):647-657.
- Richardson, P.S., Dick, A.S. and Jain, A.K. (1994). Extrinsic and Intrinsic Cue Effects on Perceptions of Store Brand Quality. *Journal of Marketing* 58(4):28-36.
- Rigby, D., Balcombe, K. and Burton, M. (2009). Mixed logit model performance and distributional assumptions: Preferences and GM foods. *Environmental and Resource Economics* 42(3):279-295.
- Ritchie, J., Spencer, L. and O'Connor, W. (2006). Carrying out qualitative analysis. In Ritchie, J. and Lewis, J. (Eds.). *Qualitative research practice.* London, Sage Publications, p. 219-262.
- Roe, B. and Sheldon, I. (2007). Credence good labeling. The efficiency and distributional implications of several policy approaches. *American Journal of Agricultural Economics* 89(4):1020-1033.
- Sattler, H. and Hensel-Börner, S. (2000). A comparison of conjoint measurement with self-explicated approaches. In Gustafsson, A., Herrmann, A. and Huber, F. (Eds.). *Conjoint measurement. Methods and applications.* Berlin et al., Springer, p. 121-133.
- Sattler, H. and Nitschke, T. (2003). Ein empirischer Vergleich von Instrumenten zur Erhebung von Zahlungsbereitschaften. *Zeitschrift für betriebswirtschaftliche Forschung* 55(6):364-381.
- Sawyer, E.N., Kerr, W.A. and Hobbs, J.E. (2008). Consumer preferences and the international harmonization of organic standards. *Food Policy* 33(6):607-615.
- Sawyer, E.N., Kerr, W.A. and Hobbs, J.E. (2009). International marketing of organic foods: Consumers, standards, and harmonization. *Journal of International Food & Agribusiness Marketing* 21(1):44-66.
- Scarpa, R., Thiene, M. and Marangon F. (2007). The value of collective reputation for environmentally-friendly production methods: The case of Val di Gresta. *Journal of Agricultural & Food Industrial Organization* 5(1):1-26.
- Scarpa, R., Thiene, M. and Train, K. (2008). Utility in willingness to space: A tool to address confounding random scale effects in destination choice to the Alps. *American Journal of Agricultural Economics* 90(4):994-1010.
- Schaack, D., Willer, H. and Padel, S. (2011). The organic market in Europe. In Willer, H. and Kilcher, L. (Eds.). *The world of organic agriculture. Statistics and emerging trends 2011.* FiBL-IFOAM Report. Bonn, IFOAM, Frick, FiBL, p. 156-159.
- Scherer, K. (2005). What are emotions? And how can they be measured? *Social Science Information* 44(4):695-729.

- Schulze, H., Jahn, G., Neuendorff, J. and Spiller, A. (2008). Die Öko-Zertifizierung in Deutschland aus Sicht der Produzenten: Handlungsvorschläge zur politischen Weiterentwicklung. *Berichte über Landwirtschaft* 86(3):502-534.
- Shao, A.T. and Zhou, K.Z. (2007). *Marketing research. An aid to decision making*. 3rd ed. Mason, Thomson.
- Simon, H. and Fassnacht, M. (2009). *Preismanagement*. 3rd ed. Wiesbaden, Gabler.
- Skiera, B. and Revenstorff, I. (1999). Auktionen als Instrument zur Erhebung von Zahlungsbereitschaften. *Zeitschrift für betriebswirtschaftliche Forschung* 51(3):224-242.
- Slovic, P. (1995). The construction of preference. *American Psychologist* 50(5):364-371.
- Snape, D. and Spencer, L. (2006). The foundations of qualitative research. In Ritchie, J. and Lewis, J. (Eds.). *Qualitative research practice*. London, Sage Publications, p. 1-23.
- Soil Association Ltd. (2010). Organic standards. <http://www.sacert.org/Standards/tabid/1084/language/en-GB/Default.aspx> (accessed 26.04.2011).
- Soler, F. and Gil, J. (2002). Consumers' acceptability of organic food in Spain. Results from an experimental auction market. *British Food Journal* 104(8):670-687.
- Solomon, M., Bamossy, G., Askegaard, S. and Hogg, M.K. (2006). *Consumer behaviour. A European perspective*. 3rd ed. Harlow et al., Prentice Hall.
- Spiller, A. (1996). *Ökologieorientierte Produktpolitik. Forschung, Medienberichte und Marktsignale*. Marburg, Metropolis-Verlag.
- Spiller, A. (1999). *Umweltbezogenes Wissen der Verbraucher: Ergebnisse einer empirischen Studie und Schlußfolgerungen für das Marketing*. Diskussionsbeitrag des Fachbereichs Wirtschaftswissenschaften der Universität Duisburg, Nr. 264. Duisburg.
- Spiller, A., Enneking, U. and Lüth, M. (2004). *Analyse des Kaufverhaltens von Selten- und Gelegenheitskäufern und ihrer Bestimmungsgründe für/gegen den Kauf von Öko-Produkten*. Abschlussbericht. Georg-August-Universität Göttingen, Lehrstuhl Marketing für Lebensmittel und Agrarprodukte, Technische Universität München, Fachgebiet für Marktlehre der Agrar- und Ernährungswirtschaft. <http://orgprints.org/4201/> (accessed 02.05.2008).
- Spiller, A., Theuvsen, L., Franz, A., Deimel, I., Meyer, M. von and Zühlsdorf, A. (2010). *Animal-Welfare als Profilierungsinstrument*. *Fleischwirtschaft* 2010(3):74-76.
- Statistisches Bundesamt (2008). *Statistisches Jahrbuch 2008. Für die Bundesrepublik Deutschland*. Wiesbaden, Statistisches Bundesamt.
- Stockebrand, N., Berner, N.S. and Spiller, A. (2009). *Verknüpfung regionaler Beschaffungskonzepte mit innovativen regionalen Marketingansätzen (Kooperatives Erzeuger-Handels-Konzept/KEHK)*. Abschlussbericht. Georg-August-Universität Göttingen, Department für Agrarökonomie und Rurale Entwicklung, Lehrstuhl Marketing für Lebensmittel und Agrarprodukte. <http://orgprints.org/16111/> (accessed 20.03.2011).
- Stolz, H., Bodini, A., Stolze, M., Hamm, U. and Richter, T. (2009). *Lebensmittelqualität aus der Verbraucherperspektive. Eine Synthese qualitativer Studien zur Wahrnehmung und Beurteilung verschiedener Qualitätskriterien bei Öko-Produkten*. *Berichte über Landwirtschaft* 87(1):153-182.
- Tagbata, D. and Sirieix, L. (2008). Measuring consumers' willingness to pay for organic and Fair Trade products. *International Journal of Consumer Studies* 32(5):479-490.

- Tanner, B. (2000). Independent assessment by third-party certification bodies. *Food Control* 11(5):415-417.
- Teisl, M.F. and Roe, B. (1998). The economics of labeling: An overview of issues for health and environmental disclosure. *Agricultural and Resource Economics Review* 27(2):140-150.
- Teratanavat, R. and Hooker, N.H. (2006). Consumer valuations and preference heterogeneity for a novel functional food. *Journal of Food Science* 71(7):533-541.
- Thomas, W.I. and Thomas, D.S. (1928). *The child in America: Behavior problems and programs*. New York, Knopf.
- Thurstone, L.L. (1987). Psychophysical analysis. By L. L. Thurstone, 1927. *American Journal of Psychology* 100(3-4):587-609.
- Tietzel, M. and Weber, M. (1991). Von Betrügern, Blendern und Opportunisten. Eine ökonomische Analyse. *Zeitschrift für Wirtschaftspolitik* 40(2):109-137.
- TNS Opinion & Social (2009). Eurobarometer 72. Public opinion in the European Union. http://ec.europa.eu/public_opinion/archives/eb/eb72/eb72_first_en.pdf (accessed 31.05.2010).
- Toler, S., Briggeman, B.C., Lusk, J.L. and Adams, D.C. (2009). Fairness, farmers markets, and local production. *American Journal of Agricultural Economics* 91(5):1272-1278.
- Trommsdorff, V. (2009). *Konsumentenverhalten*. 7th ed. Stuttgart, Kohlhammer.
- Van Loo, E., Caputo, V., Nayga, R., Meullenet, J. and Ricke, S. (2011). Consumers' willingness to pay for organic chicken breast: Evidence from choice experiment. *Food Quality and Preference* 22(7):603-613.
- Vanclay, J., Shortiss, J., Aulsebrook, S., Gillespie, A., Howell, B., Johanni, R., Maher, M., Mitchell, K., Stewart, M. and Yates, J. (2011). Customer response to carbon labelling of groceries. *Journal of Consumer Policy* 34(1):153-160.
- Verbeke, W. (2005). Agriculture and the food industry in the information age. *European Review of Agricultural Economics* 32(3):347-368.
- Verbeke, W. (2008). Impact of communication on consumers' food choices. *Proceedings of the Nutrition Society* 67(3):281-288.
- Verordnung (EG) Nr. 510/2006 des Rates vom 20. März 2006 zum Schutz von geografischen Angaben und Ursprungsbezeichnungen für Agrarerzeugnisse und Lebensmittel. *Official Journal of the European Union*, L 93 (31.03.2006), p. 1-20.
- Verordnung (EG) Nr. 834/2007 des Rates vom 28. Juni 2007 über die ökologische/biologische Produktion und die Kennzeichnung von ökologischen/biologischen Erzeugnissen und zur Aufhebung der Verordnung (EWG) Nr. 2092/91. *Official Journal of the European Union*, L189 (20.07.2007), p. 1-122.
- Verordnung (EWG) Nr. 2092/91 des Rates vom 24. Juni 1991 über den ökologischen Landbau und die entsprechende Kennzeichnung der landwirtschaftlichen Erzeugnisse und Lebensmittel. *Official Journal of the European Union*, L198 (22.07.1991), p. 1-15.
- Völckner, F. (2006a). An empirical comparison of methods for measuring consumers' willingness to pay. *Marketing Letters*(17):137-149.
- Völckner, F. (2006b). Methoden zur Messung individueller Zahlungsbereitschaften: Ein Überblick zum State of the Art. *Journal für Betriebswirtschaft* 56(1):33-60.

- Wang, T., Venkatesh, R. and Chatterjee, R. (2007). Reservation price as a range: An incentive-compatible measurement approach. *Journal of Marketing Research* 44(2):200-213.
- Wertenbroch, K. and Skiera, B. (2002). Measuring consumers' willingness to pay at the point of purchase. *Journal of Marketing Research* 39(2):228-241.
- Wier, M., O'Doherty Jensen, K., Andersen, L.M. and Millock, K. (2008). The character of demand in mature organic food markets: Great Britain and Denmark compared. *Food Policy* 33(5):406-421.
- Wilson, R. and Gilligan, C. (2005). *Strategic marketing management. Planning, implementation and control*. 3rd ed. Oxford et al., Elsevier, Butterworth-Heinemann.
- Wirthgen, A. (2005). Consumer, retailer, and producer assessments of product differentiation according to regional origin and process quality. *Agribusiness* 21(2):191-211.
- Yiridoe, E.K., Bonti-Ankomah, S. and Martin, R.C. (2005). Comparison of consumer perceptions and preference toward organic versus conventionally produced foods: A review and update of the literature. *Renewable Agriculture and Food Systems* 20(4):193-205.
- Zander, K., Hamm, U., Freyer, B., Gössinger, K., Hametter, M., Naspetti, S., Padel, S., Stolz, H., Stolze, M. and Zanolli, R. (2010). *Farmer Consumer Partnerships. How to successfully communicate the values of organic food*. http://www.coreorganic.org/CO_results/2010_CORE_FCP_Handbook.pdf (accessed 28.04.2011).
- Zander, K. and Hamm, U. (2010). Consumer preferences for additional ethical attributes of organic food. *Food Quality and Preference* 21(5):495-503.

Annex

Table 26: Discussion guideline of the focus group study

Dur. (end)	Questions and topics	Probing / Hints	Objectives
10 min (10)	<p>1. Introduction</p> <p>Introduction by the moderator (<i>PowerPoint slide 1</i>):</p> <ul style="list-style-type: none"> - Welcome the participants and introduce the assistant as well as yourself as the moderator. - Introduce the topic in very general terms: European research project on organic food. - Explain the purpose of the focus groups: We are interested in the opinions of the participants and the variety of views; there are no right or wrong answers. The group discussion is not about coming to an agreement. We ask the participants to express their views also when they are different from other people's. - Explain the technical equipment (camera, tape and microphones). - Confirm anonymity and ask everyone to write their first name on the name plate. <p>Introduction of the participants:</p> <ul style="list-style-type: none"> - Address the first question to the participants: "I would now like to ask everyone to introduce themselves. Please say your first name. And let us briefly know how you recognise organic food when you go shopping? Who would like to start?" 	<p>Do NOT mention the project title CERTCOST nor the word 'organic standards'.</p> <p>Make sure everyone has introduced themselves.</p>	<p>To get to know each other.</p> <p>To get an idea of how consumers' recognise organic food.</p>
15 min (25)	<p>2. Awareness and perception of organic certification logos</p> <p>"We just heard how you recognise organic food when you go shopping. Now we would like to know <u>why</u> you look for those particular words, labels or symbols."</p> <p>"As part of this research project, we conducted a study in different food stores where we took a closer look at organic products and how those are labelled. These are some of the logos and labels that we found."</p>	<p>If participants ask the moderator why other labels (e.g. brand names) are not shown on the slide: "I will shortly answer your question, but</p>	<p>To explore consumers' awareness and perception of logos representing organic standards.</p>

Dur. (end)	Questions and topics	Probing / Hints	Objectives
	<p><i>Show PowerPoint slide 2.</i> <i>Point to the oval “the product is labelled just with the word ‘organic’”:</i> “Just to clarify, this is not a logo. By this we mean products that are labelled with the word ‘organic’ but without a logo.” “When you see these labels, do you prefer products with one of these labels over products with other labels that are shown here? If so, which ones do you prefer?”</p>	<p>at this stage, please only consider the logos on the slide.”</p> <p>If so: “Why do you prefer that one over the others?” If not: “Please provide reasons.”</p>	
15 min (40)	<p>3. Perception and knowledge of organic standards “The labels on the slide stand for particular organisations that have their own organic standards. Organic standards are rules that organic farmers and producers of organic food have to follow. We would now like to know: Are you aware of any differences in organic <u>standards</u> behind these labels that are <u>important to you</u>? In what way?” <i>Show PowerPoint slide 3.</i></p>	<p>If so: “Why are those important?” If participants ask the moderator about other labels (e.g. brand names) that are not organic certification logos, explain that the label is not a logo of an organisation with own organic standards.</p>	To explore consumers’ perception and knowledge of organic standards.
20 min (60)	<p>4. Market prices and willingness to pay for organic standards and logos “We would now like to talk about market prices for organic products. Do you think that there are price differences between products that are labelled with the different logos shown on the slide?” <i>Show PowerPoint slide 4.</i></p> <p>“Next, we are interested in what you would pay for products with different organic logos. We have prepared a handout for everyone that we are now giving out.” <i>Give out handouts and pens.</i> “Please imagine you want to buy 1 kilogramme of organic apples. In a food store, you find a selection of apples. The apples basically look the same but they are labelled with different logos. The apples that are labelled just with the word ‘organic’ cost € 1.99 [Insert correct price]. Please think about how much you would pay for the apples with the other logos and note down the prices in the empty boxes on the paper. We are not going to further discuss your answers in the group.” <i>Show PowerPoint slide 5. Collect the handouts.</i></p>	<p>If so: “Why do you think those are more expensive?” If not: “Why do you think there are no price differences?”</p>	To explore consumers’ perception and knowledge of price differences between products with different organic standards. To explore consumers’ willingness to pay for different organic standards.

Dur. (end)	Questions and topics	Probing / Hints	Objectives
15 min (75)	<p>5. Consumer views on the obligatory EU-logo [In Switzerland, this question is not included]</p> <p>“We have almost come to the end of the discussion. Finally, we would like to ask for your opinion on a current topic. From July 2010 on, there will be an EU-wide organic logo. All organic products that are produced or processed in the EU <u>must</u> carry this obligatory logo. Next to the logo, it must be declared where the agricultural raw materials of which the product is composed have been farmed. That will probably look like this (<i>Show PowerPoint slide 6</i>): “EU Agriculture” if farmed in the EU, “non-EU Agriculture” if farmed outside the EU” and “EU/non-EU” if the agricultural raw materials have been farmed partly in the EU and partly outside the EU. How the logo will look like has not been decided yet. The EU logo will be obligatory. In addition, further organic logos can be used.</p> <p>What do you think about such an obligatory EU-wide logo – do you welcome the logo or do you see any problems?”</p> <p>“We have a further question regarding the new EU-logo. In the case where all agricultural raw materials of which the product is composed have been farmed in the same country, the terms “EU” or “non-EU” may be replaced by the name of this country. Does this fact change your opinion about the EU-logo? If so, in what way?” <i>Show PowerPoint slide 7.</i></p>	<p>If participants ask the moderator more about the new logo, only provide facts on the logo and the Regulation but not on the reasons why it is introduced.</p> <p>Ask for reasons why they welcome the logo or why they see problems.</p>	<p>To explore consumers’ views on the obligatory EU-logo.</p>
10 min (85)	<p>6. Ending the discussion</p> <ul style="list-style-type: none"> - End the discussion but do not finish too abrupt, e.g. ask “Anything else to mention?” or “Anything we have left out?” - Finally thank the participants and emphasise that the discussion was very helpful. <i>Show PowerPoint slide 8.</i> - Clarify organisational details such as payment of allowances. 		<p>To end the discussion and thank the participants.</p>

Figure 11: Questionnaire form of the quantitative study

Questionnaire choice experiments and interviews

Interviewer please note: Directions in italics are not to be read out loud!

“Good morning/afternoon, my name is [...]. I am working for [the respective organisation] on a consumer study supported by a public funding body. The study deals with consumers’ views on food. May I ask you a few questions?”

Do not mention that the study is funded by the EU.

PART I: Screening questions

Do not mention the cash-incentive and the choice experiments before Part II.

1. Are you mainly or co-responsible for buying food in your household?

(The person should be responsible for at least appr. half of the food purchases.)

- Yes No → *thank respondent and close interview*

When asking the following questions, read out the answer categories unless otherwise stated.

2. How often do you buy organic apples?

- Never → *thank respondent and close interview*
 Less than once per month → *thank respondent and close interview*
 About once or twice per month
 About once per week
 Several times per week

3. How often do you buy organic eggs?

- Never → *thank respondent and close interview*
 Less than once per month → *thank respondent and close interview*
 About once or twice per month
 About once per week
 Several times per week

4. How do you recognise organic food when you go shopping?

Not to be read out loud: *Correct answers are*

- Organic certification logo, e.g. national logo, EU logo, farmers’ association logo, inspection body logo
- Code number of the certification body
- Organic private labels
- The word ‘organic’ on the package/price tag
- “I buy in specialised organic food stores.”

If none of the above is mentioned, thank respondent and close interview.

5. Gender (Interviewer fill in without asking)

- female male

6. Which of the following age groups do you belong to?

- 18 to 44 years
 45 to 75 years
 None of the above → *thank respondent and close interview*

Check the quotas. Close the interview if one of the quotas is already fulfilled.

PART II: Choice experiments

I would like to ask you some further questions. The interview takes no more than 15 minutes. For your participation you would receive 10 Euro. All data will be analysed anonymously and used for scientific research only. Would you be willing to participate?

- Yes
 No → *thank respondent and close interview*

Please imagine you want to buy apples and eggs. On this table/shelf, you can see different products. There are always four products next to each other. For each set, please decide which of the four products you want to buy. There are no right or wrong decisions. If you do not like any of the offered products, it is also okay not to buy any. Like in a real shop, you receive the apples and eggs that you bought and you have to pay for the products. The amount you have to pay will be subtracted from the incentive that you get for participating.

There are two sets of apples and two of eggs. Please decide for each set, which of the four products you want to buy. Afterwards, we randomly choose which of the two buying decisions is binding, that means you have to buy those apples and eggs. Do you have any questions?

Then I would like to ask you to buy apples and eggs. Please mark the chosen products with a sticker.

Interviewer: Hand out the stickers (post-it notes). Fill in the block number and note down the choices in the table below by ticking the respective box and noting down the price of the chosen product (the prices of the other products do not need to be noted down).

Attention: Do not mix up Set 1 and 2!

Block number: _____

Apples Set no.	Label 1	Label 2	Label 3	Label 4 (No logo)	No product chosen
A1	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/>
A2	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/>

Eggs Set no.	Label 1	Label 2	Label 3	Label 4 (No logo)	No product chosen
E1	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/>
E2	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/>

PART III: Interview

Thank you very much. I would now like to ask you some questions.

Ask the following question ONLY if the participant has not chosen any apples (i.e. in both sets of apples, the participant did not choose a product):

7. Why didn't you choose any of the offered apples?

Do not read out the answer categories (multiple answers possible)

I do not like the variety/sort

I do not like the look of the apples

I do not want any apples at the moment

The apples are too expensive

Other. Please specify: _____

If you had to choose one kind of the offered apples, which of the four would you choose in each set?

Set number	Label 1	Label 2	Label 3	Label 4 (No logo)	No product chosen
A1	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/>
A2	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/>

Ask the following question ONLY if the participant has not chosen any eggs (i.e. in both sets of eggs, the participant did not choose a product):

8. Why didn't you choose any of the offered eggs?

Do not read out the answer categories (multiple answers possible)

I do not like the look of the package/eggs

I do not want any eggs at the moment

The eggs are too expensive

Other. Please specify: _____

If you had to choose one of the offered packages of eggs, which of the four would you choose in each set?

Set number	Label 1	Label 2	Label 3	Label 4 (No logo)	No product chosen
E1	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/>
E2	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/> Price:	<input type="radio"/>

On these cards, you can see different labels. The following questions refer to these labels.

Interviewer: Show the label cards and the sheets for Question 9 to 15 (always in this order) (Figure 12, Annex p. 172). Never mention the name of the labels and do not explain what the labels stand for. Read out Question 9. and add the following information:

“Please place each label on one of the fields of the scale. You can place several labels on the same field.”

Note down the ratings for each of the labels in the table below. Read out the next question. Note down the ratings in the table below. Repeat this procedure for all the seven questions.

If a participant asks the interviewer about the difference between ‘standards’ and ‘control’, the interviewer should answer along the lines of “Question 12 refers to the standards and Question 13 refers to the control/inspection of compliance with the standards.”

Questions	Label 1	Label 2	Label 3	Label 4 (No logo)
9. Well-known				
10. Trust				
11. Real organic				
12. Standards				
13. Control/inspection				
14. Domestic origin				
15. Different from others				

Please read the following information and answer the questions below.

From July 2010 on, there will be a new logo for organic food in all the member states of the European Union. The new logo replaces the old EU organic logo. All prepacked organic products that are produced or processed in the EU must carry the new mandatory logo. What the logo will look like has not yet been finally decided. In addition to the new EU organic logo, further organic logos can be used.

Next to the new logo, it must be declared where the agricultural raw materials of which the product is composed have been farmed. That will probably look like this:

- “EU Agriculture” if farmed in the EU,
- “non-EU Agriculture” if farmed outside the EU and
- “EU/non-EU agriculture” if the agricultural raw materials have been farmed partly in the EU and partly outside the EU.
- In the case where all agricultural raw materials have been farmed in the same country, the name of this country can be indicated.

In the table below, you can see different statements. Please indicate your level of agreement with the statements by ticking the respective number. 1 stands for “I strongly disagree”, 4 stands for “I neither agree nor disagree” and 7 stands for “I strongly agree”.

	I strongly disagree			I neither agree nor disagree			I strongly agree
16. Without a mandatory EU organic logo, some food products are hard to identify as organic at the point of sale.	1	2	3	4	5	6	7
17. The EU generates nothing but bureaucracy.	1	2	3	4	5	6	7
18. It is unnecessary to use other organic logos in addition to the mandatory EU organic logo.	1	2	3	4	5	6	7
19. I have great trust in the organic standards behind an EU-wide organic logo.	1	2	3	4	5	6	7
20. For food products, I think the indication “EU” or “non-EU”, without the country of origin, is sufficient.	1	2	3	4	5	6	7
21. It is a good idea to have an EU-wide logo for certified* organic products.	1	2	3	4	5	6	7
22. There are more than enough organic logos already and a new, mandatory organic logo will just add complexity to the market.	1	2	3	4	5	6	7
23. I have great trust in the inspection system behind an EU-wide organic logo.	1	2	3	4	5	6	7
24. It is a good idea to have the same minimum standards for organic products all over the EU.	1	2	3	4	5	6	7
25. I welcome the fact that the new EU organic label differentiates between “EU agriculture” and “non-EU agriculture”.	1	2	3	4	5	6	7

Finally please fill in some general questions that will help us with our analyses.

26. Please estimate roughly the share of organic products in your total expenditure for food and beverages.

- 0 to 10 %
- 11 to 20 %
- 21 to 30 %
- 31 to 40 %
- 41 to 50 %
- 51 to 60 %
- 61 to 70 %
- 71 to 80 %
- 81 to 90 %
- 91 to 100 %

27. Where do you mainly buy organic food? (Multiple answers possible)

- Organic shop or supermarket selling organic products only
- Conventional supermarket → Which? Name of chain _____
- Discount store → Which? Name of chain _____
- At the market / farmers' market
- Directly from the farm (farm shops and farmers' box schemes, mail order)
- Speciality shops (like bakeries, butchers, fruit and vegetable shops / green grocers)
- Health food shops
- Other places → Which? _____

28. How many persons including yourself live in your household?

(If you are living in a shared flat, e.g. as a student, please insert "1")

Number _____

29. What education do you have? Please indicate the highest level of education you obtained. [Example UK]

- No formal qualification
- GCSE (about 10 years of school visit)
- A level (12 or 13 years of school visit)
- College or university degree (BSc, BA, MSc, MA, PhD)

30. What is your monthly net household income? That is the amount of money (after tax) that all members of the household can spend every month.

[Example Germany]

- up to below 600 €
- from 600 € up to below 1,200 €
- from 1,200 € up to below 1,800 €
- from 1,800 € up to below 2,400 €
- from 2,400 € up to below 3,000 €
- from 3,000 € up to below 3,600 €
- from 3,600 € up to below 4,200 €
- from 4,200 € up to below 4,800 €
- from 4,800 € up to below 5,400 €
- 5,400 € or more

31. In what year were you born? year _____

Thank you very much for participating in this interview!

Comments of the interviewer:

Interviewer, thank the participants and inform them about the cash-incentive:

Thank you very much for participating in our study. Finally, I need to inform you that we cannot actually give you the products that you chose in the experiments. We are very sorry, but we could not get apples and eggs with all those different labels. Instead you receive the incentive without any deductions.

Hand out the money/voucher and let the participant sign a receipt.

Interviewer, please fill in:

Date of the interview: _____

Location of the interview (which shop): _____

Name of the interviewer: _____

Participant ID: _____

Interviewer, please update the list that records how often the different blocks have already been used. Also update the list that keeps track of the gender and age quotas.

Figure 12: Example of a label rating sheet used in the interviews¹

Please rate the labels on the following scale.

This label is completely unknown to me						This label is well-known to me
1	2	3	4	5	6	7

¹ The logos tested in the choice experiments were printed on cards. The participants were asked to place the logo cards on the sheet. In the interviews, the participants were shown a sheet like this for each rating question.

Figure 13: Consumer beliefs about organic logos indicating domestic origin