

# Organic Farming Certification – the Costs of Reducing Transaction Costs

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**Abstract** - Since 1991, the European Union regulates the organic food market. By implementing the organic regulation and the corresponding inspection and certification system, organic markets were fostered, but the financial costs and bureaucratic drift of this system are controversial. Up to now, there exist only very rough estimates of the overall burden of organic producers, mostly considering only the cash costs and neglecting opportunity costs of the certified entities, which are likely to be of considerable magnitude. As a first step in approximating the amount of these costs, this paper uses the concept of Transaction Costs in order to identify and structure the relevant cost types. The quantification of this concept needs data which will soon become available.<sup>1</sup>

## INTRODUCTION

Organic food products are credence goods (Darby/Karny, 1973). This categorisation refers to buyers' information costs required to check a product's quality. Organic quality is the result of a process standard comparable to social or sustainability standards. Reference is made to the production process and therefore the adherence to the standard cannot be tested on the product directly. Even after buying and consuming an organic food product, one cannot evaluate the good's attributes in this respect. Thus, the information costs on organic markets are relatively high because monitoring the production process is quite laborious and expensive. This results in considerable transaction costs, the costs related to the exchange of a good (Williamson, 1985).

Transaction costs can be reduced by implementing an organic standard against which products are inspected and certified. By the implementation of such a certification system, the existence of the organic market is assured and transaction costs are lowered, but such a system induces substantial costs again. An estimate on the organic certification services share as part of producers' total certification burden amounts to 1.5% of organic retail turnover (Rundgren, 2001). For the year 2006, this would equal only cash-based costs around 200 Mio. € for European organic producers' certification.<sup>2</sup> The overall costs (cash-based and especially opportunity costs) of organic certification are mentioned as a major reason why organic farms are reconverted to conventional (e.g. Løes et al., 2008).

In order to prepare an estimation of the costs of the organic certification system, this paper aims at structuring and defining the different types of transaction costs specifically relevant to organic producers. The costs of organic certification shall then be estimated on European level in the framework of the project CERTCOST (Dabbert et al., 2008).<sup>3</sup>

## METHODOLOGICAL APPROACH

First, a literature analysis of publications on transaction cost measurement and the structure of the costs of market exchange is performed. Second, based on the results of the literature analysis and the theoretical concepts of New Institutional Economics, particularly Transaction Cost Economics, a system of the costs connected to organic foods' certification is developed by means of a heuristical approach.

## LITERATURE ANALYSIS

The concept of Transaction Cost Economics generally is widely applied in different areas. Empirical application in terms of exemplary breakdown or even cost estimation, however, can rarely be found (Richter/Furubotn, 2003). Wang (2003) provides a short, but comprehensive overview on the diverse utilisation of transaction cost measurements in different economic fields.

Comparable studies to this paper and the goals of the project CERTCOST are not known, neither in regard to the level nor the sector of analysis. Fundamental workings in transaction cost economics are discussed and interpreted in the textbook "Neue Institutionenökonomik" by Richter/Furubotn (2003).

## TRANSACTION COSTS

### *Occurrence and types of Transaction Costs*

The term transaction costs for this study will be defined as the cost related to the exchange of an organic food product not including the cost of the good itself.<sup>4</sup> Transaction costs occur in different forms and with specific characteristics: they can either be variable or fix, appear as cash relevant or as opportunity costs. Basic categories of transaction costs are market, managerial and political transaction costs (Richter/Furubotn, 2003).

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<sup>2</sup> Zentrale Markt- und Preisberichtsstelle (ZMP, 8.2.2008) reports the turnover of the European organic market to be 14,6 billion € in 2006.

<sup>3</sup> The EU funded project CERTCOST is starting autumn 2008 and will be coordinated by the Institute for Farm Management of the Universität Hohenheim, Prof. Dr. Stephan Dabbert.

<sup>4</sup> For the multitude of transaction costs' definitions, please consult Richter/Furubotn (2003).

### *Market Transaction Costs*

The most important category for organic certification systems is market transaction costs. These are defined as costs of using the market as point of exchange. In general, four categories of market transaction costs are distinguished:

1. Search and information costs,
2. bargaining and decision costs,
3. supervision and enforcement costs and, finally,
4. costs for investments in social relations (Richter/Furubotn, 2003).

### *Political Transaction Costs*

Any transaction, either intra-firm or market transaction, occurs in a well designed institutional system of a polity. Setting up, maintaining and changing this system is costly (Richter/Furubotn, 2003). A good and up-to-date example for a small fragment of these costs, are the public but also private resources spent in the process of revising EEC regulation no. 2092/91 and deciding on EEC regulation no. 834/2007 on organic production and labelling.

### *Managerial Transaction Costs*

Managerial transaction costs represent the intra-firm costs related to the exchange of a good. At present, we assume that there is no difference in these costs between organic and conventional farms.

## TRANSACTION COSTS OF ORGANIC CERTIFICATION

Organic certification systems intend to lower market transaction costs by providing reliable certification. Pivotal is consumers' trust in the organic quality when they shop organic. Therefore, market transaction costs related to the exchange of a good between a farmer or retailer and the consumer are considered most important. The specific costs of using the organic market will be structured in the following part from the viewpoint of a farmer.

### *Search and information costs*

The farmer has to find a buyer and exchange information on the good, e.g. its quality, and the buyer, e.g. its credibility or its solvency. In this regard, there exists only a small difference in search and information costs between non-organic and organic markets. Specific for organic farming is the duty to follow changing requirements of standards. Since organic farmers' possibilities using inputs like fertilisers are limited, search and information costs are assumed to be higher.

### *Bargaining and decision costs*

This cost category is considered to be of similar magnitude in transactions of organic and non-organic products. These transactions most likely do not differ concerning the costs incurred.

### *Supervision and enforcement costs*

The category of supervision and enforcement costs, however, are unique in the organic product case. A compulsory system of supervision and enforcement for the organic market, the inspection and certification system, has been designed and implemented by the EU organic regulation (EEC regulation no.

2092/91). This system ties up market access to ex-ante inspection and certification. Hereby, the duty of supervising organic quality is to a large extent transferred from the buyer to the seller. This differs from the usual classification of supervision costs in the literature as ex-post transaction costs.

In order to be certified organic, a farmer has e.g. to commission a certification body, to fulfil specific documentation requirements or to apply for an exception in case of need. These specific requirements add up to considerable costs, either cash-based (e.g. the certification fees) or opportunity costs (e.g. the utility gone for the time spent for documentation).

### *Costs for investments in social relations*

These costs occur e.g. when meeting clients in order to foster relations and to build up a trustful relationship. In organic food production this is of special importance and one could assume these costs being higher than in non-organic systems.

## OUTLOOK

This paper outlines the structure of the transaction costs specific to organic farming certification and provides some first hypotheses on their relative importance. In the project CERTCOST, data on transaction costs associated with the organic certification system will be collected. These data will be analysed following the conceptual breakdown outlined in this paper in order to get an idea of the costs next to certification fees that burden organic operators. The question how relevant this burden is, when deciding for or against organic food production can then be answered based on empirical evidence.

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