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An approach towards explaining market shares of organic food – Evidence from Swiss household data

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The market share of organic food in Switzerland is high compared with that in other European countries, and has grown notably in recent years. However, little is known about why the market share of certain organic food products is higher than that of others. Swiss household expenditure data distinguishing between organic and conventional products allow an analysis at the product level. As a result, factors which determine the market share level of different organic food products are identified. Based on the results of this study, the driving factors are categorised into three dimensions. First, a low level of processing is positively related to the organic market share. This suggests that communicating the benefits of organic food is more successful for unprocessed than for processed products. Second, products with high price premiums as well as products that are of importance for the household in terms of its food budget have a clear disadvantage on the market. Third, Swiss consumers seem to have a high preference for domestically produced organic food, since the characteristic of being an imported product is negatively related to the organic market share. The results give a first understanding of what is important to Swiss consumers when it comes to the consumption of organic food. The findings imply that supporting organic agriculture in Switzerland is still promising from a policy perspective as long as the price premium for organic quality stays at a reasonable level.

Keywords: consumer behaviour, organic food, generalized linear model, Switzerland

1 Introduction

Organic food products have become an important part of the global food market, especially in wealthy parts of the world. The market for organic food in Switzerland is one of the most mature ones in terms of market shares. Even though this market has become an important part of the food industry, there is a lack of studies regarding the driving factors of organic consumption in Switzerland. The literature about market shares of organic food is yet very general. Systematic comparisons of different market shares are rarely cited. By analysing actual purchasing choices rather than consumer statements, this paper presents an alternative way to study consumption decisions regarding organic food. As LEE and YUN (2015) study how consumers in the U.S. perceive product attributes of organic food and how this perception influences their buying decisions, we focus on how different product attributes are valued by Swiss consumers (reflected in their buying decisions) and thereby affect market shares. Our study uncovers patterns which provide a new perspective on the underlying motives to participate in the organic food market in Switzerland.

2 Material and Methods

This study identifies factors which determine the level of the market share of different organic

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food products. The analysis is based on a six-year sample of the Swiss Household Budget Survey (HBS, 2013) which reports the purchasing decisions of more than 19,000 Swiss households for the years 2006–2011. Because the HBS distinguishes between organic and conventional products, we are able to carry out an analysis at the product level. To do so, the data is aggregated over all households for each product and each observation year.

Consequently, 60 product categories are analysed resulting in 360 observations over the six-year observation period.

The methodological framework that is used for this study aims to identify and rank the product attributes as they are valued by consumers. In our study, we apply this approach to investigate the relationship between product characteristics and the level of the market share of different organic food products. To account for the fact that our dependent variable is limited and can only take values between 0 and 1, we apply a **generalized linear model** with a logit link function proposed by Papke and Wooldridge (1996).

3 Results

The results show which product characteristics are determinants of the organic market share. We find evidence that the degree of processing is negatively related to the organic market share. This suggests that consumers of organic food prefer raw and unprocessed organic products over processed ones. The regression results also verify that the price premium paid for organic quality is negatively related to the organic market share. Consequently, organic products with low price premiums appear to have an advantage on the market. We also learn that the higher the share is that is spend on a certain food product (organic and conventional), the more reluctant is the household to buy this product in organic quality. The results of this analysis also reveal that the characteristic of being a domestically produced food item is positively related to the level of the organic market share. Surprisingly, we do not find sufficient evidence that the characteristic of being a plant or animal product as well as the characteristic of being a beverage or solid food product is related to the level of the organic market share. However, this does not rule out that these product characteristics are important for the consumption decision of the household. At least in our analysis we cannot reject that they have no systematic influence on the level of the organic market share.

4 Conclusions

This study was conducted to explore how consumers value different attributes of organic food products and thereby affect market shares. Exploiting a six-year sample of the Household Budget Survey at the product level reveals that the following three dimensions are important for the decision to consume organic food in Switzerland. The first dimension is the demand for unprocessed food and a natural nutrition. In industrialised countries with increasing rates of cardiovascular diseases and obesity, a growing number of consumers pursues a healthy lifestyle. This affects the consumption choices consumers make. In recent years, consumer interest in the production of agricultural goods and their origin has increased.

Previous research confirms that from the consumer perspective organic products are closely related to a healthy lifestyle (Goetzke et al., 2014). This study confirms that the dimension of naturalness is important to the average organic food shopper in Switzerland. This includes the preparation of fresh and nutritious home-cooked meals and the purchase of unprocessed food products. Therefore, organic products with a low degree of processing have a competitive advantage on the market and thus higher market shares. For the food industry, this implies that promoting highly processed organic food is likely to be less successful in capturing market shares. However, from a marketing perspective, it might be promising to emphasise the fact that the nature of organic food products is hardly compromised when a product is processed or part of a multi-ingredient product.

The second dimension relates to the budget share and the price premium paid for organic quality. Our regression results show that organic products are rather bought when the household spends only a small fraction of its food budget on that product. This result is somewhat surprising considering that the health aspect is important to an increasing number of consumers (Hauser et al., 2011). In this case, one would expect that consumers buy especially those products in organic quality that represent a large part of what they eat on a daily basis. However, it seems that the higher cost associated with buying a product with a price premium might outweigh the additional benefit in terms of assumed healthiness in this case. The finding that Swiss consumers seem to be cautious to buy products with high price premiums confirms this. Obviously, the organic price premium is one of the reasons why the organic market share of certain products is lower than that of others. For the food industry it is crucial to convince consumers that the price premium for organic food is justified by higher quality (in terms of sustainable production methods and healthiness). A deeper investigation of what drives consumers to purchase organic products could yield additional insights.

The third dimension is the preference for locally produced food (home bias). In a globalised world in which a considerable share of what we eat is not produced within the country, consumers are increasingly sceptical about the conditions under which food is produced abroad. In contrast, consumers know the conditions of agricultural production in their own country better. Furthermore, media reports about animal diseases and agricultural practices make them even more aware of the consequences of their consumption choices regarding food. Therefore, they may have a higher preference for products that are produced in their own country. For agricultural policy makers this implies that promoting organic agriculture in Switzerland is still promising as consumers obviously appreciate home-grown organic products more than imported ones. However, it is important to keep in mind that the organic price premium has to stay at a reasonable level in order to further increase the demand and, thus, the market share. From a marketing perspective, the food industry might, on the one hand, use the already existing preference for domestically produced food to further increase sales. On the other hand it might be promising to supply consumers with information on how organic food is produced in other countries.

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