Quality Assurance and Safety of Crops & Foods, 2018; 10 (2): 155-164

Wageningen Academic Publishers

The impact of obtaining a European quality sign on origin food producers

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Received: 9 November 2017 / Accepted: 28 January 2018

RESEARCH ARTICLE

Abstract

A unique Europe-wide research study was conducted among all the producer organisations having a European Union quality sign (protected designation of origin, protected geographical indication, traditional speciality guaranteed) registered in the DOOR database with the use of postal and Internet surveys. 840 requests to complete the survey were sent. The final sample consisted of 56 entities from 11 countries. Descriptive statistics, χ^2-tests, t-tests, bivariate regressions and a multivariate regression model were applied. In the majority of cases, the adoption of a European quality sign for origin food results in an increase of marketing outlays, number of clients, production, and net profit. The most important marketing consequences of implementing the system of origin product protection consist in image enhancement, distribution policy innovations and refreshing the marketing strategy of the organisation. The principal determinants of the competitive advantage turn out to be taste, followed by the quality guarantee in the form of certificates and signs, and emphasising the product identification with its region of origin. As far as the general assessment of the impact of obtaining a European quality sign on the organisation development is concerned, positive answers prevailed decidedly. 59% estimated the impact to be rather good, and 22% very good. Neutral assessments amounted to 17%, and negative to less than 2%. In a multiple regression model, factors that influence the evaluation of the impact of obtaining a European quality sign for origin food were identified. They include: increasing production, entering new distribution channels, building one's competitive advantage on consumer loyalty and selling one's products on a market.

Keywords: quality labels, geographical indications, protected designation of origin, certified quality systems, origin food marketing

1. Introduction

The processes of European integration and economic globalisation lead to an intensification of the competitive pressure, which, on the one hand, contains incentives toward minimisation of production costs, but, on the other hand, promotes the adoption of more ambitious marketing strategies. The strategy of offering origin food, which shows a remarkable dynamics, may be included in this category. There is a strong stream literature on country-of-origin food (e.g. Insch *et al.*, 2015; Newman *et al.*, 2014; Ozretic-Dosen *et al.*, 2007), but much less attention has been devoted to exploring the role of regional origin labelling in food marketing. Emphasising the regional origin of food products and the use of traditional methods of production becomes an increasingly attractive alternative to the model of mass production and consumption, which prevailed in the second half of the 20th century. The growth in consumer income and awareness accelerates this process. The European Union has adopted a policy of promoting quality food production. A scheme for protected designations of origin (PDO) and protected geographical indications (PGI) has been established in order to help producers of products linked to a geographical area by: (1) securing fair returns for the qualities of their products; (2) ensuring uniform protection of the names as an intellectual property right in the territory of the Union; and (3) providing clear information on the value-adding attributes of the product to consumers (European Union, 2012). Certification, PDO, and traceability of food products can be viewed as quality cues, possessing certain socioeconomic and demographic characteristics that are highly valued by consumers (Tsakiridou *et al.*, 2011). There is a significant main effect of the region of origin presentation on brand

attitude and purchase intention (Luceri *et al.*, 2016). Quality orientation and market orientation are complementary. Quality management and marketing reinforce each other in enhancing organisational performance (Kee-Hung and Edwin, 2005). The policy of awarding EU quality signs promotes collective actions of farmers, which are an important element of rural development in Europe (Burandt *et al.*, 2013; Kelemen and Megyesi, 2007). This paper focuses on the impact of obtaining a European quality sign for origin food on the basis of a unique Europe-wide research study among the producer organisations having a EU quality sign registered in the DOOR database.

The principal research questions were as follows: (1) What is the impact of acquiring a EU quality sign on the organisations offering origin food products (including both an overall evaluation and specific changes in selected parameters)?; (2) What are the differences in the marketing strategies of those who reported a very good impact of the European quality sign and the rest of the sample?; (3) What are the determinants of competitive advantage of origin food producers?; and (4) What are the determinants of the evaluation of the impact of obtaining a European quality sign?

2. Materials and methods

This research study aimed at investigating the marketing strategies and operations of producer organisations offering origin food products with EU quality signs (protected designation of origin, PDO; protected geographical indication, PGI; traditional speciality guaranteed, TSG). The questionnaire consisted of 6 parts: (1) the impact of a European quality sign on the development of one's organisation (5 questions); (2) the characteristics of one's strategy of offering origin products (3 questions); (3) the characteristics of one's marketing activities (12 questions); (4) the characteristics of the development strategy of one's organisation (4 questions); (5) brief information about one's organisation (7 questions); and (6) the characteristics of the CEO (president) of one's organisation (5 questions). The most common scales used in the questionnaire were 5-point Likert scales (very important, rather important, average, rather not important, without any importance), and the catalogues of answers usually included an option to provide an additional answer (other, What?...). The questionnaire is available from the author upon request.

Due to the geographical dispersion of the population under study and a rather extensive character of the questionnaire, the author opted for a postal enquiry complemented with an Internet survey. The addresses of the producer groups that had been granted the quality sign were obtained from the European Commission database called DOOR. The study was complete, as it encompassed all the entities registered in this database. 840 postal enquiries were sent. The survey questionnaire and the cover letter were prepared in six language versions: English, French, Italian, Spanish, German, and Polish. This choice depended on the share of products from a given language zone in the DOOR database and the capacity to obtain a high-quality translation. 44 filled-in questionnaires were received from all over Europe. 12 more replies were received in an Internet survey. Therefore, finally, the sample consisted of 56 entities.

Descriptive statistics, χ^2-tests, t-tests, bivariate regressions and a multivariate regression model were applied. The analyses were conducted in MS Excel (Microsoft, Redmond, WA, USA) and Statistica 12.0 (TIBCO, Palo Alto, CA, USA).

3. Results

Sample characteristics are presented in Table 1. A more detailed description of the sample characteristics is available in a book in Polish (Domański and Bryła, 2013).

Each study subject has at least one quality sign awarded by the European Commission and registered in the DOOR database (PDO, PGI, and TSG). They were asked about the year they received it for the first time. The oldest quality sign at the European level dates back to 1987 (earlier the products could be subject to protection in a national system), and the newest from 2010. Half of the respondents acquired the European quality sign until 2001, and 1/4 during 3 years preceding the survey. Therefore, products

Table 1. Sample characteristics.

Criteria	Characteristics
Institutional and legal form	producer organisations (56%), cooperatives (21%), public institutions (7%), associations (8%), other (8%)
Geographical structure	Italy (20%), Spain (15%), France (13%), Portugal (11%), Germany (7%), Austria (5%), Belgium (5%), Poland (5%), Greece (4%), Slovenia (4%), UK (4%), no data (7%)
Organisation age	mean age of the organisation: 36 years, median: 27 years
Organisation size	1st quartile: 20.75, median: 40.5, 3rd quartile: 147.5
Industry	fruit and vegetables (31%), meat (25%), dairy (15%), olive oil (6%), bakery (5%), apiculture (5%), confectionary (5%), alcohol (4%), fish (2%), pasta (2%)

with a relatively long tradition of protection at the European level prevail in the sample. This may support the author's expectations of a reliable retrospective assessment of the impact of getting a European quality sign on the firm's condition and marketing strategy. Moreover, these findings help to explain the relatively low share of products from the new Member States in the DOOR database.

The representatives of regional food producers were asked to evaluate the process of obtaining the European quality sign for their products. Over 2/5 said it was moderately difficult, and over 1/3 rather difficult. It was very difficult for 1/9 of the study subjects. There was the same share of replies in the category 'rather easy'. It is worth noting that no respondent evaluated the process as very easy.

As far as the general assessment of the impact of obtaining a European quality sign on the organisation development is concerned, positive answers prevailed decidedly, as they were expressed by over 4/5 of respondents. 59% estimated the impact to be rather good, and 22% very good. Neutral assessments amounted to 17%, and negative to less than 2%. The following questions concerned the detailed effects of acquiring a European quality sign.

The most visible effect of acquiring a European quality sign was observed in the field of marketing outlays, which grew according to over 3/4 of respondents, as well as regarding the increase in the number of customers of their products (indicated by almost 2/3 of the study subjects) (Table 2). Over 3/5 confirmed an impact of the European quality sign on higher output and about a half of the respondents pointed out improved profits. A similar number of answers concerned export growth as a result of getting the EU quality sign. The least common effect was higher employment, noted by over 1/4 of the producers. Therefore, the findings confirm a positive influence of the European quality sign acquisition on basic parameters of their firms as well as on enhanced involvement in marketing activities.

Table 2. Changes following the award of a European quality sign for origin food.[1]

Increase in	Total (%)	VGI (%)	Other (%)	Comparison
Marketing outlays	76.0	81.8	73.7	Yates χ^2=0.02, *P*=0.88
Number of clients	65.4	81.8	62.5	Yates χ^2=0.71, *P*=0.40
Production	61.1	83.3	53.7	Yates χ^2=2.29, *P*=0.13
Net profit	52.0	60.0	48.7	Yates χ^2=0.08, *P*=0.78
Exports	48.1	54.6	47.5	Yates χ^2=0.01, *P*=0.94
Employment	27.5	45.5	23.1	Yates χ^2=1.17, *P*=0.28

[1] VGI = respondents reporting a very good impact of the European quality sign.

Additional analyses were conducted in order to compare those respondents that indicated a (general) very good impact of the European quality sign with the rest of the sample. All the analysed favourable changes occurred more frequently among those who reported a very good impact of the European quality sign. The greatest difference was observed in the share of those who mentioned an increase of production.

The principal marketing effects of obtaining a European quality sign included: an improvement of the producer image and a transfer of the positive image towards the region of origin (Table 3). Over 2/3 mentioned entering new distribution channels. Nearly the same number of respondents indicated the elaboration of a new marketing strategy. Over 2/5 of the study participants reported the impact of the European quality sign on price increase of the origin products, higher enthusiasm and motivation of their employees, and their export expansion. Thus the most important marketing consequences of implementing the system of origin product protection consisted in image enhancement, distribution policy innovations and refreshing the marketing strategy of the organisation. Regarding the comparison between those reporting a very good impact of the European quality sign and the rest of the sample, all the aforementioned effects more often in the former group of respondents with the exception of price increases. The biggest difference was observed for the entry to new distribution channels.

The most common types of advertising among the origin food producers were Internet, press, on packaging, leaflets, and outdoor (Table 4). Spontaneously, the respondents indicated such forms of their marketing communication (not necessarily advertising strictly defined) as: exhibitions, fairs, events, sponsoring, animations in shops, aromas in the points of sale (sensory marketing), advertisements on the company premises, culinary recipes. Those who reported a very good impact of the EU quality sign tended to use all kinds of advertising more often than the rest of the sample.

The most important distribution channel for the origin food is big distribution networks, which comprise various shop formats, like hypermarkets and supermarkets (indicated by 70% of respondents) (Table 5). The second rank was taken by sales on a market (46%), followed by direct sales on the farm of the producer (42%). Other distribution channels included: having one's own distribution network, shops with organic products, delivery to the customer, traditional shops, agents, wholesalers, independent supermarkets and restaurants. Considerable differences were observed as far as the composition of the distribution channels is concerned between those who indicated a very good impact of the EU quality sign and the rest of respondents. The biggest differences concerned more frequent sales on a market and in one's own shops.

Table 3. Effects of obtaining a European quality sign for origin food.[1]

Effects	Total (%)	VGI (%)	Other (%)	Comparison
Improvement of the organisation's image	87.0	100.0	83.3	Yates χ^2=0.91, *P*=0.34
Improvement of the region's image	77.8	81.8	76.2	Yates χ^2<0.001, *P*=0.99
Entry to new distribution channels	67.9	90.9	61.0	Yates χ^2=2.30, *P*=0.13
A new marketing strategy	64.8	81.8	59.5	Yates χ^2=1.04, *P*=0.31
Higher prices of products	45.5	41.7	47.6	Yates χ^2=0.001, *P*=0.97
More enthusiasm and motivation among employees	43.4	63.6	39.0	Yates χ^2=1.25, *P*=0.26
Entry on new foreign markets	40.7	45.5	40.5	Yates χ^2=0.002, *P*=0.96

[1] VGI = respondents reporting a very good impact of the European quality sign.

Table 4. The types of advertising used by the organisations under study.[1]

Advertising types	Total (%)	VGI (%)	Other (%)	Comparison
Internet	75.0	90.9	70.0	Yates χ^2=1.04, *P*=0.31
Press	63.5	81.8	57.5	Yates χ^2=1.27, *P*=0.26
On packaging	63.5	81.8	57.5	Yates χ^2=1.27, *P*=0.26
Leaflets	55.8	63.6	52.5	Yates χ^2=0.10, *P*=0.75
Outdoor	51.9	63.6	50.0	Yates χ^2=0.21, *P*=0.64
Radio	44.2	63.6	40.0	Yates χ^2=1.11, *P*=0.29
TV	30.8	45.5	27.5	Yates χ^2=0.59, *P*=0.44
Other	23.1	27.3	22.5	Yates χ^2=0.01, *P*=0.94
On vehicles	19.2	18.2	17.5	Yates χ^2=0.16, *P*=0.69

[1] VGI = respondents reporting a very good impact of the European quality sign.

The origin food producers were asked to assess the importance of selected factors contributing to their competitive advantage (Table 6). The most important determinant turned out to be taste, followed by quality guarantee in the form of certificates and signs. The third rank with a very similar share of answers was taken by emphasising the product identification with its region of origin. Further places were taken by: smell, safety of consumption, brand and reputation of one's organisation, and healthiness. As far as the comparison between those indicating a very good impact of receiving the European quality sign and the remaining respondents, the biggest differences were observed for the traditional recipe, consumer loyalty, and quality assurance. All of them were much more important among those who indicated a very good impact of the European quality sign.

In order to identify the determinants of the impact of obtaining a European quality sign, a series of regressions with a single independent variable were conducted. They served to determine the variables which will be tested in multiple regression models. The following variables turned to have a statistically significant impact on the evaluation of the impact of obtaining the EU quality sign for origin food: increase in production (β=0.528, R^2=0.28, *P*=0.000048), increase in net profits (β=0.305, R^2=0.09, p=0.033), increase

Table 5. The most important distribution channels used by the organisations under study.

Distribution channels	Total (%)	VGI (%)[1]	Other (%)	Comparison
Big distribution networks[2]	70.0	90.0	64.1	Yates χ^2=1.44, *P*=0.23
Sales on a market	46.0	80.0	38.5	Yates χ^2=3.97, *P*=0.05
Direct sales on the farm of the producer	42.0	40.0	43.6	Yates χ^2=0.03, *P*=0.88
Own distribution network[3]	32.0	60.0	25.6	Yates χ^2=2.85, *P*=0.09
Shops with organic food	26.0	40.0	23.1	Yates χ^2=0.46, *P*=0.50
Other	16.7	10.0	18.9	Yates χ^2=0.04, *P*=0.85
Delivery to customer home	12.0	20.0	10.3	Yates χ^2=0.09, *P*=0.77

[1] VGI = respondents reporting a very good impact of the European quality sign.
[2] hypermarkets, supermarkets, discount stores, etc.
[3] shops belonging to the respondent's organisation.

Table 6. The evaluation of determinants of one's competitive advantage in the field of offering origin products.[1,2]

Determinants	Total	VGI (%)	Other (%)	Comparison
Taste	4.71	4.82	4.68	t=0.84, *P*=0.41
Quality guarantee (certificate, sign)	4.53	4.82	4.44	t=1.62, *P*=0.11
Identification of the product with the area of origin	4.52	4.64	4.48	t=0.60, *P*=0.55
Smell	4.33	4.55	4.28	t=0.81, *P*=0.42
Safety of consumption	4.18	4.09	4.20	t=-0.29, *P*=0.77
Brand and reputation of one's organisation	4.06	4.30	4.00	t=0.70, *P*=0.49
Healthiness	4.06	4.09	4.05	t=0.12, *P*=0.90
Consumption pleasure	3.94	4.20	3.87	t=0.95, *P*=0.34
Traditional recipe	3.92	4.36	3.80	t=1.73, *P*=0.09
Uniqueness of the product	3.92	4.00	3.90	t=0.26, *P*=0.80
Traceability (knowing the origin of raw materials)	3.90	3.91	3.89	t=0.06, *P*=0.96
Consumer loyalty	3.77	4.18	3.63	t=1.67, *P*=0.10
Price	3.68	3.60	3.69	t=-0.27, *P*=0.79
Richness in minerals and vitamins	3.51	3.45	3.53	t=-0.18, *P*=0.86
Ecological character of the product	3.41	3.55	3.38	t=0.41, *P*=0.68
Customer concern for local manufacturers	3.39	3.64	3.31	t=0.87, *P*=0.39
Nostalgia of consumers	3.24	3.27	3.21	t=0.18, *P*=0.86
Consumer curiosity	3.23	3.36	3.18	t=0.48, *P*=0.63
Fashion for consuming such food	3.10	3.36	3.00	t=0.89, *P*=0.38
Expiry date	3.06	3.09	3.05	t=0.09, *P*=0.93
Delivery of the product to the customer	2.78	2.64	2.82	t=-0.40, *P*=0.69
Customer concern for animal welfare	2.76	3.09	2.67	t=0.97, *P*=0.34

[1] VGI = respondents reporting a very good impact of the European quality sign.

[2] Each determinant was evaluated in the 1-5 scale, where 1 means 'with no importance', and 5 'very important'.

in employment (β=0.310, R^2=,0.10 *P*=0.028), increase in the number of clients (β=0.392, R^2=0.15, *P*=0.004), more enthusiasm and motivation among employees (β=0.285, R^2=0.08, *P*=0.041), one's entry to new distribution channels (β=0.362, R^2=0.13, *P*=0.008), an improvement of one's organisation's image (β=0.414, R^2=0.17, *P*=0.002), building one's competitive advantage on quality guarantees (certificates, signs) (β=0.286, R^2=0.08, *P*=0.040), building one's competitive advantage on the identification of the product with the area of origin (β=0.319, R^2=0.10, *P*=0.022), building one's competitive advantage on consumer loyalty (β=0.392, R^2=0.15, *P*=0.004), using advertising on product packaging (β=0.325, R^2=0.11, *P*=0.020), selling in one's own distribution network (β=0.377, R^2=0.14, *P*=0.008), selling on a market (β=0.346, R^2=0.12, *P*=0.015), and the CEO tenure (β=-0.75, R^2=0.56, *P*=0.008). As there were only 11 observations available for the last variable, it could not be included in the multiple regressions. Several multivariate regression models were constructed on the basis of the aforementioned independent variables that turned out to be significant in bivariate regressions. Taking into account the criteria of quality and parsimony of the model, the author decided to report here a model with 4 independent variables: increase in production, entry to new distribution channels, building one's competitive advantage on consumer loyalty and selling on a market (Table 7). All these independent variables influence positively the evaluation of the impact of obtaining a European quality sign in a statistically significant way. The whole model is also highly significant at the level of *P*=0.000002 and explains the majority of the variance of the dependent variable (R^2=0.545).

In order to check that the assumptions of regression modelling are met, the author also decided to examine the correlation matrix of the variables included in the model (Table 8). The correlations between independent variables and the dependent variable should be greater than the correlations between independent variables themselves. The model fulfils this criterion. There are no statistically significant correlations between the independent variables, whereas the dependent variable is correlated with each independent variable in a statistically significant way at the level of $P<0.05$.

Table 7. Determinants of the evaluation of the impact of obtaining a European quality sign (a multiple regression model).

Independent variables	β	β Standard Error	b	b Standard Error	t(39)	*P*
Intercept	x	x	2.393	0.310	7.71	<0.000001
Increase in production	0.377	0.116	0.497	0.153	3.25	0.002
Entry to new distribution channels	0.276	0.116	0.397	0.167	2.38	0.022
Consumer loyalty	0.313	0.112	0.217	0.078	2.79	0.008
Sales on a market	0.438	0.113	0.577	0.150	3.86	0.0004

Table 8. A correlation matrix for variables included in the regression model.[1]

Correlations	(1)	(2)	(3)	(4)	(5)
Evaluation of the impact[2] (1)	1.00	0.31*	0.48*	0.41*	0.39*
Increase in production (2)	0.31*	1.00	0.21	-0.03	-0.27
Entry to new distribution channels (3)	0.48*	0.21	1.00	0.26	0.09
Consumer loyalty (4)	0.41*	-0.03	0.26	1.00	0.07
Sales on a market (5)	0.39*	-0.27	0.09	0.07	1.00

[1] **P*<0.05.
[2] Of obtaining a European quality sign.

4. Discussion

Designation of origin represents a way to protect and emphasise a historic productive patrimony, rooted in a specific area, obtained from a rural culture, and offering original characteristics (Bertozzi, 1995). The adoption of various quality assurance schemes, such as PDO/PGI, has been a response to the growing demand for certified quality food products among consumers (Fotopoulos and Krystallis, 2003). Market interaction with quality uncertainty generally produces underestimation of product quality as well as systematic drops in prices and losses of market efficiency (Izquierdo and Izquierdo, 2007). Quality labels may be regarded as signals that reduce problems stemming from asymmetric information (Moussa and Touzani, 2008). Geographical Indications can support a competitive provision of quality and lead to clear welfare gains (Moschini *et al.*, 2008). Geographical indications can facilitate upgrading for small-scale producers through acting as a quality signal, stimulating collective action and enabling diversification into higher margin activities (Gorton *et al.*, 2014b). The adoption of PDO is not generally linked to an implementation of better industrial practices, rather of better marketing practices (Parra-López *et al.*, 2015). Versus other place links, terroir offers a more specific Resource-Advantage, operating at environmental, philosophical and commercial levels. It offers a unique form of value to both consumers (e.g. identity, authenticity, cultural rootedness) and producers (e.g. irreproducibility, potential legal protection) (Charters *et al.*, 2017). The region-of-origin cue and the PDO label were both found to influence origin product preferences in Italy through perceived quality (Van der Lans *et al.*, 2001). Similarly, it was found in Australia that consumer awareness and preference for local foods is high because of the local attributes associated with high-quality products (Mugera *et al.*, 2017). However, the closer consumers live to the area of production of the certified product, the less they refer to extrinsic certification cues (Garavaglia and Mariani, 2017). According to a survey among French consumers, the guarantee of product origin constitutes the fourth most important criterion of quality evaluation, and the top variable for 14% of the study participants (Aurier and Sirieix, 2004: p. 36). There is a market potential for products differentiated by emphasising their region of origin and process quality (Wirthgen, 2005). The results of Oberthür *et al.* (2011) provided ample evidence to support the application for regionally-based denominations of origin. The image of the region of origin influences perceived overall quality of a product (Dekhili and d'Hauteville, 2009). Certification schemes, including quality labels, are used to ensure marketing claims for unobservable quality attributes (Jahn *et al.*, 2005). The market outcome of certification programmes depends upon consumer awareness, understanding and confidence in high quality labels (Hocquette *et al.*, 2012). Protected designations have had most impact in safeguarding products with pre-existing widespread prestige, rather than serving as a mechanism for creating it (Gorton *et al.*, 2014a). An analysis of the Vistula Cherry case found that there are significant market opportunities for certified producers of high quality fruits, but at the same time they to develop their production and marketing skills, within the framework of the local producer group (Hajdukiewicz, 2014). There is a strong correlation between the perception of European quality signs and the attitude toward origin and organic food (Bryła, 2017).

Consumers increasingly rely on product quality information provided by third-party product ratings organisations, but both content and context significantly influence consumer

perceptions of source credibility and their intentions to use the product quality ratings in their purchase decisions (De Maeyer and Estelami, 2011). A Greek study confirmed that informational labelling linking product to place ranks top among a wide set of information sought on labels by consumers (Dimara and Skuras, 2005), whereas findings from Belgium revealed that consumer interest was generally low for traceability, moderate for origin and high for direct indications of quality like a quality guarantee seal (Verbeke and Ward, 2006). Italian local food buyers can be profiled as ethnocentric consumers, environmentalists, strict localists, and quality labelling oriented (Aprile *et al.*, 2015). A French experiment study with the PGI quality sign highlighted the importance of building awareness of a values-based label among consumers (Carpenter and Larceneux, 2008). An association to an alleged origin in a local or regional food culture is seen as an attractive way to interest consumers in new brands (Tellström *et al.*, 2006). A study concerning Spanish ham with the PDO showed that it is the extrinsic attributes that motivate consumer satisfaction and loyalty in buying the product if perceived quality is measured using a global model (Espejel *et al.*, 2007). Another study highlighted the importance of consumers' perceptions regarding: the association of a PDO food product with the place of origin, territory, climate, and regional know-how; and the strict controls to which products under the protection are submitted (Espejel *et al.*, 2008). The influence of quality attributes on consumers' perceived risk, trust, satisfaction and loyalty depends on their involvement level (Espejel *et al.*, 2009). In the Czech Republic, there is a low awareness of origin food labels, and the credibility of labels in influenced by their low familiarity (Velčovská and Sadílek, 2014). According to Krystallis *et al.* (2017), the designation of origin labels (DOLs) remain a quality differentiation scheme predominantly for the southern EU agrifood industry.

Consumers' image of regional certification labels consists of a quality guarantee dimension and an economic support dimension, which positively relate to consumers' willingness to buy and pay for the protected origin product (Van Ittersum *et al.*, 2007). PDO labels are different from other labelling schemes, as they involve technological and capacity constraints that influence their economic efficiency (Bouamra-Mechemache and Chaaban, 2010). In consumers with greater familiarity and experience with the PDO, the effects of trust on satisfaction and satisfaction on loyalty are higher (Fandos and Flavián, 2011). In comparison with other extrinsic product attributes, DOLs constitute less important drivers of loyalty, but brands carrying such a label tend to exhibit higher levels of loyalty compared to those without any DOL (Chrysochou *et al.*, 2012). Region of origin labelled food products consumption is influenced both by cognitive motives based on individuals' health and safety concerns and by affective motives related to pleasure, emotional states and social values (Trigui and Giraud, 2013). Offering origin food with quality labels fits the concept of food well-being, developed by Bublitz *et al.* (2013).

Van der Meulen (2007) distinguished 5 dimensions of origin food: territoriality, typicity, traditionality, communality, and lanscapeability. Polish consumers indicated traditionality, i.e. being rooted in the history of the area of origin and local diet, as the most important characteristic of origin food (Bryła, 2015b). Origin food products with EU quality signs are usually manufactured by producer organisations and bear multiple characteristics of shared brands. Shared brands enable to reach a stronger brand presence, contribute to higher credibility of brand claims, and are often supported by public institutions (Tregear and Gorton, 2009). Sometimes they are called place umbrella brands (Iversen and Hem, 2008), collective brands (O'Reilly and Haines, 2004), or territorial products (Philippidis and Sanjuán, 2006). The development of a quality system in combination with product certification can be used as a part of brand strategy by agricultural cooperatives (Kontogeorgos, 2012). Agricultural producers are negatively affected by structural problems related to the small size of the farms and their inability to concentrate and promote production, that is why the European Union promotes the development of producer organisations (Camanzi *et al.*, 2011). The PDO scheme is an important governance strategy and regulatory system, but despite strict guidelines regarding implementation and geographical infrastructure there are notable differences between countries in terms of how the label is used to organise and respatialise food chains. For instance, it is framed as a strategy to protect the rural economy in Switzerland but is promoted more as a mechanism to communicate and reconnect with consumers in the UK (Maye *et al.*, 2016). Even incremental innovation can have serious effects for the market when it is applied on production phases which lie outside the direct control of the PDO producers (Mancini and Consiglieri, 2016).

This study indicated that quality assurance (certificate, label, trademark) ranked second among competitive advantage determinants of the European origin products, whereas it was found the top determinant of competitive advantage of Polish (conventional) food on export markets (Bryła, 2012b). This may stem, *inter alia*, from the differences in the level of trust in local vs international food distribution channels. Organic food producers believed that their competitive advantage depended on healthiness, brand, reputation and taste to the largest extent (Bryła, 2013). Therefore, the type of food studied and the degree of international orientation of the company impact on the relative importance attached to competitive advantage determinants. Poland suffers from a reluctance of farmers to engage in producer organisations, which has its roots in the communist past and constitutes an important obstacle in certain European Union rural development policy schemes (Bryła, 2012a). This factor also seems to impede the development of origin

food producers, as this field of activity usually requires a high level of cooperation and horizontal market channel integration. The development of origin food production is not only an interesting marketing strategy proposition, but also a factor contributing to the sustainable development of Polish rural areas (Bryła, 2015a). From the perspective of Polish consumers, the most important determinant of origin food selection was traditional recipe, followed by taste (Bryła, 2015b), while the principal organic food selection motives were healthiness and being ecological (Bryła, 2016). Resano *et al.* (2012) found that although the PDO scheme attracted a segment of consumers, the origin by itself is still a more powerful signal of quality, and more specifically the region of origin. According to Traversac *et al.* (2011), producers with vineyards having a PDO are also more likely to bottle and sell their wines, because they wish to capture the value of the PDO reputation, the collective brand name capital owned by the farmers.

5. Conclusions

In the majority of cases, the adoption of a European quality sign for origin food results in an increase of marketing outlays, number of clients, production, and net profit. The most important marketing consequences of implementing the system of origin product protection consist in image enhancement, distribution policy innovations and refreshing the marketing strategy of the organisation. The main types of advertising used by the organisations under study are Internet, press, on packaging, leaflets, and outdoor. The most important distribution channels include big distribution networks, sales on a market and direct sales on the farm. The principal determinants of the competitive advantage turn out to be taste, followed by the quality guarantee in the form of certificates and signs, and emphasising the product identification with its region of origin. As far as the general assessment of the impact of obtaining a European quality sign on the organisation development is concerned, positive answers prevailed decidedly. Numerous differences were observed between those respondents who reported a very good impact of the European quality sign and the rest of the sample, in particular in the field of distribution channels. In a multivariate regression model, factors that influence the evaluation of the impact of obtaining a European quality sign for origin food were identified. They include: increasing production, entering new distribution channels, building one's competitive advantage on consumer loyalty and selling one's products on a market.

The adoption of the strategy of offering origin food brings multiple benefits. The regional shared brands endorsed by EU quality signs legitimise the product in the eyes of consumers and distributors. From the sustainable development perspective, the use of quality signs to promote origin food enhances the attachment of producers to the area of origin through the location of production processes, access to agricultural supplies, and various forms of cooperation expressed in horizontal and vertical market channel integration. Therefore, the marketing investment to adopt a EU quality sign contributes to the stability of the economic, social, and ecological development of the area of origin. The strategy of offering origin food brings dynamics to the development of organisations, which would be unable to build a strong producer brand otherwise.

Acknowledgements

This research study was funded by the Polish Ministry of Science and Higher Education (research grant no. N N114 301938) and the National Science Centre (an Opus research grant no. 2015/17/B/HS4/00253).

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