The development of the European market for organic products: insights from a Delphi study

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Abstract

Purpose – The purpose of the paper is present experiences using a well-established forecasting tool, the Delphi method, to explore the dynamics of, and prospects for the development of the market for organic food in Europe. Delphi, developed by the Rand co-operation to improve military technology forecasting, uses expert feedback to refine an informed perspective on complex or uncertain issues.

Design/methodology/approach – This study used experts of the organic food market in 18 countries to explore factors influencing the development of the organic market, future market prospects, and the role of governments in future market development.

Findings – The results show that short supply chains and focus on regional organic shops may be an indication of an earlier stage of market development, likely to be followed by integration into mainstream outlets and involvement of multiple retailers.

Research limitations/implications – While more research would clearly be required, it is concluded that the mutual but mismatched interdependence of demand and supply acts as a constraint to the overall development. Policy intervention should not only take the specific local conditions, but also the stage of market development into account.

Originality/value – Prior research in this area is limited, as is work using the Delphi method.

Keywords Organic foods, Marketing strategy, Delphi method, Europe

Paper type Research paper

Introduction

The organic market in European countries has grown rapidly over the past decade (Michelsen and Hamm, 1999; Hamm and Gronefeld, 2004), although pace and continuity varies from country to country, and the sector remains a small part of the overall food market, between below under 1 and up to 7.5 per cent in Switzerland. Nevertheless, it has attracted more than its fair share of attention, particularly because of its important role in European agricultural policies (e.g. CEC, 2004), consumers' perception of safety of its products (Harper and Makatouni, 2002; Padel and Foster, 2005), and its role in the sustainability of agricultural production (Lotter, 2003). Because of these external influences, the development of organic for organic food market is of interest to policymakers, environmental lobbyists and also to businesses

engaged in it. However, there is lack of statistical data in this sector (Hamm and Gronefeld, 2004), and because of the rapid recent development and diverse local circumstances, it is very difficult to use conventional analysis to predict the evolution of the markets. This paper presents our experience with using a well-established qualitative tool for improving foresight, the Delphi study, to explore the dynamics of, and prospects for the development of the market for organic food in Europe.

Delphi studies have been used widely since development by the Rand Corporation to improve (military) technology forecasting in the 1960s. The approach involves successive questionnaires to an expert panel, using feedback to refine an informed perspective on complex or uncertain issues. Epistemologically, Delphi studies are not merely deductive but also disclosive (Jones, 1989), and allow fragmentary perspectives to coalesce into a larger collective understanding. The best definition of the approach is found in the seminal work of Linstone and Turoff (1975, p. 3):

> Delphi may be characterised as a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem.

Recent use of the approach has been widespread, especially in health and education topics (for examples, see Tigelaar *et al.* (2004); Powell (2003); Leach *et al.* (2001); and Lafourcade and Chapuy (2000)). A topical review of methodology and critiques of Delphi studies is provided by Mullen (2000). A small number of studies have been carried out to forecast food market development, but as Critcher and Gladstone (1998) note, its use in applied social science is not widespread, perhaps because it is less well known among researchers than other techniques. While many Delphi studies are focused on purely forecasting issues, a "policy Delphi" variant (Turoff, 1975) aims to provide a forum for idea generation, commentary and evaluation; facets of both forecasting and idea-generation are used in this study.

Given conditions in the organic market, use of the Delphi approach provided potential for valuable market intelligence on key issues, including future growth trends, evolution of and factors influencing consumer demand and supply chains, and scope for improved policy intervention. The study reported here formed part of a larger study of the marketing of organic products in Europe (reported in Schmid *et al.*, 2004), aiming to support marketing strategies for collaborative producer groups. This paper concentrates on emerging issues concerning the development of the organic market across Europe that are of general interest, leaving out material related to the internal management competences of organic marketing initiatives and spill-over impacts on rural development that were also part of the survey (see Padel *et al.*, 2003 for full details).

The remainder of the paper is organised in three sections. The next section provides brief description and commentary on our approach, giving links to methodological literature where appropriate. Then the results of the Delphi study are described, providing some detail on regional differences within Europe. The final section analyses the main implications and conclusions that can be drawn, and provides some general commentary on the usefulness of the Delphi approach in this context.

Description of the organic market development Delphi approach

The stages involved in the method were the selection of the expert panel, and the development of the three questionnaires, with an intervening analysis phase

(successive questionnaires were based on results of previous rounds), and a final analysis and interpretation of the conclusions (reference to report). This process occurred over two years, the first round questionnaire was sent in March 2001; the second in January 2002; and the third in March 2003.

Members of the expert panel were recruited in 18 European countries (Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Italy, The Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, Switzerland and the UK: efforts in Luxembourg failed to recruit respondents). Since the organic sector is still relatively small, and the researchers involved in the project were familiar with and engaged in networks of key market actors, it was possible to identify panel members on an informal basis. However, as Tichy (2004) notes, there is some controversy over the self-selection of experts involved in Delphi processes, and evidence that where self-rated "top" experts are recruited, optimism bias may distort efficiency of the process. Therefore, in each country the aim was to recruit a broader representation of experts from a range of occupational backgrounds. For countries with relatively large organic markets, the overall recruitment target of 20 participants included four representatives each from commercial organisations in the organic food market, government agencies, organic producer organisations, non-organic producer organisations, and the academic research sector. In countries with relatively smaller organic markets, the aim was to recruit one in each category. Initial recruitment was by letter, accompanied with an explanatory leaflet outlining the Delphi approach, and expectations of results and benefits likely to be gained.

The first round questionnaire was unstructured, using broad, open questions relating to market development that required narrative response. All returns were analysed using N-Vivo qualitative analysis software (Richards, 1999), involving an initial coding and then repeated re-reading of the responses, by individual question, in order to build up a representation of the strands of opinion (and any clear divergences) contained within them. Respondents received a report of the first round results with the second round questionnaire. The second round was mostly structured, using statements derived from first round responses on which respondents were invited to agree or disagree. Use of a Likert scale provided accuracy (Delbecq *et al.*, 1986), and also ease of use for participants (Scheibe *et al.*, 1975). The third round provided a general report of second round results; it contained only questions where significant prior divergence existed, and provided feedback to respondents to give an opportunity to revise their original response. Each questionnaire was piloted, using UK respondents not included in the panel, prior to its administration. The questionnaires were translated into German, Finnish, Italian, Spanish and French, and where necessary, responses translated back into English. In countries outside these linguistic areas, the English version was used.

Non-response from panel members is a major problem in questionnaires involving several rounds, and in Delphi studies the norm is reckoned to be a 50 per cent attrition rate at each round (Cyphert and Gant, 1971). In this study, the overall respond was very good, 51 per cent of our original panel still responded in the final round (see Table I for a more detailed breakdown of responses by countries). The proportion of respondents from different occupational backgrounds changed little between rounds, although there was some dropout by non-organic organisation respondents after the first round, and of organic organisation respondents after the second. In the final round, the

	Original number sent	Responses (%):			Final number received	Overall % response
		Round 1	Round 2	Round 3		
Austria	20	100	95	95	18	90
Belgium	8	63	60	100	3	38
Czech Republic	20	90	94	82	14	70
Denmark	5	100	80	75	3	60
Finland	20	55	73	75	6	30
France	20	100	85	76	13	65
Germany	29	69	90	83	15	52
Greece	25	92	87	90	18	72
Ireland	5	80	100	75	3	60
Italy	5	80	50	50	1	20
The Netherlands	20	55	73	75	6	30
Norway	8	88	71	80	4	50
Portugal	10	90	67	67	4	40
Slovenia	5	60	33	100	1	20
Spain	10	90	78	71	5	50
Sweden	5	60	33	0	0	
Switzerland	11	100	91	40	4	36
UK	26	100	67	55	11	42
Total	252	85	80	76	129	51

Table I.
Analysis of responses by country

majority of respondents were aged between 30 and 44 years, 72 per cent were male and most (93 per cent) bought organic food for themselves. Average length of involvement of respondents in the organic sector increased between the second and third rounds from ten to 11.6 years; some respondents with shorter involvement did not return their third round questionnaire.

Delphi study results
The first round
The first Delphi questionnaire contained six open questions. These covered the most important events and influences that had shaped the development of the organic market in the respondent's country in the past ten years, the current state of the organic market (including regional variations), and the respondent's expectation of the organic market's development over the coming ten years. Three additional questions concerned marketing initiatives by collaborating organic producers, but these are less central to the topic of the current paper.

Respondents in all countries described the organic market as a still small segment with potential for further growth. Past growth had come from various crises in the conventional food sector, and generally positive media coverage. In some countries in the established market category with wide availability of organic products, respondents noted market stagnation, oversupply in some products, downward pressure on prices and greater competition, but also increased professionalism of all market actors. In other countries also with well-developed organic markets, further growth was constrained by fragmented marketing structures. Although direct marketing and specialist organic shops are generally less important than supermarkets, they provide market access for small-scale producers and outlets

(especially through direct marketing) for advocates of local production and consumption patterns.

In growing market countries constraints to growth included the underdeveloped nature of distribution structures, lack of volume, weak consumer demand confined to a core, minority group, and low consumer confidence in certification and labelling. Supermarkets were seen as the key drivers of development and direct marketing was considered unimportant for future growth.

Market infrastructure and organisation were severely limited in emerging market countries. Most sales were either through direct marketing or specialist organic shops, with little supermarket involvement. Lack of supply was seen as a constraint on development, although market growth has been rapid in Belgium, Ireland and Spain, where producer and organic organisations are better established.

In many countries variable quality, poor availability, consumer confusion about labelling and product identification and reluctance to pay price premiums were identified as restricting organic demand growth. Reduction of consumer prices through scale economics achieved through larger industrial scale production was foreseen as the best opportunity for greater growth potential. Although some respondents were also concerned that this might conflict with high consumer ethical expectations of organic products, others argued that the "conventionalisation" of the organic sector (supermarkets and conventional processors moving into organic lines) is one condition for expanding demand in mature market countries; the other is income growth.

Competition from "near-organic" alternatives was seen as increasing and requiring innovative strategies. One approach suggested was to bolt on additional sustainability characteristics to organic products, such as local origin, social and ethical content and high quality. Other respondents felt that the nature of organic products (premium, high quality products with specific ethical characteristics) itself confined them to a niche market. Concerns were widely expressed about the potential of an organic food "scandal", particularly if organic production standards are compromised by the rate of expansion. Alongside this, initiatives to provide information, promote organic food and ensure a transparent labelling system were seen as vital to maintain consumer confidence and raise awareness.

On the supply side, respondents recognised the role that farm support schemes can play in encouraging conversion, but that they can also lower farm gate prices for organic products. Respondents anticipated increased volumes of internationally traded organic products, particularly within the EU. Although the prospect of increased export potential was welcomed by countries with a saturated domestic market, imports raised concern that in countries with currently low organic production prospects for more widespread conversion could be stifled. Respondents also predicted higher levels of product processing.

The results showed that there were very strong similarities in the conditions in countries at particular chronological stages of development of their organic food market (Table II). This led to a preliminary, subjective categorisation of countries according to market development stage. Countries with established (mature henceforth EST) organic markets are characterised by the important role of supermarkets as sales channels for organic products. In these countries, environmental protection and animal welfare are of high importance to consumers. In countries with growing organic markets (henceforth GRO), specialised organic food shops and direct sales are

important outlets for organic products; animal welfare seems to play a less important role in these countries. In countries with emerging markets (henceforth EMG), the experts described the organic sector as a market niche, mainly serviced by organic farming pioneers, involving a small number of actors and lacking organizational structure. This has proved useful as a means of summarising responses, although the categorisation of one country was modified based on responses to the second round (see below). The categorising was subsequently confirmed by other findings of the project (Hamm and Gronefeld, 2004).

Other main conclusions that can be drawn from this first round of inquiry concern the overall direction of marketing strategies whether there should be a focus on integration into mainstream outlets through the multiple retailers, or on short supply chains either in regional organic shops or through direct marketing. The former allows organic products to penetrate the mainstream food market, but requires greater production efficiency and supply chain organisation so that continuity of supplies at a consistently high quality can be assured. There was, however, concern that this could reduce producer prices and dilute organic standards. To offset this, strong countervailing producer organisations would be required. The latter strategy appears particularly suited to areas with currently low organic consumer demand, but also alongside conventional distribution systems in EST countries where demand for an alternative, not perceived as compromising the ethical characteristics or image of the product, exists. However, respondents emphasised that this requires an equally high level of commitment and professionalism in order to be successful in the long term. There was widespread agreement on the necessity to safeguard integrity and quality of organic products in an increasingly competitive environment.

Second and third round questionnaires

The summary in the previous subsection highlights key issues which provided a basis for the development of structured questionnaires for the second and third rounds. These two questionnaires were divided into thematic sections: country specific issues relating to the historic development of the organic market; prospects for the future development of the organic food market, the role of governments in future market development. A fourth main section, relating to the role of organic marketing initiatives in rural development which was of particular interest to the project but to a large extend was only included in the third round questionnaire has not be considered in this paper. In the third round respondents received feedback on second round questions where consensus was not clear. We used the mean response of all other respondents from the same home country. While many Delphi practitioners adopt the median and inter-quartile range of responses, Phillips (1996) suggests that these are more properly used in applications evaluating individual scores in the context of a larger group; in the current context, evaluation of the characteristics of a group as a

Established	Growing	Emerging	
Austria, Denmark, Germany, Switzerland, UK	Finland, France, Italy, The Netherlands, Norway, Portugal, Sweden	Belgium, Czech Republic, Greece, Ireland, Slovenia, Spain	**Table II.** Countries clustered by stage of market development

whole with median scores would have eclipsed outlying results, distorting the range of opinion.

Question in relation to the current state of the organic market. This section began in the second round with feedback on the proposed "soft" classification of respondents' home countries in terms of stage of market development (see Table II). Compared with data on the market development (Hamm and Gronefeld, 2004), the question was raised, whether France, the UK and Belgium were correctly classified, so respondents in these countries were asked again about the proposed classification. Based on the results of the second round, France was re-classified from EST to GRO. Other questions focused on variations in the level of development of markets in regions and for major product groups within countries. Respondents were asked to classify urban and rural areas as established, growing or emerging in terms of market development. The category chosen by most respondents for urban markets closely reflected the overall categorisation of the country, whereas markets in rural areas were always considered to be less developed. Markets for dairy, cereal products and fruit and vegetables were considered better established, with convenience and meat products at the earliest stages of development. There was some variation depending on the market development of countries: In EMG countries, dairy products were the most developed; in GRO countries, cereal products; and in emerging, fruit and vegetables; convenience products achieved the lowest rating in all categories.

Respondents were also asked to rank the importance of different retail channels in the organic market. In all except EMG countries, multiple retailers were considered most important in urban areas, specialist organic shops second, direct marketing was ranked third, followed by other shops and catering. This average ranking was largely identical, with the following exceptions. In Germany specialist organic shops were on average ranked higher than multiple retailers; in Finland direct marketing ranked second before specialist organic shops; and in Sweden catering and public services ranked second and specialist organic shops received a comparably low ranking. In rural areas, multiple retailers also maintain the leading position in EST and GRO countries, but direct marketing was mostly ranked second, and the difference in ranking between multiple retailers and direct marketing was less distinct. In EMG countries, direct marketing was considered more important in rural areas than multiple retailers.

Respondents were asked to assess the impact of food scandals on the development of the organic market, differentiating between impact on demand and supply in general, and for specific product groups. Their impact was considered to be clearly positive on demand and, to a lesser degree, also on supply. This applied also to most product groups, although a majority considered the impact to be negligible on the supply of fruit and vegetables, cereals and convenience products. No great differences emerged if the average scores on the demand side were analysed by country category. Much the same response emerged when we asked about the media impact: overall, this was perceived to be positive, and with a higher impact on the demand than the supply side.

Respondents classified a given a list of constraints on the development of organic supply according to importance, using Likert categories from "very important" to "not at all important" (Table III). The most important constraints were considered to be a fragmented or underdeveloped market and lack of marketing know-how; both

	Round 2			Round 3		
	Important[a]	Not important[b]	Don't know	Important	Not important	Don't know
Fragmented or underdeveloped market	80	17	2	88[c]	11	1
Lack of marketing know how	85	12	3	87[c]	11	2
Poor cooperation and communication	65	31	3	75[c]	25	0
Low farm gate premiums	56	39	5	73[c]	26	2
Low level of organic support payments	55	42	2	66[c]	34	0
Lack of consumer demand	52	46	2	64[c]	36	0
Limited processing capacity	63	34	5	55[d]	42	3
Over-reliance on imports in retail sales	43	49	8	48[c]	45	7
Lack of supermarket involvement	56	41	3	47[d]	52	1
Competition from near-organic alternatives	35	63	2	38[c]	61	1
Lack of information for producers				52	45	2
Limited availability of organic inputs				49	45	5

Notes: [a] "Very important" and "important"; [b] "Not important" and "not at all important"; [c] Increase in third round; [d] Decrease in third round

Table III.
Classification of constraints of the supply of organic products (% of responses, both rounds)

attracted heightened importance in the third round. Responses were converted into averages using numerical scores; these were contained in the third round questionnaire, with the participant's second round response.

Poor co-operation and communication and low levels of farm gate premiums were also considered important by more than 70 per cent of respondents in the third round. Only two constraints listed were considered unimportant by a majority of respondents to the third round, which were lack of supermarket involvement and competition from near organic alternatives. Two new statements, added on the basis of second round comments, were considered, on average, important by only a bare majority.

The importance respondents attributed to the supply constraints listed varied in relation to the stage of development of the organic market. For example, lack of supermarket involvement was considered more important in GRO countries. Limited availability of inputs, limited processing capacity and low support payments were considered more important, the lower the level of development; therefore importance was rated highest in EMG countries. Also, although not considered important by an overall majority, limited availability of organic inputs was considered more important among respondents from EMG countries.

The importance rating of organic supply constraints also varies according to occupational background of respondents; to a degree, different groups of stakeholders in the organic sector vary in their attitudes. Notable differences (approximately 0.3 points difference in averages or more) occurred in the following areas. Respondents from a research background in organic farming consider a fragmented and underdeveloped market and limited processing capacity to be more important than other respondents. Respondents from a commercial background, on the other hand, consider the low level of support payments as more important than others. Respondents from organic organisations see lack of information for producers and lack of supermarket involvement as more important. Respondents from non-organic backgrounds see lack of know-how and over reliance on imports as more important than the average for all respondents.

In the second round, respondents were asked an open question on means to overcome organic supply constraints. Suggested strategies mostly encompassed themes already covered in later sections of the second round questionnaire.

Respondents were also asked to assess for importance given list of constraints on the development of organic demand (see Table IV). In both rounds (with little change in opinion) most considered the issue of high consumer price to be important, followed by poor product availability and lack of consumer information. The importance attributed to lack of consumer awareness and poor product presentation increased in the third round, compared with the second. The lack of a common logo for organic food and lack of credibility of organic certification were not considered to be important. Overall, ranking of constraints on organic demand development was confirmed in the third round.

Among constraints considered important, there is little variation between categories of countries and respondents. Poor product quality is considered less important, and lack of consumer information more important, in EMG countries, suggesting that as supply increases, competition, quality awareness and consumer information also increase. The lack of a common logo, on the other hand is considered more important in EST and GRO than in EMG countries.

	Round 2			Round 3		
	Important[a]	Not important[b]	Don't know	Important	Not important	Don't know
High consumer price	92	8	0	91[d]	9	0
Poor availability	84	16	1	88[c]	12	1
Lack of consumer information	74	26	1	84[c]	16	0
Lack of consumer awareness	61	35	2	81[c]	18	1
Poor product presentation	67	30	1	71[c]	28	1
Poor quality of organic produce	46	51	2	45[d]	53	1
Lack of common logo	37	62	1	39[c]	59	2
Competition from near-organic alternatives	44	54	2	35[d]	64	2
Lack of credibility of organic certification	28	70	1	26[d]	74	1

Notes: [a]"Very important" and "important"; [b]"Not important" and "not at all important"; [c]Increase in third round; [d]Decrease in third round

Table IV.
Classification of
constraints of the demand
for organic products (%
of responses, both
rounds)

Variation of more than 0.3 average score points between different occupational backgrounds only occurred in relation to two statements. Respondents from organic organisations considered the lack of a common logo as a more important constraint than those from a commercial background. Poor product presentation was considered less important by respondents from non-organic organisations, perhaps indicating a lower level of awareness. Overall, ranking of constraints on development of organic demand was confirmed by the third round: price, availability and a lack of consumer information are important constraints, whereas issues related to certification systems and labels are not.

The second round contained also an open question on means to overcome organic demand constraints. Many respondents from a variety of countries noted a need for better information and reduced prices for consumers, confirming the importance of the constraints discussed in immediately preceding paragraphs. Respondents also recognised the potential of achieving this through economies of scale accompanying growth in the organic market, but also by support to producers and reduced profit margins among various actors in the organic food chain. The need for a common logo that can be clearly identified and the need to improve the marketing of organic products in multiple retailers were also frequently mentioned, particularly by respondents from EST countries and from organic organisations, but a statement about the absence of a common logo as a constraint for demand development did not attract agreement from the overall majority (see Table IV).

Questions in relation to the future development of the organic markets. Experts were asked to forecast the growth rate of the organic market in their home country for five years from the receipt of the second round questionnaire; as well as overall growth, they forecasted regional growth and also by product category.

In the second round questionnaire, they were asked to forecast growth using interval categories (less than 0 per cent; 0-2 per cent; 2-5 per cent; 5-10 per cent; and more than 10 per cent); Across all countries, overall future growth rates were considered to be between 2 and 10 per cent by the majority of respondents, and only 2 per cent of respondents expected a negative growth rate. There was some differentiation between product groups, with more than 30 per cent of respondents expecting more than 10 per cent growth for meat and convenience products. Similar growth was expected in the organic market in urban areas, whereas nearly 30 per cent of respondents expect less than 2 per cent growth in rural areas. In the third round, these were converted into average estimates using a mid-point method, and respondents were invited to comment and dissent. While a majority of respondents agreed with these averages, weighted disagreements were used to modify the final estimates: Table V provides details for selected EST countries, and for all countries combined in the GRO and EMG categories. For meat and convenience products, higher growth than overall is expected, with the converse anticipated for dairy and cereal markets.

The wide variation in growth rates (from 1.5 per cent up to 11 per cent or more in GRO countries) can be accounted for by many factors such as:

· high consumer prices (particularly for organic meat);
· the level of market penetration in specific sectors or countries; and
· the general economic climate.

	DK		AT		CH		UK		DE		All growing		All emerging	
Round	2nd	3rd	2nd	3rd	2nd	3rd	2nd	3rd	2nd	3rd	2nd	3rd	2nd	3rd
Overall	2.4	1.5	3.9	7.4	8.0	5.4	6.3	4.6	5.2	4.5	8.4	11.0	8.9	4.8
Convenience products	3.3	3.3	4.9	6.9	9.2	4.3	5.1	8.4	7.0	7.0	8.4	8.8	9.5	7.3
Meat products	2.3	1.7	4.9	7.5	7.5	7.3	7.5	3.2	5.7	8.0	7.3	12.3	9.0	3.1
Dairy products	2.3	1.0	3.5	7.3	7.8	5.3	5.5	3.4	4.2	1.5	6.3	8.8	9.1	6.7
Fruit and vegetables	2.8	4.0	6.1	6.3	9.2	4.7	7.3	5.7	4.1	5.0	6.3	8.3	8.1	7.1
Cereals products	1.9	2.5	3.6	6.4	7.0	5.5	4.5	5.3	3.1	2.0	5.8	6.0	7.6	4.6
Urban regions	2.9	2.9	5.4	8.6	10.8	6.9	8.0	5.9	6.4	5.3	7.8	9.9	9.8	8.1
Rural regions	1.8	0.0	3.3	5.5	6.5	2.9	2.0	2.8	3.0	3.5	5.1	6.9	6.5	4.7

Table V.
Expected market growth
rates 2002-2007, overall
and for specific categories
of product categories

Respondents ranked retail channels in terms of their importance for future organic food market development both in urban and rural areas. Multiple retailers were perceived as most important, followed by specialist organic shops; direct marketing and farmers markets were expected to become more important in rural areas, particularly in conjunction with tourism on farms and local restaurants (Figure 1). There was little variation either by the occupation of respondent or country category, results show some difference when compared with the current importance of retail channels investigated in the first section of the questionnaire. Catering and public service procurement are considered more important in the future; particularly, respondents in EMG countries expect multiple retailers to become more important. In contrast, direct marketing and shops (specialist or general) are expected to decrease in importance in the future. Comments received to an open question in the second round also highlighted a potential role for catering and public services in rural areas in the future and provide further explanation why multiple retailers are considered important for development of the organic market beyond niche status. One participant from Austria noted "... to reach the majority, you have to sell where the majority shops". Further reasons for this critical role included the larger potential volume of sales than possible through health food or organic shops; inflexible consumer shopping habits; a need to focus on middle income groups; easy access and wide availability; the busy lifestyle of organic consumers; and the conversion of occasional into regular buyers as the main source of future growth. Some, although not all, multiple retailers have actively supported development in the supply of organic products, improving overall quality by applying rigorous product selection. Respondents raised concerns about loss of direct contact between producers and consumers, and problems that aggressive price policies of some supermarkets could cause for organic producers. Respondents from EMG
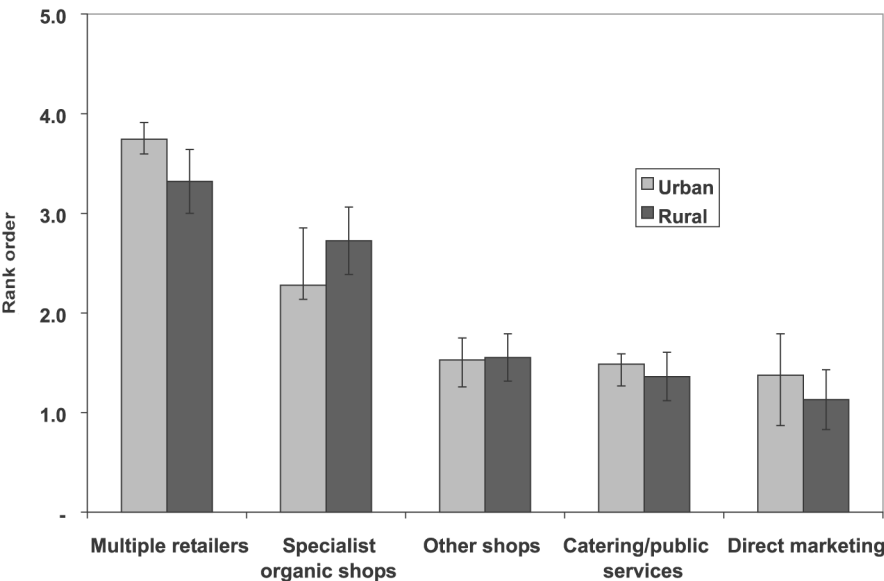

Figure 1.
Expected future rank order (5 = most important) of retail channels in urban and rural areas (average third round, reversed ranks)

countries, particularly, noted the augmented role of supermarkets as production volumes increase.

From responses to the second round it became clear that most respondents consider organic markets in rural areas to be less developed, and expected this trend to continue. Because rural markets are important for organic marketing initiatives, we asked respondents to classify possible barriers to purchases of organic food by rural consumers according to their importance, on a four-point scale ranging from very important and not at important.

The most important barrier overall was that buying local produce is considered more important in rural areas than buying organic. The importance given to this statement appears inconsistent with the lack of importance accorded to competition from near-organic alternatives which respondents registered when considering constraints on supply development; possibly, respondents consider local produce not to be near-organic, or only important in a rural rather than in an urban context. Following in importance are the barriers stemming from a food culture restricted to urban areas, and more frequent access for rural consumers to home grown vegetables. Statements that rural consumers are less concerned about the environment, animal welfare and their own health were rejected. Respondents in GRO countries consider the restriction of food culture to urban areas as a more important barrier; those from EMG countries considered home grown vegetables and lower disposable income to be more important barriers, but local food as less important. Overall, the responses confirm that different barriers act in the rural context and that buying local might be a more important consideration than buying organic for the rural consumer.

A set of general statements about the future development of the organic markets followed, to which respondents were asked to indicate their level of agreement on a four-point scale (Table VI). Statements receiving high-generalised support in the second round related to market structure, the importance of multiple retailers as distribution channels, the need to increase product range and targeting new market segments. There was least support for organic food to be promoted on the basis of risks associated with conventional food. Clear disagreement also emerged on statements that the organic market would remain a niche; that involvement of multiple retailers poses a threat to local retail structures and organic standards; and that labelling could be used effectively to differentiate niches within the organic market.

	Important[a]	Not important[b]	Don't know
"Local" is more important than "organic"	80	18	2
Grow vegetables in their own gardens	71	28	1
Lifestyle' food culture is restricted to urban	66	25	9
Reduced availability of organic products	64	35	1
Solidarity with conventional farmers	59	39	2
Lower disposable incomes in rural areas	58	41	2
Less concerned about the animal welfare	35	60	5
Less concerned about the environment	35	60	5
Consumers in rural area less health conscious	30	60	9

Notes: [a] "Very important" and "important"; [b] "Not important" and "not at all important"

Table VI.
Barriers to the purchase of organic foods in rural areas ($n = 128$, per cent of respondents, third round only)

Statements not receiving clear agreement or disagreement across all countries were repeated with relevant feedback in the third round and Table VII shows their responses for both rounds. Based on comments to the second round some new statements were also formulated. Clearer support was expressed for decreasing prices resulting from competition between producers and cheap imports; and for increased development of the organic sector unrelated to crises in the conventional sector. Clearer disagreement emerged regarding the role of consumer price reductions in developing demand, contradicting the prior view expressed that high price is the most important barrier to the development of demand.

Analysis of variations according to country classification and occupational background used Liekert scale scores. Notable differences, involving 0.3 average scale points or more, were few. Respondents from EST countries showed more agreement with marketing of organic products as a premium product; and those from EMG countries see mainstream channels as more of a threat to sector development that may also compromise standards, expect more consumers to buy direct from producers, and disagree less with promotion based on risk associated with conventional foods.

Variation in responses from different occupational backgrounds was more marked. Respondents from non-organic backgrounds agreed more strongly that cheap imports will drive down prices for organic producers, and also that international trade in organic products with countries outside Europe contradicts the basic philosophy of the organic movement. Respondents from organic organisations disagreed strongly with the statement that reductions in consumer price premia have a major role to play in developing demand for organic products, although they also agreed more strongly with the statement that the organic sector will grow independently of crises in the conventional sector and that in future more consumers will prefer to buy directly from the producer as an alternative to the increasing globalisation of the organic food market in multiple retailers. Respondents from a government background disagreed more strongly than others with the statement that regionalisation will increase trust, whereas respondents from a commercial background agree less with a need to further differentiate the market.

Questions related to the role of government. Where respondents were asked to assess the impact regional and national policies have had on the development of the organic market, the first clear polarisation occurred, and consequently this question was repeated in the third round. Overall, and in urban markets, the impact of national and regional policies was considered to be positive by the majority of respondents in both rounds; however, in the second round, a bare majority believed the impacts to have been negligible in rural markets and for consumer demand. On review in the third round, these were transformed into clearer majorities. Analysis by country category shows a similar assessment of lower impact in rural areas and on consumer demand; Figure 2 shows the percentage of respondents that viewed government action as positive; these percentages fall below 50 per cent for impacts on rural markets in GRO and EMG countries, and for consumer demand in EMG countries in both rounds. Individual country responses reflect differing policy environments; for example most Scandinavian countries gave higher scores for impact on consumer demand than elsewhere.

Comments on the low perceived impact of policy in rural areas suggest why consumers in rural regions may be less interested in organic produce. Reasons included

	Second round		Third round	
	Agree[a]	Disagree[b]	Agree[a]	Disagree[b]
Organic marketing structures need to improve, to be able to keep pace with the expected increase in demand	93	7		
Supermarkets and conventional distribution channels are appropriate for organic products	91	9		
It is important to increase product range (for example wider choice of different dairy products, introduction of convenience products) in order to extend the demand	89	9		
Organic food should be marketed as a premium, high quality product	89	10		
It is important to target new consumer groups (for example consumers of a different social category) in order to increase demand	88	11		
Price premiums for producers will decrease once supply increases because of competition between producers	69	26	82[c]	13
Reductions in consumer price premia have a major role to play in developing demand for organic products	70	28	80[c]	19
Regionalisation of organic sales (also in supermarkets) will increase consumer trust			78	15
Different sectors of the organic market require the development of different marketing structures	79	15	78[d]	16
Cheap foreign imports are driving down the prices for organic producers	62	28	78[c]	20
Direct marketing offers an alternative to mainstream outlets for producers in disadvantaged rural areas			77	19
Price premia for consumers will decrease with increasing volume of sales	86	10	73[d]	22
Price premiums for producers will decrease because of the competition between various multiple retailers	57	37	73[c]	22
Organic marketing should be clearly differentiated from the marketing of non-organic products	65	29	71[c]	24
The organic sector will grow independently of crisis in conventional agriculture	66	30	72[c]	26
It is inevitable that the organic food sector will develop on an agro-industrial scale to serve the requirements of mainstream customers	61	35	69[c]	30
Reductions in consumer price premia conflict with the positioning and marketing of organic food as a high quality product	42	51	57[c]	42

(*continued*)

Table VII.
Future development of
the organic market

	Second round		Third round	
	Agree[a]	Disagree[b]	Agree[a]	Disagree[b]
The involvement of mainstream marketing channels poses a threat to local, small-scale distribution channels	40	56	53[c]	46
Dominance of mainstream food companies in retailing of organic food will lead to the lowering of organic standards for commercial reasons	33	61	42[c]	54
Public procurement will become an important alternative outlet for organic producers in rural areas within the next three years			41	39
In future more consumers will prefer to buy directly from the producer as an alternative to the increasing globalisation of the organic food market in multiple retailers			41	53
International trade in organic products with countries outside Europe contradicts the basic philosophy of the organic movement	42	52	41[d]	56
Trade in organic products between regions in Europe contradicts the basic philosophy of the organic movement	36	58		
Different labels (for example "organic" and "organic + " products) can be used effectively to differentiate niches within the organic market	33	58		
Highly processed organic goods (for example convenience products) conflict with the organic aims	34	63		
It is inevitable that organic food as a premium, high quality product, remains restricted to a niche market	29	67		
Promotion for organic food should be based on risks associated with conventional food	15	83		

Notes: [a] "Very important" and "important"; [b] "Not important" and "not at all important"; [c] Increase in third round; [d] Decrease in third round

Table VII.

the better condition of the rural environment, different value systems and lifestyles, and more conservative rural consumers who are less interested in following "fashion" trends. Also, from EST and GRO countries, complaints emerge of a general lack or focus of policy measures on market development, with current policies directed at supply rather than demand.

In the second round respondents were asked some questions about the importance of both national and regional government in developing the organic market, and in an open question asked to explain their response. 85 per cent believed national government policies to be either important or very important, and 63 per cent in the case of regional governments. Participants explanations provided some fresh insights: at national level, arguments were made in respect of non-market, public good benefits of organic farming, and respondents suggested that integrated strategic policy development based on government commitment can increase the pace of development of the organic market overall. The effect of organic conversion support on supply was clearly recognised, through direct payments, raising the confidence of producers and
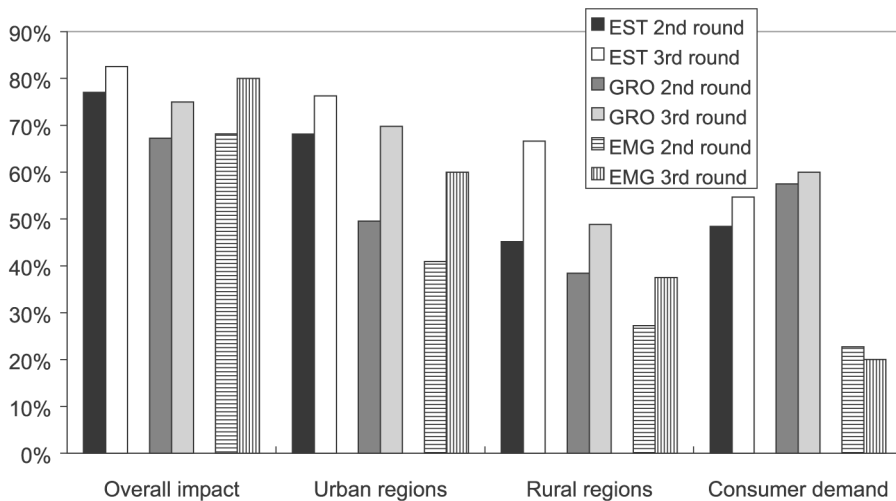
Figure 2.
Impact of regional or
national policies on the
organic market according
to country categories (%
positive, both rounds)

other actors, and in setting production standards. The potential role of government on demand was recognised through educational promotion campaigns, public procurement, and increasing the credibility of organic certification systems and, from Germany, the issue of a common logo. At regional government level, responses reflected the variation in policy structure between countries. For example, in Germany, Italy and Spain, regions have considerable power in agricultural policy decision-making, whereas in other countries major issues are decided at national level. A clear distinction between the national and regional government level is thus problematic. Varying levels of governmental support for the organic sectors are well documented elsewhere (Lampkin *et al.*, 1999).

Respondents were also presented with statements relating to the role of government in the development of the organic sector, and asked to indicate agreement level on a four point scale (Table VIII). Where clear consensus emerged from the second round, statements were not repeated in the third: these related to further development of European standards for organic production and consideration of environmental impact of trade in organic products (agreement) and discontinuing financial support to producers in favour of marketing grants (disagreement). Other statements were repeated with feedback on average responses, and two, relating to the role of production incentives in overcoming supply problems (especially in EMG countries) and the greater credibility of government certification systems than private sector schemes, attracted increased agreement.

Converting responses to numerical scale, notable variations involving an average of 0.3 scale point difference or more was mostly observed among respondents from EMG countries. Agreement that production incentives for producers help overcome problems in the supply of organic raw materials was less strong; and the effect of national and regional governments buying organic products for public canteens attracted higher than average agreement. By occupational background, respondents from non-organic backgrounds agreed more strongly governmental certification systems for organic produce are more credible for consumers than private sector

	Second round		Third round	
	Agree[a]	Disagree[b]	Agree[a]	Disagree[b]
There is a need to develop common (EU) standards in new areas (foe example fresh water fish production, glasshouse production)	86	11		
There is a need to consider the environmental impact of trade in the further development of organic standards	77	16		
Production incentives for producers help overcoming problems in the supply of organic raw materials	83	10	90[c]	9
Government initiatives are important in creating demand for organic produce	72	25	83[c]	16
Government certification systems for organic produce are more credible for consumers than private sector schemes	55	37	71[c]	26
National government should introduce and promote a common logo for organic produce	61	32	66[c]	29
Conversion incentives for organic producers should target specific types of producers (for example fruit producers) to deal with supply constraints	54	39	63[c]	33
National government should run a common certification system for organic production in a country	57	34	62[c]	34
Financial support to organic producers helps to lower the price to consumers	54	38	57[c]	42
National and regional governments interfere in the organic market though buying organic products for public canteens, such as schools and hospitals			52	40
Confidence in the future of the organic market for all actors is not related to government support			44	53
Financial support to producers leads to oversupply and should be stopped in favour of marketing grants	24	70		

Table VIII.
The role of government

Notes: [a] "Very important" and "important"; [b] "Not important" and "not at all important"; [c] Increase in third round

schemes, and that national government should run a common certification system for organic production. Respondents from an organic background agreed more strongly with national governments interfering in the market through public procurement. Research respondents agreed more strongly with the statements related to a common national logo whereas the opposite was true of commercial respondents.

Conclusions
Clearly, results of a Delphi study such as this can provide a multifaceted and enriched perspective, relatively cost-efficiently and rapidly. From the preceding presentation of the results two sets of conclusions are evoked: those relating specifically to the development of the organic market, and those which emerge more generally from the

experience of applying the Delphi method as a qualitative tool in market research more generally.

The result show that the application of the Delphi method can provide more than just forecasts for market growth, even though these can be readily obtained. The responses highlighted a number of contingent conditions that, unless fulfilled, will act to constrain potential growth to a lower level.

In responses to the open question in the first round it appeared as if to alternative models or strategies exist in relation to the development of the organic market development in European countries: a focus on integration into mainstream outlets through the multiple retailers, or concentration on short supply chains either in regional organic shops or through direct marketing. The study suggests that this might not be a question of alternative strategies but one of different stages of the development of the organic food. In emerging markets the organic sector occupies a small niche, mainly served by direct sales of pioneer producers and a small number of other actors. In the next stage specialised organic shops become more important alongside direct sales, before the involvement of multiple retailers and a higher level of organisation structure takes in the organic sector into the mainstream.

The study suggests that the mutual but mismatched interdependence of demand and supply acts as a constraint to the overall development. For example, fragmented markets are considered an important constraint for supply, whereas poor availability of organic products is considered an important constraint for the development of demand. This would suggest that policy intervention could help to bring a about a more smooth development of these still very small markets, if this is sensitive, not only to particular local contexts, but also to the specific chronological stage of development that the organic market has reached. Specifically, promotion of supply through farm subsidies, support for supply chain infrastructures, and validation of the authenticity of organic provenance could be important instruments during the emerging and growth phases, whereas in more established markets a focus on further development of the demand (such as promotion and consumer education campaigns) could help facilitate economies of scale and thus reduce consumer prices.

In respect of the underlying motive for this Delphi study, the extent to which organic farming can provide a base for rural development, the production system has often been seen as a successful response to declining incomes on small or otherwise production-limited farms. Consequently, a policy aspiration has been to extrapolate these benefits more widely for peripheral (especially high nature value) rural regions as well. The results of this survey illustrate some potential, but up until now at least the organic market are largely concentrated in urban rather than peripheral rural areas. This confirms caution in relation to the policy expectation that support to organic farming will automatically bring substantial benefits for wider rural development as suggested by Smith and Marsden (2004, pp. 355-6). The results highlight that there might be a greater potential of this, if the marketing is effectively organised to cope with the demands of the multiple retailers, and does not rely on direct and local sales alone, but this process of shifting from limited direct sales to supplying greater volumes in consistent quality can be very delicate.

Turning finally to the broader lessons that can be derived from this study, the anticipatory character of Delphi studies can, through a sharing knowledge and experience, augment understanding within the expert group. A consequence of this

could be to make leading opinion-formers into a more effective caucus, and (to the extent that this happens) turn the outcome of the process into a self-fulfilling prophecy from their enhanced ability to achieve their preferred future. Although the accuracy of the current study has yet to be fully confirmed, indications are that its main outlines are broadly correct (see, for example, Blank and Thompson, 2004). Concerns of this nature can be lessened if an action research (Quigley and Kuhne, 1997) rather than more conventional empirical approaches, underpin the study framework. This requires clear moral choices to be made by the researchers who control the process, but provided that these are explicit at the outset, greater use of the approach could and should be made in food market research.

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