Consumer Attitudes, Knowledge and Behavior in the Russian Market of Food

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Abstract

In the last decades the market for organic food was well developed in Western European Countries and comparable markets like the US or Canada. While these markets more or less approach market saturation, other markets still have huge potentials and are of special interest for exporting companies. In this paper we analyze demands, knowledge and expectations in the emerging market Russia. It is well documented that the Russian market for organic food has much higher growth rates compared to Western markets. According to the USDA, the market rose from about 640 million Rubel in 2004 to about 7.4 billion Rubel in 2011 (about 155 Mio €). This dramatic boost in sales might also be due to a significant change in Russians' consumer behavior. However, some challenges have to be considered when entering the Russian market with premium products (organic food is usually sold at comparable high prices in Russia). (1) There is a huge number of low-income consumers who are not able to pay for premium products. (2) Up to now, there are no official organic labels available in Russia. Therefore, it is likely that the Russian population has a lack of knowledge on what organic food is and which requirements are connected to the organic production process. Considering these restrictions, it was interesting to analyze important factors for the food choice on the one hand and the knowledge of Russian consumers about organic food on the other. This contribution will present results for one specific product (organic potatoes) which can be considered to be a typical alternative to low priced, conventional products. A conjoint analysis was conducted in Saint Petersburg investigating the importance of buying attributes connected to organic potatoes (n = 300); obviously, the results are not representative for the whole Russian market. But the results impressively show how different consumers' attitudes are compared to Western markets and how low the average knowledge about this product category still is. The findings deliver valuable information for all members within the supply chain who want to enter a market with high growth rates but also with obvious shortcomings.

Keywords: *Russian Federation, organic food, organic labels, food choice, consumer perception, conjoint analysis*

1 Introduction

The market of organic fruits and vegetables is growing fast all over the world. In Russia the market of organic food is not yet well developed. Thus, the aim of this work was to describe the market of organic fruits and vegetables in Russia. In particular, an empirical study was conducted in Saint Petersburg in 2012. 300 consumers were interviewed in middle-class supermarket "Lenta" and on streets. Via our empirical approach we wanted to

- check respondents' knowledge about organic production and labeling,
- analyze their interests and motives to buy organic fruits and vegetables,
- analyze the most important factors that influenced consumers' choice (approximations via conjoint measurement),
- describe socio-demographical characteristics of respondents to link these variables with the outcomes of our conjoint measurement.

In brief, we wanted to get first insights into wishes and demands of potential Russian consumers of organic food like it was done in other countries in the past (e.g. Hearne and Volcan, 2002). To understand whether the market is ready for the introduction of organic products, and whether it is beneficial to develop local organic production or not, it is important to find out if consumers are interested in buying organic food, if they are ready to pay premium prices for it, and if they know about different certification systems and labels. The latter is especially connected to consumer trust and their willingness to pay (Janssen and Hamm, 2012). The research question of this study is therefore to investigate if it is promising to develop the market of organic food in Russia. Until now, there are almost no empirical data available about consumer behavior and organic food in Russia. Our empirical work therefore intends to get deeper insights into this emerging market and follows findings of Honkanen and Frewer (2009) on Russians' food choice motives. Considering the huge dimensions of the market and it's heterogeneity, these are only first insights and only valid for a small region of Russia.

2 The Russian market of organic foods

Compared to other important consumer markets, there is still a huge potential for organic food in the Russian market. Confirming Willer et al. (2012) the total area of agricultural land where organic food is cultivated amounted to 44,000 ha in 2011. For 2012, only one year later, Willer et al. (2013) estimated the total area to amount to about 127,000 ha. This would imply a tripling of cultivated land for the production of organic food within only one year but still less than 1% of Russia's agricultural land.

There are several problems to develop the national organic market. Local organic production is still a small niche, there is a lack of knowledge for both farmers and consumers about organic production and certification systems, and the distribution network is not well developed at the moment. In particular, there is no national standard for organic goods in Russia. Strict regulations by law are still missing about using terms like "bio", "natural", or "eco" in promoting the products. Therefore, some producers use these definitions to market their goods without any confirmation. That leads to a lack of trust of consumers.

Due to the fact that organic products are different from conventional ones, consumers must believe that this is not just a marketing mechanism to sell foods at premium prices. Considering that, it is not surprising that the total market for organic foods is still small; it only amounts to about 65 Mio € in 2009 compared to about 6 Billion € in Germany or 1 Billion in Austria, Spain or Sweden (Schaak et al., 2013; the metric size is not immediately comparable as statistics is not very trustworthy for the Russian Federation and only an estimation). For 2011, the USDA estimates the market to have reached 11 billion Rubel, these are more than 150 Mio €.

One single government document concerning organic foods appeared in 2008, the Regulation No. 26 issued in Moscow by Chief Health Officer of Russia on April 21, 2008 "Approval of Sanitary and Epidemiologic Rules and Standards No. 2.3.2.2354-08". Within the regulation one can find the definition of "organic" products, and a description concerning the requirements for growing and proceeding organic food. Most of them correspond to the EU Regulation. But there is no description of certification processes and no information about certification bodies and authorities is available in the document (Kolchevnikova, 2011).

Nowadays, foreign certification bodies can certify Russian producers according to EU, US or Japanese standards. Usually, it depends on the relevant export market of Russian products. Imported products are extremely expensive, due to adding transportation costs to already premium price products. So up to now, they are affordable only for wealthy people (Kolchevnikova, 2011). But there is a potential for development of the market of organic products in Russia. Consumers in Russia, especially the young generation, take care about their appearance and fitness and are aware about risk of heart and other diet-related diseases. They are more and more interested in healthy products. The market for diet, organic and fresh foods will grow rapidly as people become wealthier and health consciousness, commanding premium prices, specialist stores and dedicated supermarket sections (Kolchevnikova, 2010).

3 Materials and methods

The data were collected in Saint-Petersburg, Russia (from 20th of April till 20th of May, 2012) in a "Lenta" supermarket and on the streets. The questionnaire consists of two parts. The first part aimed to check consumers' knowledge about organic production and labeling, to survey whether they are concerned regarding risks of pesticides residues in fruits and vegetables, GMO products, and their interest and motives to buy healthy food. The second part of the survey consists of a conjoint analysis (CA). Consumers were asked about their preferences in choosing potatoes (the empirical object of this study). It was done via a ranking CA. This technique was chosen because CA is an adequate method that can be applied for potential markets; it allows to estimate the value of each attribute of a product for consumers and to evaluate many attributes simultaneously. CA contributes to create a situation close to reality: a person does not focus on one characteristic of the product, but makes a trade-off between different features. Moreover, it is an easy and practical technique.
For the CA design, five factors were selected:

- Method of production: (1) organic and (2) conventional production method
- Origin of potato: (1) local and (2) imported origin of potato
- Convenience: (1) washed and (2) non-washed product
- Packaging: (1) packaged in nets and (2) in boxes
- Price (converted into Euros): (1) 0.25 €/kg, (2) 1.03 €/kg, (3) 2.06 €/kg, (4) 3.90 €/kg

All factors are orthogonal. Price was estimated to be a linear (less) factor, the others to be discrete. The orthogonal design of the survey was run in R ("AlgDesign" package). In total, 5 attributes (4 of them with two levels and 1 with four) equals 64 possible combinations. Out of these 64 possible combinations, 8 profiles were randomly chosen. Respondents were asked to rank each card (from 1 to 8) according to their preferences.
Conjoint analysis was used to approximate partial utilities for all factor values based on ranking, and then to approximate total utilities and define the importance of each attribute. We used an individual CA, so utility values are calculated for each respondent. The additive model is used for computing utility values. Metric ANOVA is used to determine partial utilities. The average utility of a factor value is calculated as a difference between its average empirical rank value and the average of all ranks. Then, one can compute the total utility of the stimulus cards.
In addition to these two empirical parts of the questionnaire we asked some more general questions including demographical characteristics of consumers (age, sex, number of children, education, income etc.). We asked interviewees if they are responsible for buying products and where they usually purchase food. Finally we asked them whether they travel to Europe, because people who travel a lot could have seen and gained knowledge about organic products from European countries. The aim of this part was to understand what type of people are interested in consuming organic products.

4 Results

The results of our survey concerning general socio-demographic characteristics of the respondents showed, that our sample is not completely comparable to the statistical structure of the population: The age of respondents varied from 18 to 70 years (average: 33.8 years), young people were overrepresented (58% of respondents were under 30 years old). 66% of the interviewees are women, 41% have children (23% under 18 years old, 11% under 5 years old, 5% under 1 year old). In view of their education, 4% of respondents have completed a school as their highest educational level, 16% of interviewees finished a specialized college, 18% had an incomplete higher education. Most of the respondents (42%) had a university degree, diploma of specialist or bachelor degree, 9% had a master's degree. The overrepresentation of people with diploma degree and lower representation of bachelor and master graduates is connected to the system of education in Russia. Diploma was an old form of education; bachelor and master programs appeared after the adoption of the Bologna process. 10% had a PhD or more than one degree. 16% of the interviewees earn less than 255 Euro per person and month, the majority (53%) had a monthly income between 255 and 765 €. 28% had an income between 765 and 1530 €; only 3% had an income above 1530 €. 68% of the interviewees were responsible for buying products for the household. 59% of respondents already travelled to European countries.

4.1 Knowledge of consumers about organic production and labeling

Concerning their shopping behavior, most of respondents answered that they would buy organic food if it were available in supermarkets (only 4% would definitely not buy organic food, not even sometimes). The non-disposability of organic food seems to be one obstacle for consumers to purchase organic food and also to get in touch with this product category. Availability seems to be a dominating characteristic of the Russian food market influencing consumers' choice and preferences. Confirming Honkanen and Frewer (2009) "availability" was the second most important attribute for Russian consumers. Up to now, most organic food in the market is imported food at premium prices (far beyond affordability for average customers) and therefore simply not available for average consumers, influencing their knowledge about organic food negatively.

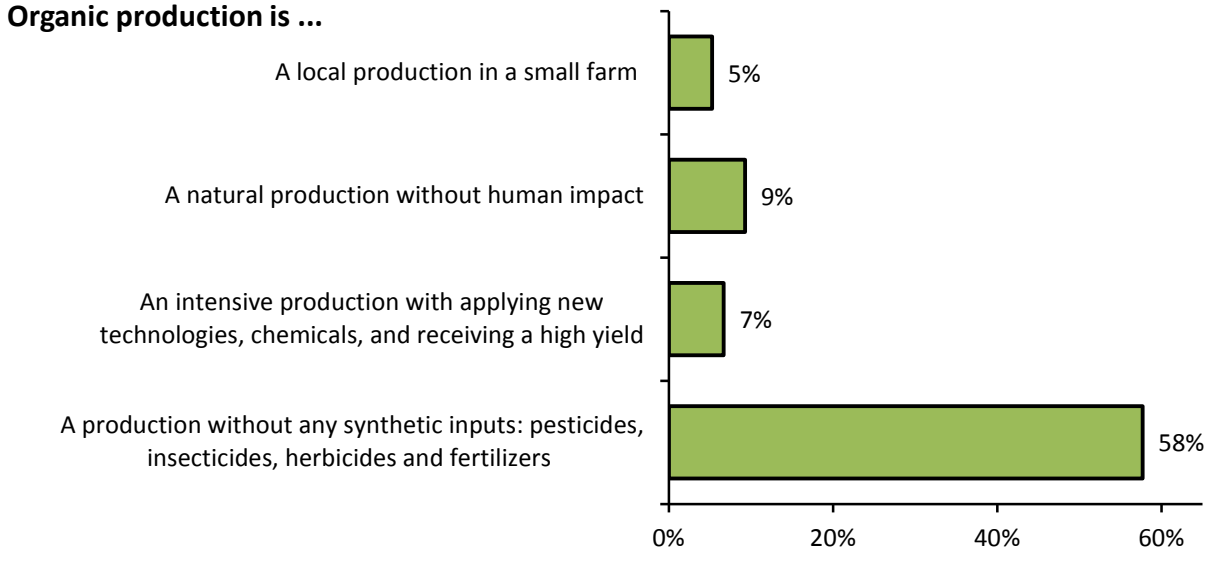

Figure 1. Consumers' opinion on which definition of organic production is correct
(Data base: 79% of all respondents who stated at least to have «heard» about organic products)

The result of the survey showed that 79% of respondents have at least heard about the term "organic". 58% defined organic production in a correct way (Figure 1). 55% understood that companies should pass through a certification process to sell their goods with an organic label. Almost 40% of consumers just declared their

knowledge about organic fruits and vegetables, but did not have clear ideas about the processes. This corresponds to other empirical studies. For example, Krystallis and Chryssohoidis (2005) showed for Greece, that 66% of Greek consumers who buy products in retail chains provided correct definitions of organic production (Krystallis and Chryssohoidis, 2005). Fotopoulos and Krystallis (2002) pointed out in their research that 82% of consumers in Greece declared their awareness of the term "organic". From them only 54% gave a correct definition of organic food (Fotopoulos and Krystallis, 2002). These results come close to our findings for Russia. In contrast to this more general knowledge on organic food, the respondents' knowledge about labels was really poor. As one can see from table 1, the most well-known labels were "Pure Dew", "Saint-Petersburg sign of quality" and "Vitality leaf", followed by "Natural product", "Euro Leaf" and "USDA ORGANIC". The least popular was the Japanese organic label JAS (only about 5% of respondents have seen it). The general low knowledge about the organic labels influences consumers willingness to pay for organic food: If consumers had more knowledge about the labels and the corresponding organizations, their willingness to pay would certainly increase (Rousseau and Vranken, 2013).

Table 1.
Respondents' knowledge about organic labels

Labels	Label description	Known label	Unknown label	… is an organic label	… is not an organic label
	Agrosophia's (Moscow) eco-label "Pure Dew"; standard developed according to EU Regulation 2092/91 (www.biodynamic.ru)	35.0%	65.0%	26.3%	73.7%
	St. Petersburg Sign of Quality; voluntary certification on quality; no organic label (http://quality.spb.ru)	29.7%	70.3%	3.3%	96.7%
	Voluntary life cycle eco-labeling program "Vitality leaf", based on ISO 14024 (http://www.ecounion.ru/en/site.php?&blockType=251)	25.0%	75.0%	16.7%	83.3%
	Sign of quality "Natural product", issued by Council of Public Quality Control of Saint-Petersburg; no organic label	17.0%	83.0%	15.0%	85.0%
	EU organic label	16.0%	84.0%	17.0%	83.0%
	US organic label	10.3%	89.7%	29.7%	70.3%
	JAS label; organic certification system for Japan	5.3%	94.7%	9.3%	90.7%

From all labels, "USDA ORGANIC" was associated with organic labels more often (but also here, the vast majority did not think that it is an organic label; see Table 1). That might be due to the fact that the word "organic" is written on the label and not because consumers recognized it. This is supported by comparable results from literature, according to which the most successful brands comprise the word "organic" itself rather than certification labels (results presented for UK; Padel and Foster, 2005). Therefore, it is not surprising that "USDA ORGANIC" was more often quoted to be an organic label (of about 30% of all respondents) followed by "Pure Dew". Approximately 17% of respondents thought that "Euro Leaf" and "Vitality Leaf" are organic labels. Ac-

cordingly, “Saint-Petersburg sign of quality” was not associated with organic labels (only 3.3% of consumers thought that this is an organic label). Similar results were revealed on Poland consumers (Zakowska-Biemans, 2011). Consequently, one of the main barriers for developing the market of organic products is consumers’ lack of knowledge about organic labeling. In the Polish study, some consumers could not even distinguish organic products from conventional ones (Zakowska-Biemans, 2011). Thus, providing more information about organic labeling will be useful to develop the market of organic products.

4.2 Concerns in food production and attributes of organic food

Russian consumers seem to be in particular concerned about pesticides in food. The proportion of consumers who stated that they are always concerned about them almost amounts to 40%. Including other answering categories (“often” and “sometimes”), almost 90% are concerned. This proportion is even higher compared to GMO foods: Here too, most of the consumers (more than 80%) were more or less concerned about GMO products and only about 20% had no concerns. Probably, these proportions are much higher compared to highly developed food markets in Europe, Asia or Northern America. Obviously, this is a good starting point for marketing organic food in Russia, as only a minority of the population is not concerned about pesitcides, GMO and related negative impacts of conventional food production.

Organic food is attributed with mainly two positive effects: Healthiness and no GMO or synthetic inputs during production; up to ¾ of all respondents said these are the main reasons for buying organic food.

Table 2.
Reasons for respondents’ choice to buy organic products

Reasons that explain respondents’ choice	Percentage of responses
They are good for my health	74%
They do not contain synthetic inputs and GMO	67%
The production and processing of organic fruits and vegetables is strictly controlled	34%
They are good for my children	28%
They are good for the environment	22%
They have a better taste	17%
They are fresher than the other products	16%
I just wanted to try them like something new	12%
I don’t think there is anything special about them which justify a higher price. “Organic” is just a marketing gag/promotion	12%
I do not trust the label / I do not think it is really organic	11%
They are too difficult to get	11%
It is trendy to buy organic products	2%
Other reasons	1%

For up to one third, also other reasons could be arguments to buy organic food; however, these reasons are much less important in comparison to the two mentioned above (see Table 2). This is comparable to the outcomes of other studies in various countries. They usually showed that health was the most important, crucial characteristic for buying organic products (Fotopoulos and Krystallis, 2002; Chinnici et al., 2002; Canavari et al., 2002; Loncaric et al., 2009). And it clearly promotes the assumption, that in Russia environmental arguments (less pollution) are of minor importance (only 22%), comparable to a study that showed an even lower percentage in Italy in 2002 (only 11% confirming Chinnici et al., 2002).

5 Conjoint Analysis: Importance of different attributes when buying organic food

Considering these findings that (1) organic food is mainly bought because of health and product quality attributes and that (2) there is still a huge lack of knowledge on organic food, the following question arises: Is there a potential for mass marketing of organic food in the Russian market (taking into account the average low income situation of a large proportion of the Russian population)? To be able to answer this question, a CA was conducted as described above.

5.1 Importance of product attributes

From all factors that were included into the empirical design of the CA, price was by far the most important one for making a buying decision (Figure 2). It can be assumed that there is a strong negative correlation between the price of organic food and their buying probability.

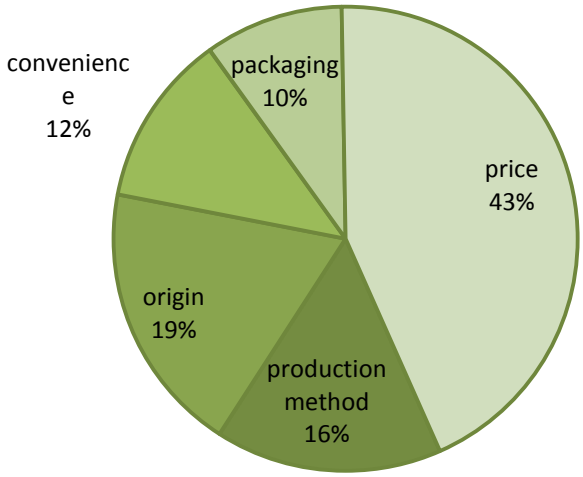

Figure 2. Importance of different factors for respondents' choice

This outcome characterizes the Russian food market as extremely price-sensitive. Price responded for 43% of the total utility. Average Russian consumers demand cheap food products. Therefore, the product price will be one of the main barriers towards introducing organic food to the market. Comparable to results of Batte et al. (2010) who estimated an increase in price of 1$ (they analyzed jam) equals a decrease in buying probability of 36%, we assume that (negative) price elasticity is huge on the Russian food market. Including our findings, for average consumers the probability of buying premium food products will decrease towards zero if products are above a certain margin. So for an average customer, the acceptable premium for the added value "organic" is low. However, the barrier will not be relevant for all Consumers. For about 10% of respondents, the reverse is true: The higher the price the higher the probability to buy the product. Probably, for these consumers price is an indicator of product quality. These buyers could be the relevant target group for marketing organic food in Russia.

The other attributes are of much lower importance (Table 3): Almost 20% of importance of utilities was covered by origin of the product followed by method of production with about 16%. Thus, consumers in Saint-Petersburg paid attention on origin more often than on the production method. James et al. (2009) presented similar results: The origin of production is a crucial characteristic influencing consumers' choice. And also other authors presented similar findings (e.g. Kovacic et al., 2002).

Table 3.
CA: Summarized utility values

		Utility value	Standard error	
Production	Conventional	-0.309	0.100	III
	Organic	0.309	0.100	III
Origin	Local	0.615	0.100	IIIIII
	Imported	-0.615	0.100	IIIIII
Convenience	Washed	0.143	0.100	I
	Non-washed	-0.143	0.100	I
Packaging	Box	-0.003	0.100	
	In nets	0.003	0.100	
Price	0.25	-0.214	0.018	II
	1.03	-0.883	0.076	IIIIIIIII
	2.06	-1.766	0.151	IIIIIIIIIIIIIIIII
	3.90	-3.343	0.286	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
(Constant)		6.052	0.166	

Considering the average utility approximated through our CA, the following ideal product can be created: organic, locally produced, washed, in nets, at the lowest price possible. However, (1) the attributes washed and in nets are almost negligible; the difference between the utilities is small and (2) this product is only hypothetic as local, organic food at lowest prices is not realistic.

Price has a negative utility. As one can see from Table 3, the utility of the highest price (3.90 Euro/kg) was 15 times lower compared to the lowest price (0.25 Euro/kg): -3.34 vs. -0.21. Hence, price plays a crucial role in the every day buying decisions of most of the respondents. If we suppose that organic products will be sold as premium products, this will be an obvious problem in mass marketing. And it might explain why until now organic food is still a niche in the Russian food market.

Most of the respondents preferred local potatoes to imported food. The utility for local potatoes was 0.615 vs. -0.615 for imported. As Russian consumers are quite traditional, the origin of potatoes is usually quite important. Also, it could depend on the type of the product. Potatoes used within our study as the empirical object are traditional products in Russia, so a lot of consumers believed that it is better to produce potatoes locally than to import them from abroad, a result which can be found in literature quite often also in other food markets (Kovacic et al., 2002).

Organic method of production was more preferable than conventional methods (0.309 vs. -0.309). Russian consumers prefer organic potatoes. However, there are not a lot of organic fruits and vegetables available on the market. So consumers did not really get in touch with organic food, there are no experiences. Probably this is the main reason why the attribute is not very important and why the difference in utilities between organic and conventional is rather low.

5.2 Cluster analysis

As mentioned above, there is a group of consumers that are not that price sensitive (increasing utility with raising prices). This can be a perspective for introducing (locally produced) organic food to the market. To get more insights into this question a cluster analysis was conducted (what is usually done when applying CA; methodological clustering approach: hierarchical cluster analysis, cluster algorithm Ward method, number of clusters: elbow criterion). Out of the related analytical results we could extract 3 different groups of customers:

1. Traditional buyers preferring mainly locally produced food (16% of all buyers);
2. Price sensitive buyers (the biggest cluster with 55% of all respondents);
3. Organic buyers (29%)

Table 4.
Cluster analysis: Mean utilities and clusters

	Traditional cluster	Price sensitive cluster	Organic cluster	Total
n	49 (16%)	165 (55%)	86 (29%)	300
Conventional	-0,270	0,067	**-1,052**	-0,309
Organic	0,270	-0,067	**1,052**	0,309
Local	**2,000**	0,346	0,343	0,615
Imported	**-2,000**	-0,346	-0,343	-0,615
Washed	-0,087	-0,068	0,677	0,143
Non-washed	0,087	0,068	-0,677	-0,143
Box	-0,010	0,086	-0,172	-0,003
In nets	0,010	-0,086	0,172	0,003
Price of product (linear less)	-0,402	**-1,177**	-0,503	-0,857

Cluster 3 can be considered to be the core group for marketing organic food (highest utility for attribute "organic"; see Table 4). But also for them, moderate prices are required. The price is still very important and it is the lowest price that is preferred by the majority of consumers also within this cluster. No clusters were identified where the price of the food product became obsolete. In addition, there is no strong relation between consumer behavior, attitudes and income situation concerning organic food (there are differences, but these differences are not significant). The 3 identified clusters are differing slightly concerning the income situation within the groups (same is valid for education): Organic buyers and traditional buyers can be found more often in higher income classes (see Table 5). However, for our sample, this relation between income and demand for organic food is not very strong compared to other empirical findings in literature (e.g. Roy et al., 2006; Fotopoulos and Krystallis, 2002).

Table 5.
Distribution of income classes and cluster

	Traditional cluster		Price sensitive cluster		Organic cluster		Total	
Income per month	n	%	n	%	n	%	n	%
less than 255 €	2	4%	32	19%	13	15%	47	16%
255.13 - 765 €	28	57%	92	56%	40	47%	160	53%
765.3 - 1530. €	16	33%	38	23%	29	34%	83	28%
more than 1530.64 €	3	6%	3	2%	4	5%	10	3%
Total	49		165		86		300	

6 Limitations

Of course, our findings have to be discussed considering several limitations. Obviously, our findings are not immediately transferable to other regions of Russia (at least for urban regions in Russia similar results can be expected). Strictly speaking, we analyzed the market in Saint-Petersburg. Considering the quantitative information about the total Russian market we suppose that these results are more or less valid for other urban Russian markets, too. However, this is only an assumption, an empirical proof might be an interesting research field for future studies.

To keep information acquisition simple, we decided to use a simple additive model using ranking technology within our CA. For example, we did not use a Choice Based Conjoint Analysis (CBC) confirming discrete choice modeling because Russian consumers are not familiar with empirical research. Traditional CA is easier to un-

derstand and time requirements decrease if only a small number of stimulus cards is used. For our purpose we used a very basic product category (potatoes) where the number of relevant attributes is limited. We presented only 8 stimulus cards, which made it easy for respondents to rank them. Of course, the approximations out of the rankings are still fuzzy. But this is a common problem in empirical research.
The orthogonal design of the used product features cannot be guaranteed. Especially price and e.g. organic production are not completely independent (to some extent they are, but discount prices and organic production usually do not fit). This is a common problem when using CA. It reduces the predictability of product choices as some combinations of attributes will never be available on markets.
The price span form 0.25 to 3.90 € is huge. Although these are realistic price levels in the Russian food market, it probably influences the importance of the attribute "price". In fact, the relevance of the price level of food products might be overrated. The overwhelming importance of the factor "price" might be due to the fact that the price span was huge. But as this price span comes close to real market conditions for potatoes in Saint Petersburg (and the Russian market, too) the core finding that the product price is by far the highest important attribute is still valid.
Concerning the structure of our sample we mentioned that there are differences to the overall structure of the Russian population (in particular concerning income and education). This might be due to the point of interviewing. Many Interviews were made in a middle-class supermarket where the structure of customers obviously is not the same compared to the overall structure of the society. However, socio-demographics are not very important for describing consumer behavior. Considering that, the deviations might be negligible.

7 Conclusions and future perspectives

The market of organic food in Saint Petersburg was investigated (Saint Petersburg was taken as an example of urban Russian markets). Although about half of our respondents knew at least something about organic production, there is a huge lack of knowledge concerning organic certification and organic labels. Usually, consumers are not familiar with organic labels and standards. Following Zakowska-Biemans (2011), too less knowledge could be an important obstacle for the development of the organic food market. At the moment, this seems to be totally true for the Russian market.
Consumers were concerned about GMO products and risks of pesticide residues in fruits and vegetables. This could be a clear message for marketing organic food: They are not containing any GMO or pesticide residues. Consumers must be trustful in the purchased organic food and for this purpose, clear understandable organic labels are a must. The findings of Janssen and Hamm (2012) that the willingness to pay is connected to well-known organic labels, seem to be true for Russian consumers as well. They point out that "it is advisable to label organic products with well-known organic certification logos that consumers trust" (Janssen and Hamm, 2012).
The majority of the respondents declared that they would buy organic fruits and vegetables if they were available in supermarkets. The most popular reasons for that were health concerns and that organic food contain no chemical substances and GMO. The price was by far the most crucial factor defining consumer choice, followed by origin and method of production accordingly. In general, consumers prefer locally produced food. Other attributes connected to convenience or packaging did not seem to be important characteristics for respondents. The core outcome of our research significantly differs from studies in developed markets: It is the price that matters for the vast majority of Russian consumers; the price sensitivity is a huge obstacle for marketing premium products. Organic food has to be cheap. Only then it will be possible to succeed in mass distribution. Another strategy could be the distribution of organic food at premium prices for only a small, wealthy minority. In this case, organic food will remain a small niche within the food market (as it is now). The target segment for this marketing strategy are consumers with significantly higher than average income and higher education. Consequently, the organic sector will not gain an important proportion within the agricultural sector in the near or even further future. But as we are talking about a really huge market with millions of potential customers where the income situation is improving at least for parts of the population, there is of course a significant potential for foreign companies to import organic food into the Russian market.

All in all, the market of organic food in Russia is on an early stage of development. Most of the consumers have heard about organic products, but usually, they have no knowledge what that product category is about. They are not familiar with organic labels, so up to now, no basic signal is available that could support building consumer confidence in organic food.

In this context, one important issue was identified that contradicts the premium price strategy mentioned above: Consumers prefer local products. There are numerous studies available mentioning that domestic products are becoming more and more popular and usually localness is an even more important characteristic defining consumers' choice than the method of production. For example, Roosen et al. (2012) showed that organic products lose their authenticity when they are not local. Up to now, almost all organic products sold on the Russian food market are imported. Producing local organic fruits and vegetables seems to be an important perspective. Obviously, the production cost will decrease with increasing quantities. Logistics will become less costly in comparison with imported good. In total, prices of domestically produced organic food would probably be much lower. Together with consumers' preferences for local food, this could significantly support a further development of the Russian domestic market.

The barriers for development are the same like in other Eastern European countries and which have already been overcome by Western European countries. The problems are connected with distribution channels (organic products are unavailable for consumers), a lack in legislation and governmental support, low rate of farmers who converted to organic production, a lack of information and knowledge of consumers, low market supply from the domestic market, no training and education for farmers, high prices for the products (which have to be imported), and low quality of fruits and vegetables produced organically by local farmers. All these factors slow down the development of the market of organic food in Russia. However, this market has a good perspective for development, at least if organic products can be produced locally at competitive price levels and in good quality or if more wealthy people can be reached with higher priced, premium organic food.

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