PERCEPTION OF FOOD ORIGIN BY THE SLOVAK CONSUMER

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Abstract


In many product categories is one of the factors influencing consumer behaviour also the country of origin what is the main goal of this article. Consumers are influenced by their own origin, by experiences with domestic and foreign products and stereotyped ideas about quality and reliability of products from other countries. The results of many marketing studies have concluded that the evaluation of products is significantly influenced by knowledge of where the products were produced. However, when directly analysing the importance of country of origin in the purchase decision, buyers mostly minimize its impact. They want to look like logical or rational consumers who decide rather for more objective internal product attributes (taste, design and appearance) than the external factors, including the origin.

consumer behaviour, country of origin, food market

The influence of country of origin at perception of products from those countries deals with since the sixties of the 20th century the country of origin research which incorporated into the research of the consumer behaviour. In addition to examining whether and how the perception of external information “country of origin” affects the evaluation of the products from that country. If a person evaluates the product from more rational aspect, an indication of the origin performs like one of the characteristics of the overall evaluation of the product. However, if the evaluation is emotionally and socially oriented, the origin affects directly on the preferences eventually on consumer behaviour, says SAND (2000). All realized empirical studies have in common that the attribute of product “country of origin” influences the evaluation of the product by buyer. The same applies to 1) products in general, 2) the selected product categories, 3) specific types of products and 4) specific brands. Moreover, holds that the products from more advanced countries are preferred to products from less developed countries. Several studies show that generally are preferred domestic products against the foreign ones. A similar conclusion as ORTH - FIBRASOVÁ (2003) also concluded BATRA (2000).

Gradually, as markets were becoming global, the companies began to transfer their production because of lower costs to less developed countries. Therefore, the concept of COO (country of origin) extended by the concepts of COM (country of manufacturing), COD (country of design), COA (country of assembly) (INSCH–McBRIDE, 2004). Consequently the term COO was not used as a synonym with “made in” say GOLDBERG and BAUMGARTNER (2002), but to labelling a country which people think of it that the product originates, regardless of where it was produced.

OBERMILLER and SPANGENBERG (1989) explain the effect of country of origin as follows:
- Normative impact. Direct effect of the information on the country of origin on purchase decision. In this context it is advisable to highlight the concepts like ethnocentrism and patriotism.
- Affective impact. Country of origin has symbolic and emotional value to the consumer.

All described processes can not be easily separated, but each one of them dominates, depending on the type of goods, situational factors and by per-
The formulation of manufacturing, marketing and in this field is the importance of country of origin in than imported products. However, the respondents consider Lithuanian organic food products to be of lower quality than towards the imported ones. They consider Lithuanian products as being fresher, more trustworthy and tastier than imported products. However, the respondents consider Lithuanian organic food products to be of lower quality than imported products.

Until now, more than 750 publications were issued, the main theme leading marketing researchers in this field is the importance of country of origin in the formulation of manufacturing, marketing and investment strategies for global and multinational firms (CHINEN, 2000).

The first multinational study on a sample of 2220 respondents was realized in five countries in the years 1985–1987 by Papadopoulos and Heslop. Their main result was finding that there exists a relationship between the image of the country and product image.

While in this field were realized countless surveys, there exist several limitations of individual researches. Firstly, not all surveys reflected that the products could be suggested, produced and assembled in different countries. Secondly, most studies were realized in developed Western countries such as USA, Canada, Western Europe, and therefore not possible comparison of countries (LI, 2000). Thirdly, most researches have been realized on unrepresentative sample of students. And fourthly, many studies analysed only solitary origin in isolation from other factors influencing the consumer decision (BAKER–BALLINGTON, 2002).

The primary decision criteria for the food market, according to SCHADE and LIEDTKE (2001), are freshness, taste and appearance of food. Only then are relevant decision criteria such as price, healthy food and origin.

Preferring quality of food, which includes the freshness, controlled safety of food and other criteria, is the objective of any advanced society. From this reason the origin of the food is often highly rated by the consumers even sometimes overestimated.

Quality of food has a different role depending on the type of food, says BECKER (2005). It cannot be forgotten that the origin is a feature of the confidence. It can not be directly examined by the consumers, such as appearance. Consumer gets the information about the origin from the product packaging, advertising in the media or from the shop assistant in the store. In the best case, consumer trusting to the indication of origin on the label of the product, as well as to other data on the package.

Sometimes it is possible to know the origin of the name of the product itself. It is in case if the text contains a protected label of origin or protected geographical labels, which are defined in Council Regulation EC No. 510/2006. In the identification of origin may be helpful for the consumer also the Quality Label SK, which is granted from the year 2004 on the territory of the Slovak Republic by Ministry of Agriculture of SR.

The European Union leads the individual Member States to support and promote the agricultural products and foodstuffs on the basis of quality, safety and health harmlessness, but not directly encouraging to their national origin, but with the logo and quality labels, say NAGYOVÁ and ÁCSOVÁ (2006).

The current state of quality and safety of food in the Slovak Republic as a EU member country is characterized by ROVNY (2008) as fully harmonized with the state valid anywhere in the European Union. Changing consumers’ attitudes to quality and origin of food, chances to improve the health by consumption of functional food are important factors that may significantly affect in the future the consumption of other kind of foodstuffs.

**MATERIALS AND METHODS**

The main aim of the article was researching of determinants of the consumer behaviour with an emphasis on assessing the impact of country of origin on consumer decision making.

Background data were drawn from primary and secondary sources. Primary data were obtained from marketing research of the market, especially by the questionnaire technique. An overview of the problems solved, was molded by studying domestic and foreign scientific publications.

Anonymous questionnaire survey on consumer behaviour in the market of selected food has been prepared in accordance with the rules governing the creation questionnaire. In distributing the questionnaire, respondents were familiar with the purposes of research and asked to cooperate. At the same time they received the instructions how to complete the questionnaire. There was a pilot survey conducted on a selected sample before distribution. From a total of 1080 distributed questionnaires into the various regions of the SR, were fully completed 1017.

To calculate the sample size was used the relationship to determine the extent of the sample without repetition: \[ n = \frac{1}{\left(6+2(\mu^2+4\pi^2(1-pi)^2)+1/N^2\right)} \]

where: \[ \mu = 1.97, \pi = 0.5, a = 0.03, \text{ and } N = 4287.848 \]. The calculation of sample size showed that the number of respondents should move at the level of 1078 respondents. The sample was random, the controlled variables were only gender and age, where we ensured the representativeness of the sample.

Summary characteristics of the obtained data were analysed using methods of descriptive statistics (fre-
frequency, mean rate, rate variability) to allow fast and reliably insight into the entity of examined data.

In examining the relationships and dependencies between the qualitative features we used the association and contingency analysis. Association examines the relationship between alternative characters with two variations, contingency between the characters with more variation.

We sorted the input data at the beginning of the analysis and results of the classification were held in contingency tables. Then we verified the existence of dependencies between the characters using the Chi square test of square contingency and Chi square test of a good match.

Chi square test of square contingency is based on a comparison of empirical and theoretical multiplicity for each category of observed characters. The test criterion for verifying the null hypothesis \( H_0 \) predicting the match of categories of the basic characteristics is calculated by the relationship:

\[ \chi^2 = \sum \sum \frac{(E_{ij} - T_{ij})^2}{T_{ij}}, \]

where:

- \( E_{ij} \) - empiric multiplicity in cell in the \( i \)-th line and \( j \)-th column,
- \( T_{ij} \) - theoretical multiplicity in cell in the \( i \)-th line and \( j \)-th column,
- \( r \) - number of categories first (row) index,
- \( c \) - number of categories the second (column) index.

Theoretical multiplicity \( T_{ij} \) is calculated:

\[ T_{ij} = \frac{(R_i \cdot C_j)}{n}, \]

where:

- \( R_i \) - amount of multiplicity in the \( i \)-th row,
- \( C_j \) - amount of multiplicity in the \( j \)-th column,
- \( n \) - total multiplicity.

Alternative hypothesis (\( H_1 \)) supposes that between given quality characters exists a dependence (association). If \( H_1 \) is valid, then \( H_0 \) is refused. If the calculated value of the test criterion \( \chi^2 > \chi^2_{\alpha} \), where \( \chi^2_{\alpha} \) is a table value found for \((c - 1), (r - 1)\) degrees of freedom, so is valid \( P(\chi^2 > \chi^2_{\alpha}) = \alpha \) (\( \alpha \) is the level of significance at which the test is performed). If \( \chi^2 > \chi^2_{\alpha} \), we accept the hypothesis \( H_1 \), so we consider the characteristics of the chosen level of significance as a dependent. Mutual dependences are tested using the \( \chi^2 \) value. The value is close to zero, the degree of interdependence is higher.

Chi square test of a good match provides to determine whether the obtained empirical values are statistically significantly different from theoretical values that characterize the conditions of the basic complex. The test criterion for verifying the null hypothesis \( H_0 \) predicting the match of categories of the basic and the selective sample is variable:

\[ \chi^2 = \sum \frac{(E_{ij} - T_{ij})^2}{T_{ij}}, \]

where:

- \( E_{ij} \) - empiric multiplicity \((i \)-th category of the selective sample),
- \( T_{ij} \) - theoretical multiplicity (is calculated by multiplying the extent of selective sample \( n \) and the relative share \( i \)-th category basic sample).

The test criterion has \( \chi^2 \) - distribution with \( m - 1 \) degrees of freedom, where \( m \) is number of categories (classes). If the calculated value of the test criterion \( \chi^2 > \chi^2_{\alpha} \), where \( \chi^2_{\alpha} \) is table value founded for \((m - 1)\) degrees of freedom, then we accept null hypothesis \( H_0 \) and the selective sample is in comparison with the basic sample is representative for the level of significance \( \alpha \). Otherwise, we reject \( H_0 \). For measuring the strength of statistical dependence we used correlation coefficients.

**RESULTS**

Satisfying the customer needs constantly requires the most possible exact identifying the shopping desires and motives. The respondents were asked to estimate the impact of individual purchasing criteria in their purchasing behaviour on a scale from 1 (very strong influence) to 5 (no impact).

We presented in the questionnaire to respondents the following eighteen factors: taste, advertising, price, quality, known brand of the product, the positive impact on health, the country of origin, appearance/packaging of the product, various forms of sales promotion, freshness, safety, their own experiences with the product, the effort to try something new respect for the environment, recommendations of known, family and experts, the content of preservatives, the product quality label and information on the product packaging.

Based on the calculated relative multiplicity and values of contingency coefficients 4 can be stated that the most important criteria in the selection and subsequent purchase of food are freshness, taste and quality. This means that consumer chooses food first on the primary characteristics of the products themselves, then monitors the price and then the other attributes of products and marketing factors. Consequently, it is confirmed that the consumer cares about quality when buying food and the country of origin is in the consumer decision-making lateral.

Country of origin food has a very strong impact on about quality when buying food and the country of origin is in the consumer decision-making lateral. Country of origin food is ranked among the eighteen criteria to the 16th place.

Country of origin food has a very strong impact on 13.9% of respondents. We could see differences between decisions, which were mostly demonstrated in different age, occupation and educational categories. The origin of the product influences food choice in households of employees, from 35 to 64 years old, with graduation or university education.

Significant effect of the criterion “country of origin” for the purchase of food for different groups of
respondents was verified by \( \chi^2 \) (chi-quadrant). Results are summarized in the Tab. I.

### Tab. I: Expression of dependencies between factor “country of origin” and various socio-demographic characteristics

<table>
<thead>
<tr>
<th>Factor</th>
<th>Characteristic</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td>1.79</td>
</tr>
<tr>
<td>Education</td>
<td>26.83 *</td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>63.47 *</td>
<td></td>
</tr>
<tr>
<td>Household</td>
<td>15.79</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>13.37</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>86.54 *</td>
<td></td>
</tr>
<tr>
<td>Domicile</td>
<td>8.09</td>
<td></td>
</tr>
</tbody>
</table>

Source: Own questionnaire survey and author’s calculations

Note: * refers to groups whose individual categories show different characteristics in the decision by the existing factor

Majority of Slovak consumers now observes the country of origin of food, of which 20% always and 50% only sometimes despite of participation with other criteria of selection, the origin of food placed on the last ranks (16th place of 18 criteria).

Statistically significant differences in observing the country of origin exist in terms of age, education and economic activity. In terms of gender, domicile, income and net monthly disposable income of household does not reveal any significant differences.

In terms of the age, the origin observes mostly the middle generation (35–49 years) and at least seniors over the age of 65 years what confirmed also in terms of economic activity. As far as the highest reached level of education, country of origin finds out in the purchase mainly university educated people or people with upper secondary education. At least observe the origin people with primary education.

The main reasons of observing the country of origin based on the spontaneous responses of the respondents are summarized in the Fig. 1.

As most often responses indicated respondents “preferring domestic products” and “supporting of domestic economy”, which can be connected with some patriotism or etnocentrism. Another group of respondents consider the country of origin as an “indicator of product quality”, it means that they use the image of the country for evaluating its products. This reason is at the same time connected also with another motive for observing the country of origin and with the question of food security, especially in relation to third countries. To the other reasons of monitoring the origin of food on packages belonged curiosity and other factors such as taste, price or freshness.

The impact of country of origin on consumer decision when buying food in general and by selected foods we tried to quantify on the basis of another question of the questionnaire. The aim was finding out in which food is the origin important for the consumer and from what reasons.

In order to detect differences in observing the country of origin in individual foods, respondents should refer importance to the country of origin on a five step Likert scale (1 – the origin is very important, 2 – rather important, 3 – neither important nor insignificant, 4 – rather insignificant, 5 – insignificant).

From the Tab. II follows that consumers refer the greatest importance to the country of origin just to the bakery, meat and dairy products, probably by the reason of the freshness. The freshness will be at the same time also the main motive for preferring of domestic food from abroad for these kinds of food. For other assortment groups of food can be supposed that observing of the country of origin is based on the preference of a concrete manufacturer or brand, of a concrete taste or curiosity of consumers.
For the purpose of further analysis, respondents were divided into three groups on the basis of the importance attributed to the country of origin when buying food. The first group represents respondents who take notice of the origin of food and/or refer very strong or strong importance to the country of origin in their shopping process (mark 1 and 2 on a five step Likert scale). The second group is represented by the middle (mark 3), thus a group of respondents for who the origin is neither important nor insignificant. The last third group consists of respondents who on a scale from 1 to 5 selected 4 and 5. It is a group for who the origin is not very important when they decide to purchase food.

Most respondents (52.7%) may be ranked into the first group, a group for who the country of origin when buying food is important.

Closer characterization of all three groups according to socio-demographic characteristics (gender, domicile, age, education, income, number of family members) is shown in the Tab. III. Among the different groups that refer to the country of origin different meaning and individual socio-demographic characteristics are some associations. Statistically significant differences between groups were found out by chi square test of independence on the 5% level of significance in terms of age and education.

In terms of age, refer the greatest importance to the country of origin the middle age group (35–

<table>
<thead>
<tr>
<th>Type of food</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food in general</td>
<td>28.61</td>
<td>23.99</td>
<td>23.21</td>
<td>6.49</td>
<td>17.70</td>
</tr>
<tr>
<td>Dairy Products</td>
<td>44.98</td>
<td>24.21</td>
<td>13.29</td>
<td>4.63</td>
<td>12.89</td>
</tr>
<tr>
<td>Meat products</td>
<td>45.43</td>
<td>22.52</td>
<td>12.39</td>
<td>5.12</td>
<td>14.54</td>
</tr>
<tr>
<td>Bakery goods</td>
<td>47.20</td>
<td>19.96</td>
<td>12.39</td>
<td>5.11</td>
<td>15.34</td>
</tr>
<tr>
<td>Sweets</td>
<td>15.04</td>
<td>22.32</td>
<td>27.24</td>
<td>11.21</td>
<td>24.19</td>
</tr>
<tr>
<td>Non-alcoholic beverages</td>
<td>16.22</td>
<td>17.99</td>
<td>25.07</td>
<td>11.01</td>
<td>29.71</td>
</tr>
<tr>
<td>Wine</td>
<td>25.17</td>
<td>24.16</td>
<td>21.69</td>
<td>6.63</td>
<td>22.35</td>
</tr>
<tr>
<td>Beer</td>
<td>28.08</td>
<td>27.16</td>
<td>19.10</td>
<td>5.75</td>
<td>19.91</td>
</tr>
</tbody>
</table>

Source: Own questionnaire survey and author's calculations

<table>
<thead>
<tr>
<th>Socio-demographic characteristics</th>
<th>1. gr.</th>
<th>2. gr.</th>
<th>3. gr.</th>
<th>Socio-demographic characteristics</th>
<th>1. gr.</th>
<th>2. gr.</th>
<th>3. gr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td>Domicile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woman</td>
<td>51.21</td>
<td>54.66</td>
<td>51.64</td>
<td>City</td>
<td>62.62</td>
<td>65.25</td>
<td>60.57</td>
</tr>
<tr>
<td>Man</td>
<td>48.79</td>
<td>45.34</td>
<td>48.36</td>
<td>Countryside</td>
<td>37.38</td>
<td>34.75</td>
<td>39.43</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td>Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18–24</td>
<td>21.68</td>
<td>32.63</td>
<td>32.79</td>
<td>To 500 EUR</td>
<td>15.89</td>
<td>19.92</td>
<td>20.49</td>
</tr>
<tr>
<td>25–34</td>
<td>15.88</td>
<td>17.38</td>
<td>16.80</td>
<td>501–800 EUR</td>
<td>28.41</td>
<td>27.12</td>
<td>22.95</td>
</tr>
<tr>
<td>50–64</td>
<td>23.93</td>
<td>20.34</td>
<td>20.91</td>
<td>1201–1700 EUR</td>
<td>18.69</td>
<td>19.48</td>
<td>18.03</td>
</tr>
<tr>
<td>65 and more</td>
<td>6.92</td>
<td>8.89</td>
<td>12.70</td>
<td>Over 1700 EUR</td>
<td>5.42</td>
<td>4.24</td>
<td>10.25</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td>Activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic</td>
<td>5.05</td>
<td>8.48</td>
<td>11.06</td>
<td>Employed</td>
<td>63.11</td>
<td>50.85</td>
<td>53.28</td>
</tr>
<tr>
<td>Apprentice</td>
<td>13.08</td>
<td>14.41</td>
<td>13.11</td>
<td>Unemployed</td>
<td>2.06</td>
<td>1.27</td>
<td>1.64</td>
</tr>
<tr>
<td>With graduation</td>
<td>52.71</td>
<td>51.26</td>
<td>54.52</td>
<td>Student</td>
<td>20.79</td>
<td>30.51</td>
<td>29.92</td>
</tr>
<tr>
<td>University</td>
<td>29.16</td>
<td>25.85</td>
<td>21.31</td>
<td>Pensioner</td>
<td>14.04</td>
<td>17.37</td>
<td>15.16</td>
</tr>
<tr>
<td>Number of household members</td>
<td></td>
<td></td>
<td></td>
<td>Place of purchase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>6.54</td>
<td>6.78</td>
<td>9.43</td>
<td>Hypermarket</td>
<td>33.08</td>
<td>29.66</td>
<td>40.65</td>
</tr>
<tr>
<td>2</td>
<td>19.81</td>
<td>20.34</td>
<td>16.80</td>
<td>Supermarket</td>
<td>34.21</td>
<td>33.47</td>
<td>29.27</td>
</tr>
<tr>
<td>3</td>
<td>19.82</td>
<td>21.62</td>
<td>23.36</td>
<td>Discount</td>
<td>6.92</td>
<td>11.44</td>
<td>7.72</td>
</tr>
<tr>
<td>4</td>
<td>39.81</td>
<td>36.86</td>
<td>37.71</td>
<td>Self-service</td>
<td>25.79</td>
<td>25.42</td>
<td>22.36</td>
</tr>
<tr>
<td>5</td>
<td>11.96</td>
<td>12.71</td>
<td>11.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 and more</td>
<td>2.06</td>
<td>1.69</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Own questionnaire survey and author's calculations
After clarifying of the impact of different criteria for purchasing decisions, in this section we will focus on the reasons that lead consumers to prefer food of domestic origin. 74.4% of respondents prefer Slovak food because they are convinced of good taste of the Slovak food and 66.5% of respondents consider the domestic food er than foreign. Only one sixth of respondents presented the price as the motive of preferring domestic food. As we also expected, by buying Slovak food play the most important role cognitive motives (taste, freshness or price). Normative reasons such as with purchase of Slovak food I want to support jobs in Slovakia or I buy Slovak food because their time of delivery and distribution is shorter than foreign food were also frequently mentioned. From the affective processes, 52.8% of respondents presented as a reason of the purchase of Slovak foods reality, which they come from their homeland.

**CONCLUSION**

The importance of the origin of the country is one of the criteria which will be significant also in future. Perception of food through their internal and external attributes demonstrates a strong focus on freshness, taste and price. Therefore, it also shows that communication could focus on these factors. But what can not be underestimated is emotional influencing of consumers and observing normative factors in the purchase, which may also be motivation to buy. However, in conjunction with the price, the impact of country of origin significantly decreases. We should realize that the attribute of the product – the origin is certainly not only the one, but in the context of other characteristics of products creates the overall image of the goods. It is important the mutual consistency of the three attributes – origin, label and price. If there are any presumptions to use the origin in marketing, then especially in the communication policy.

**SÚHRN**

Vnímanie krajiny pôvodu potravín slovenským spotrebiteľom


spotrebiteľské správanie, krajina pôvodu, trh potravín

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