

# IMPORTANCE OF THE COUNTRY OF ORIGIN FROM THE CONSUMERS' PERSPECTIVE IN THE RESEARCH CONTEXT OF BOSNIA AND HERZEGOVINA

## ISTRAŽIVANJE VAŽNOSTI ZEMLJE PODRIJETLA IZ PERSPEKTIVE POTROŠAČA U ISTRAŽIVAČKOM KONTEKSTU BOSNE I HERCEGOVINE



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### Abstract

**Purpose** – The purpose of this paper is to establish the level of importance of the country of origin (COO) in the purchasing process of different categories of consumer goods in the research context of Bosnia and Herzegovina (B&H).

**Design/Methodology/Approach** – The study is based on primary data collected through a survey questionnaire on a consumer sample in B&H. The analysis consists of several levels: establishing a level of COO importance for consumers; establishing a level of consumer familiarity with a COO; identifying the influence of consumer ethnocentrism on the level of COO importance.

**Findings and implications** – ANOVA and T-paired tests highlighted the importance of COO to vary across product categories. The results of regression analysis showed that consumer ethnocentrism significantly influences the level of COO importance in the purchasing process. The results contribute to the thesis that COO has a di-

### Sažetak

**Svrha** – Svrha ovoga rada jest utvrditi važnost zemlje podrijetla u kupovnom procesu različitih kategorija potrošačkih dobara na tržištu Bosne i Hercegovine (BiH).

**Metodološki pristup** – Rad je zasnovan na rezultatima anketnog ispitivanja na reprezentativnom uzorku potrošača u BiH. Analiza sadrži nekoliko razina, a to su: utvrđivanje važnosti zemlje podrijetla za potrošače; utvrđivanje stupnja upoznatosti potrošača sa zemljom podrijetla; utvrđivanje utjecaja potrošačkog etnocentrizma na razinu važnosti zemlje podrijetla.

**Rezultati i implikacije** – Analizom varijance (ANOVA) i T-testom parova utvrđeno je kako važnost zemlje podrijetla sa stajališta potrošača varira u ovisnosti o razmatranoj kategoriji proizvoda. Rezultati regresijske analize pokazali su da u kupovnom procesu potrošački etnocentrizam značajno utječe na razinu važnosti zemlje podrijetla. Rezultati doprinose tezi kako ona ima dijagnostičku vrijednost za potrošača u kupovnom procesu i prema

agnostic value for the consumers in the purchasing process and can therefore be used as a marketing tool in providing better market acceptance and positioning of products.

**Limitations** – This research has a limited scope considering that it is a single-market study, but also because of the small range of researched product categories. Further research studies should consider a wider range of product categories, as well as a cross-cultural research approach to explore the importance of COO on the overall purchasing process.

**Originality** – This study represents an integrative approach to the phenomenon of COO, consisting of consumer ethnocentrism, product characteristics, and consumer perspective regarding COO importance and familiarity.

**Keywords** – country of origin, country of origin studies, country of origin effect, product cues, product categories

tome može biti korištena kao marketinški alat doprinoseći boljem prihvaćanju i pozicioniranju proizvoda.

**Ograničenja** – Rad ima ograničen doseg zbog činjenice da je istraživanje provedeno na jednome tržištu, kao i zbog ograničenog raspona razmatranih kategorija proizvoda. Buduća istraživanja trebaju razmotriti veći raspon kategorija proizvoda kao i kroskulturni istraživački pristup kako bi utvrdili utjecaj COO na ukupni kupovni proces.

**Doprinos** – Rad predstavlja integrativni pristup fenomenu zemlje podrijetla koji uključuje potrošački etnocentrizam, karakteristike proizvoda i perspektivu potrošača s obzirom na važnost zemlje podrijetla te njezino prepoznavanje u kupovnom procesu.

**Ključne riječi** – zemlja podrijetla, studije zemlje podrijetla, utjecaj zemlje podrijetla, karakteristike proizvoda, kategorije proizvoda

## 1. INTRODUCTION

Country of origin (COO) studies represent a research tendency that has been developed over the course of fifty years in order to link COO with product evaluation and purchase intentions (Usunier & Cestre, 2007). The phenomenon of evaluating products based on the country of origin is called the COO effect (Chryssochoidis, Athanassios & Panagiotis, 2007). A typical design of earlier COO studies was to overestimate the COO effect on the consumer evaluation process (Pharr, 2005). However, some of those studies were critical of the dominant importance given to the concept of COO in the overall product evaluation (Peterson & Jolibert, 1995). Even in that period, there were attempts at a more realistic research approach and the analysis of a greater number of product cues relative to the products' COO (Ahmed & d'Astous, 1993). In the last few years, the relevance of COO has also been studied taking into account the globalization of the market environment. The relevance of COO for consumers might have decreased on account of external changes due to the increasing globalization of production, which in turn causes many consumers to be unaware of COO in the purchasing process (Samiee, Shimp & Sharma, 2005; Samiee, 2011; Usunier, 2011).

According to Parameswaran and Pisharodi (1994), there are two main streams among COO studies. The first is related to the COO effect on cognitive, attitudinal and behavioral aspects of the purchasing process. The second is related to the conceptualization of the COO image and its operationalization. The first research stream, related to the COO effect on cognition, provided a great body of literature based on the *cognitive approach built on the theory of information processing*. Based on that theory, the process of product evaluation has been observed on the basis of different informational cues or stimuli used by consumers depending on their availability and diagnostic value (Samiee, 1994; Samiee et al., 2005). From the perspective of that theory, consumer information processing is based on intrinsic cues, such as product design,

performance, and taste on the one hand, and extrinsic cues, such as price, brand, COO, etc. on the other hand (Samiee, 1994). In case intrinsic cues are missing or are difficult to evaluate, the consumer uses extrinsic cues to get a better understanding of the product's attributes (Ahmed, 2008). This paper is focused on a COO from the cognitive perspective and, therefore, COO has been observed as an informational cue. Information related to the country of origin refers to the place or the location in the world where a product is manufactured or branded (Liefeld, 2004). The country of brand origin and the country of production origin, as a relevant COO decomposition, play important roles in forming customer perception (Demirbag, Sahadev & Mellahi, 2010; Uddin, Parvin & Rahman, 2013).

The purpose of this paper is to explore the importance of COO from the consumers' perspective for different product categories, relative to other product cues in the research context of B&H. For the purpose of this study, consumer ethnocentrism is observed as a consumer characteristic that significantly influences the level of COO importance in the purchasing process. The term *consumer ethnocentrism* was developed to represent beliefs held by consumers about the appropriateness, and indeed morality, of purchasing foreign-made products (Shimp & Sharma, 1987). On the basis of a conceptual background of consumer ethnocentrism, Shimp and Sharma (1987) developed and validated the *Consumer Ethnocentric Tendencies Scale* (CETSCALE). In their study, the importance of COO was positively related to the CETSCALE score.

## 2. AN INSIGHT INTO COO ANTECEDENTS AND CONSEQUENCES

Although COO remains a highly researched topic in the international marketing literature, the concept has recently been exposed to criticism questioning both its theoretical utility and practical relevance (Herz & Diamantopoulos, 2013). Credit for a shift in theoretical and analytical ap-

proaches to the earlier COO studies was given to two critical reviews of previous studies: one by Bilkey and Nes (1982) and another by Peterson and Jolibert (1995). The meta-analytical review of COO studies done by Peterson and Jolibert (1995) significantly set the direction and content of recent COO studies.

Recently, one of the most cited reviews of COO studies is the meta-analytical review made by Pharr (2005). In order to contribute to the insight into the COO phenomenon and to overcome the flaws of previous COO studies, Pharr (2005) focuses on Peterson's and Jolibert's (1995) conclusions about the necessity to explore the antecedents, moderators, and outcomes of the COO. With this in mind, Pharr (2005) analyzed COO studies from a ten-year period (1995-2005) by categorizing them into the following groups: (1) studies that research antecedents of COO evaluation; (2) studies that research moderators of the COO effect, and (3) studies that analyze outcomes of the COO effect. Further in this paper, Pharr's categorization of the COO studies is used as the framework for an inquiry into the antecedents and consequences of COO evaluation.

## 2.1. Antecedents of COO evaluation

The most recent COO studies are characterized by an increasing number of observed variables (Liefeld, 2004). In the last decade, many studies have dealt with antecedents that influence COO evaluation (Balabanis & Diamantopoulos, 2004; Insch & McBride, 2004; Laroche, Papadopoulos, Heslop & Bergeron, 2003).

According to Pharr (2005), the antecedents that influence COO evaluation can be divided into endogenous and exogenous groups of antecedents. Endogenous antecedents of COO are related to consumer characteristics, such as psychographic dimensions, that explain the variance in the COO evaluation. On the other hand, exogenous antecedents of COO evaluation consist of external sources of influence, such as the characteristics of a specific country.

Consumer characteristics as endogenous antecedents of COO evaluation have been ana-

lyzed by a number of studies. Among them, the following characteristics have been identified: sub-cultural consumer characteristics (Laroche et al., 2003); stereotypes about certain countries (Liu & Johnson, 2005); cultural orientations (Gurhan-Canli & Maheswaran, 2000); consumer animosity (Nijssen & Douglas, 2004), materialism (Demirbag et al., 2010; Sharma, 2011), etc.

As a general tendency of inclination towards domestic products rather than towards imported ones, consumer ethnocentrism has also been identified as an endogenous antecedent of COO evaluation (Balabanis & Diamantopoulos, 2004; Dmitrovic & Vida, 2007; Pecotich & Rosenthal, 2001; Sharma, 2011; Shimp & Sharma, 1987). COO as an informational cue activates ethnocentric beliefs and the antecedent knowledge of consumers, which subsequently affect the interpretation and evaluation of product attributes (Chrysochoidis et al., 2007). Country of origin information was found to be more important to the ethnocentric consumers (Dmitrovic & Vida, 2007; Vida & Dmitrovic, 2001). However, a small group of studies have examined the importance of COO for consumers (Balabanis & Diamantopoulos, 2004; Liefeld, 2004). Also, an even smaller number of studies have dealt with the knowledge of ethnocentric consumers about products' origins (Balabanis & Diamantopoulos, 2008). In this paper, consumer ethnocentrism was observed as the most important endogenous variable in the assessment of COO importance for consumers.

The research on exogenous antecedents of influence on COO evaluation has been significantly less plentiful, although, among external variables for COO evaluation, the level of economic development of COO has been distinguished as highly significant (Pharr, 2005). Roth and Romeo (1992) postulated a theoretical framework for the relationship between consumer preferences for a country's products and perceptions of a country's culture, economy, and politics. Generally speaking, on the basis of COO studies, it has been shown that consumers prefer products originating from developed countries

over products from undeveloped or developing countries (Ahmed & d'Astous, 1996). According to Balabanis and Diamantopoulos (2004), the perception of COO competitiveness is an important factor influencing overall product evaluation. Competitiveness would be a particular country's ability to manufacture products that require a certain level of skills and technology (Verlegh & Steenkamp, 1999).

## 2.2. Influence of COO and other product cues on consumer evaluation and purchase intention

Directly influenced by Peterson's and Jolibert's (1995) meta-analytical study, many COO studies have tested a great range of variables in a combination with COO and their mutual influence on product evaluation and purchase intention. The general conclusion derived from the earlier studies was that, in the case of extremely low levels of information about existing products, consumer perception will be more likely to be influenced by COO (Johansson, Ronkainen & Czinkota, 1993). A certain number of earlier studies confirmed that product quality and price are the two most significant cues used by consumers in product evaluation, especially those of foreign origin (Shimp et al., 1993). It was also found that COO is not very important in product evaluation in comparison to quality, brand name, and price (Ahmed & d'Astous, 1993).

The effects of different informational cues were not the same across different product classes; COO significantly influences the evaluation of luxury products, as well as products linked with social status, while in the case of fast-moving goods, the COO effect is not significant (Prion, 2000). Kinra (2006) also found the same by identifying an important COO effect on the evaluation of permanent, but not fast-moving consumer goods. On the other hand, some studies have found that COO influences the evaluation of fast-moving consumer goods, including food products (Ahmed, Yang, Fatt, Teng & Boon, 2004; Chrysochoidis et al., 2007; Orth & Firbasova,

2003). Insch and McBride (2004) established that familiarity with a product reduced the significance of COO as a factor in product evaluation, but the direction of this relation also depended on the product itself. The level of consumer involvement in the decision-making process, as well as involvement type, moderate the significance of the COO effect on the evaluation of product quality (Gurhan-Canli & Maheswaran, 2000; Ahmed et al., 2004).

Summarizing the described results of interactive influence of COO and other product cues on product evaluation, it can be said that, regardless of the fact that a great number of studies offer an argument in favor of COO affecting product evaluation, in the case that a greater number of product cues are analyzed, results have not been unambiguous in recent COO studies or from the point of view of the cumulative contribution of earlier COO studies (Pharr, 2005).

As studies proved to be inconsistent in their results related to the COO effect on product evaluation, this is also the case for the COO effect on purchase intentions (Pharr, 2005). Hui and Zhou (2002) determined that COO did not directly influence purchase intentions. The authors concluded that purchase intentions were directly influenced by brand name and price, while COO actually operated through the perception of the overall product evaluation. Based on this, they outlined a pattern in which COO information had a direct influence on the perception of product quality and an indirect effect on perceived value, while the perceived value of a product influenced purchase intentions. The same model found that purchase intention was directly influenced by brand and price information, but not by the COO information, which leads to the conclusion that COO is more likely to operate through other variables rather than directly influence purchase intentions (Hui & Zhou, 2002). In accordance with the conclusions on indirect influence of COO on purchase intentions, in a study conducted by Lin and Kao (2004), it was found that COO operated through

brand value perception, which furthermore significantly influenced product perception and purchase intentions. On the other hand, Phau and Chao (2008), as well as Sharma (2011), argue that COO has a direct effect on both product evaluations and purchasing intentions.

### 3. CONCEPTUALIZATION AND HYPOTHESIS DEVELOPMENT

Most studies of consumer behavior suggest that motivation to search for product information is proportionally determined by the level of consumer involvement. Hutchinson and Alba (1991) found that there are certain groups of consumers who are characterized by targeted search for additional information about products. This targeted process of consumers learning about products is significantly different from random or situational learning, and it results in an organized structure of knowledge that enables a consumer to better classify and categorize product attributes.

Under the complex conditions of the global production environment, products are produced, designed, assembled, or branded in the several different countries, which means that most of the products have multinational or multi-country origin related to the different countries with a different level of production competencies and different images. This fact gives managers more control over choosing the countries associated with the products which influence the consumer in the product selecting process (Nijssen & Douglas, 2004). However, "many producers and retailers use brand names that lead consumers to the wrong conclusions about products origin, in order to minimize potential negative effects of country of production" (Samiee et al., 2005, p. 391).

Considering the fact that, in the global environment, COO information has become more complex, researchers question the significance of COO for consumers' evaluations and subse-

quent behaviors (Liefeld, 2004). Certain studies also confirmed that real consumers' familiarity with a COO is mostly on a low level (Balabanis & Diamantopoulos, 2008; Liefeld, 2004; Samiee et al., 2005). Two possible conclusions can be drawn from the studies mentioned above: either the importance of COO for consumer evaluation and the decision-making process is overestimated (Liefeld, 2004), or COO is a concept of decreasing significance in the era of global brands (Pharr, 2005).

Consumer ethnocentrism, as an endogenous variable of COO evaluation, initiates a certain type of motivation for intentionally seeking information about COO (Balabanis & Diamantopoulos, 2008), but it also influences the level of importance of COO for consumers (Dmitrovic & Vida, 2007; Vida & Dmitrovic, 2001). However, a limited number of studies have dealt with the importance of products' COO to the consumer or with real consumers' familiarity with a COO (Balabanis & Diamantopoulos, 2008). Also, a relatively limited number of studies have attempted to explore the complexity of interaction between consumer ethnocentrism, a product's COO, certain product cues, and their mutual influence on overall product evaluation and the decision-making process (Balabanis & Diamantopoulos, 2004; Balabanis & Diamantopoulos, 2008; Pecotich & Rosenthal, 2001). The main precondition for studying the COO effect on product evaluation is first to establish the level of consumers' familiarity with a product's COO in the purchasing process (Balabanis & Diamantopoulos, 2008).

Ethnocentric consumers pay special attention to COO and intentionally search for products of domestic origin (Dmitrovic & Vida, 2007). The diagnostic value of COO information is higher for the consumers with higher levels of ethnocentric tendencies (Dmitrovic & Vida, 2007; Vida & Dmitrovic, 2001). The significance of COO varies depending on the level of consumer ethnocentrism but also depending on the product category (Balabanis & Diamantopoulos, 2004; Balabanis & Diamantopoulos, 2008; Pecotich &

Rosenthal, 2001). Considering the studies' results described above, the following hypotheses have been set.

- H1: The level of familiarity with a COO is higher among consumers with ethnocentric characteristics.
- H2: The level of COO importance is higher among consumers with ethnocentric characteristics.
- H3: The level of COO importance will vary regarding other product cues, depending on the product category.

## 4. RESEARCH METHODOLOGY AND INSTRUMENTS

The research design was developed in accordance with the purpose of the study. The study is based on primary data collected through a survey questionnaire on the consumer sample in B&H. A random sample of households (N=1000) was used, and stratified twice – by region and settlement size (Table 1).

TABLE 1: Sample characteristics

Total		1000
Gender	Male	48%
	Female	52%
Age	15-29	26%
	30-44	24%
	45-59	21%
	60+	29%
Education	Primary school	47%
	Secondary school	46%
	High education level	7%
Ethnics	Bosniaks	54%
	Croats	9%
	Serbs	35%
	Others	2%

Source: Author's research data

The overall analysis operates on the following levels of importance of COO from the consum-

ers' perspective: (1) exploring a general importance of COO and other cues for each observed product category; (2) comparing the importance of COO with regard to other cues between product categories; (3) determining the relative importance of COO in regard to other cues within each product category; (4) the influence of consumer ethnocentrism on the importance of COO in the purchasing process.

### 4.1. Selection of products and countries of origin

The research methodology aligned with the following criteria considering the selection of the countries of origin and selection of the product categories for the study (Pecotich & Rosenthal, 2001; Balabanis & Diamantopoulos, 2004): selection of the countries of origins should not be done on the arbitrary basis; there should be a great number of imported alternatives in the observed product categories; observed product categories should represent a significant share of household expenditures; there should be a proportional presence of domestic alternatives within each product category. Considering the stated criteria, this research observed milk, mineral water, and refrigerators as product categories originating from B&H and originating from the five countries that are the most important foreign trade partners of B&H.

### 4.2. Research instruments

The survey questionnaire included a set of open-ended questions and a list of statements asking the respondents to express their degree of agreement or disagreement, measured on a five-point Likert scale. The set of open-ended questions enabled determining the frequency of purchase/ownership of domestic and imported products, as well as the level of familiarity with COO of products that consumers most commonly purchase/own in their households. For the purpose of this paper, the COO has been operationalized as two-dimensional: country of production origin and the country of brand origin (Demirbag et al., 2010; Uddin et al., 2013).

In order to identify the product cues that a consumer perceives as the most important in the purchasing process, an approach was used from the study done by Keillor, Widmier and Lewison (2002). This study provided a list of statements for evaluating the importance of certain cues for each product category. After the process of pre-testing, the most important cues with an averaged mean score of  $M \geq 3.5$  were selected for further analysis.

The other set of statements have been operationalized to measure the level of general importance of COO from the consumers' standpoint (Dmitrovic & Vida, 2007) and the level of consumer ethnocentrism (Shimp & Sharma, 1987). Measurement instruments proved to be reliable, showing satisfactory results of Cronbach's alpha testing and ranked as follows: 17-item CETSCALE resulting in  $\alpha = .96$ ; and general importance of COO to the consumers resulting in  $\alpha = .86$ .

## 5. ANALYSIS AND FINDINGS

In order to get an insight into the importance of COO to consumers, this study analyzed the level of consumers' familiarity with COO of observed product categories. COO familiarity was observed from both the perspectives of consumers' knowledge about production origin and/or brand origin of the observed product categories. The respondents were asked to specify the COO of the milk and mineral water they mostly buy in their household and the COO of the refrigerator they own in their household.

For the purpose to exploring the influence of consumer ethnocentrism on COO importance, a K-means cluster analysis was used to extract the consumer segments based on the level of ethnocentric tendencies. The cluster analysis provided four cluster solutions: completely ethnocentric, ethnocentric, non-ethnocentric, and completely non-ethnocentric consumers. Chi-square testing was used to explore the buying frequency of domestic vs. imported products for each of the observed categories (Table 2).

TABLE 2: Chi-square test of buying frequency of the observed product categories across the segments based on consumer ethnocentrism

		Clustered CETESCALE				Total
		Completely non-ethnocentric	Non-ethnocentric	Ethnocentric	Completely ethnocentric	
<b>Milk</b>	<b>Imported COO</b>	64%	4%	20%	17%	30%
	<b>Domestic COO</b>	36%	54%	80%	83%	70%
Total		100%	100%	100%	100%	100%
$\chi^2=75.927$ ; $df=3$ ; $p=0.000$						
<b>Mineral water</b>	<b>Imported COO</b>	35%	30%	20%	13%	22%
	<b>Domestic COO</b>	65%	70%	80%	87%	78%
Total		100%	100%	100%	100%	100%
$\chi^2=27.920$ ; $df=3$ ; $p=0.000$						
<b>Refrigerator</b>	<b>Imported COO</b>	90%	91%	90%	90%	90%
	<b>Domestic COO</b>	10%	9%	10%	11%	10%
Total		100%	100%	100%	100%	100%
There is no statistically significant difference						

Source: Author's research data



It is obvious from the above table that segments of ethnocentric consumers have significantly higher purchase frequency of milk and mineral water of domestic origin. Only in the case of refrigerators, there is no statistically significant difference in buying frequency across the ethnocentric and non-ethnocentric segments. Most of the consumers from the sample own refrigerators of imported origin, which is the result of real market conditions. That is, there is only one domestic brand of refrigerators and it has not been present on the market for a long time.

The percentage of correct matching between the observed products and COO has been used as an indicator of consumers' familiarity with the COO of the products that they most commonly purchase/own in their households. After estimating the average rate of correct matching between products/brands and their COO, a chi-square test was used to analyze the differences in the level of familiarity with the COO of the observed product categories between ethnocentric and non-ethnocentric consumers in order to test the first set hypothesis (*H1*).

The following table shows the results of a chi-square test of familiarity with COO across the segments based on consumer ethnocentrism (Table 3).

The average rate of familiarity with COO, for all observed categories of domestic origin, is 92%, on the level of the total sample. The greatest level of familiarity with the origin of domestic products was noticed among completely non-ethnocentric consumers, with an average rate of correct matching of 98%, and among completely ethnocentric consumers with an average rate of correct matching of 93%. There is also a statistically significant difference in the level of familiarity with domestic origin between segments ( $\chi^2=12.679$ ;  $df=3$ ;  $p=0.005$ ).

The average rate of familiarity with products of Croatian origin is 77%. In the case of Croatian products, the level of familiarity with COO decreases as the level of consumer ethnocentrism increases, and there is a statistically significant difference in the level of familiarity between segments ( $\chi^2=11.056$ ;  $df=3$ ;  $p=0.011$ ).

TABLE 3: Chi-square test results for differences in COO familiarity across the segments based on consumer ethnocentrism

Familiarity with a COO of milk category	Clustered CATESCALE			
	Completely non-ethnocentric	Non-ethnocentric	Ethnocentric	Completely ethnocentric
Correct matching	93%	90%	82%	96%
Incorrect matching	7%	10%	18%	4%
$\chi^2=15.247$ ; $df=3$ ; $p=0.002$	100%	100%	100%	100%
Familiarity with a COO of mineral water category	Completely non-ethnocentric	Non-ethnocentric	Ethnocentric	Completely ethnocentric
Correct matching	92%	90%	86%	89%
Incorrect matching	8%	10%	14%	12%
There is no statistically significant difference	100%	100%	100%	100%
Familiarity with a COO of refrigerators category	Completely non-ethnocentric	Non-ethnocentric	Ethnocentric	Completely ethnocentric
Correct matching	68%	61%	66%	83%
Incorrect matching	33%	39%	34%	17%
$\chi^2=12.284$ ; $df=3$ ; $p=0.006$	100%	100%	100%	100%

Source: Author's research data

The average familiarity rate with the origin of products from Serbia is 76%, but without significant difference between segments ( $\chi^2=1.363$ ;  $df=3$ ;  $p=0.714$ ). Considering the products of Slovenian origin, the average rate of familiarity with COO is 85%, with a significant difference between segments ( $\chi^2=8.536$ ;  $df=3$ ;  $p=0.036$ ). The greatest level of familiarity with Slovenian origin is noticed among completely non-ethnocentric and completely ethnocentric consumers. It was not possible to estimate the level of familiarity with the origin of German and Italian products by chi-square test because of the small number of respondents who stated that they had purchased/owned observed categories from those countries.

The overall analysis shows that, in the case of consumers in B&H, there is no clear pattern between the level of ethnocentrism and the level of familiarity with COO of domestic or imported products. **Therefore, it can be concluded that hypothesis (H1), which states that the level of familiarity with COO is higher among ethnocentric consumers, has to be rejected.**

Multiple regression analysis was used to estimate the dependence interval based on a linear combination of independent dummy variables, and to test the second hypothesis (H2). To determine the importance of predicting variables, a standardized regression coefficient beta ( $\beta$ ) was used. The following table shows statistically significant results of multiple linear regressions with a set of independent variables that potentially influence importance of COO to the con-

sumers. The set of independent variables contains socioeconomic, demographic variables and the CETSCALE (Table 4).

It is obvious from the results that in the set of independent variables, consumer ethnocentrism is the most significant predicting variable of the level of importance of COO for the consumers.

**Therefore, it can be concluded that the level of COO importance is higher among consumers with ethnocentric characteristics, which confirms the second hypothesis (H2).**

The socioeconomic and demographic characteristics of consumers do not have a significant influence on the level of importance of COO in the purchasing process. Among the set of independent variables, ethnicity has been shown as an important predictor of the level of importance of COO. Considering the fact that, in the B&H research environment, different ethnic groups are characterized by different levels of consumer ethnocentrism (Cutura, 2006), even in the case of using a dummy variable, it is not possible to completely exclude the influence of ethnocentrism in the appearance of ethnicity as a significant variable in the regression model.

Analysis of Variance (ANOVA) and t-paired tests were used to test the third hypothesis (H3): *The level of the importance of COO will vary regarding other cues, depending on the product category.* ANOVA was used to test the differences in the importance of COO between product categories (Table 5).

TABLE 4: Statistically significant predictors of COO importance for consumers

		$\beta$	t
<b>Consumer ethnocentrism</b>	<b>CETSCALE</b>	0.305	7.931
Ethnic characteristics		-0.190	-4.920
		0.144	3.746
$R^2=0.415$	$F=46.935$	$p=0.000$	

Source: Author's research data

TABLE 5: ANOVA results of COO importance in comparison to other product cues between product categories

Product cues	Product categories		Mean difference	Sig.
Quality	Mineral water	Milk	-0.051	0.331
	Refrigerators	Milk	-0.057	0.221
	Refrigerators	Mineral water	-0.006	0.983
Price	Mineral water	Milk	-0.010	0.972
	Refrigerators	Milk	0.057	0.401
	Refrigerators	Mineral water	0.067	0.257
Brand	Mineral water	Milk	0.034	0.821
	Refrigerators	Milk	0.098	0.175
	Refrigerators	Mineral water	0.063	0.456
COO	Mineral water	Milk	0.025	0.893
	Refrigerators	Milk	-0.162*	0.007*
	Refrigerators	Mineral water	-0.187*	0.001*
*p<0.05				
Between Groups			F	Sig.
Quality	Between Groups		1.559	0.211
Price	Between Groups		1.465	0.231
Brand	Between Groups		1.700	0.183
COO	Between Groups		7.878	0.000*

Source: Author's research data

At the level of overall analysis, the only statistically significant difference was found in the importance of COO in the purchasing process between the observed categories ( $F=7.878$ ;  $p=0.000$ ). The difference in the importance of COO in the purchasing process of the milk and mineral water is not statistically significant. There is a statistically significant difference in the importance of COO between the refrigerator category on one hand, and milk and mineral water categories on the other. Consumers attach more significance to COO in the purchasing process of milk and mineral water than in the purchasing process of refrigerators. The importance of COO was also analyzed within each of observed product categories in order to additionally examine the accuracy of H3, which is presented in the following table (Table 6).

There is a statistically significant difference between each pair of cues in the importance attached by consumers in the purchase of milk. From the consumers' standpoint, quality is the

most important in the case of milk purchasing. Also, the COO of the milk is more important to them than the brand.

In the category of mineral water, almost all differences between COO and other product cues, as well as other pairs of cues, are statistically significant. Just as is the case with milk purchasing, quality is the most important factor to consumers in the purchasing of mineral water. Also, as in the case of milk, the COO of mineral water is more important to the consumers than the brand. Brand and packaging convenience of mineral water is the only pair where there is no significant difference in the importance to consumers. Packaging convenience means that product can be used with reduced effort. Packaging convenience can also be linked to the different consumers' attitudes towards health, perceived risks, ecological standards, or functionality. Which of the several aspects of packaging convenience influenced the importance of that cue in the case of mineral water is outside the scope of this paper.

TABLE 6: T-paired test results of COO importance in comparison to other product cues within each product category

Ranks and differences in the importance of COO and certain product cues in the purchase of milk					
Quality	Taste	Availability	Price	Country of origin	Brand
	0.151 6.697**	0.325 9.851**	0.366 10.721**	0.578 14.602**	0.677 15.645**
Ranks and differences in the importance of COO and certain product cues in the purchase of mineral water					
Quality	Taste	Availability	Country of origin	Brand	Packaging convenience
	0.140 5.682**	0.325 9.783**	0.502 12.813**	0.591 14.624**	0.607 15.023**
Ranks and differences in the importance of COO and certain product cues in the purchase of refrigerators					
Quality	Durability	Service and warranty	Price	Brand	Country of origin
	0.069 3.717**	0.103 4.884**	0.252 10.296**	0.522 15.850**	0.683 19.182**
Mean difference, t value (Sig. 2-tailed**)					

Source: Author's research data

In the refrigerator category, almost all pairs of cues have a statistically significant difference in the importance to consumers. As with the two previous categories, quality is the most important cue from the consumers' standpoint. Durability of refrigerators, as well as servicing and warranty, are equally important to consumers. In the case of refrigerators, brand is more important than COO. Brand obviously served as an informational cue that influences the decision-making process in the case of refrigerators more than does COO. This result can be partially explained by the fact that consumers in the case of refrigerators had the lowest percentage of correct COO matching.

The analysis of differences shows that there is a statistically significant difference in the importance of COO in comparison to observed product cues in the purchasing process within each category. Regardless of the fact that the previous ANOVA showed that there was no significant difference in the COO importance

between the categories of milk and mineral water, considering significant differences between and within all observed categories, the following conclusion can be drawn: **The importance of COO varies from the consumers' standpoint in the purchasing process of the observed product categories, which confirms the third hypothesis (H3).**

## 6. DISCUSSION

Balabanis and Diamantopoulos (2008) concluded that there was a great probability that an average consumer, in most cases, could wrongly identify COO. This research reveals a different situation. The average rate of familiarity with COO of domestic products is 92%, and the rate of familiarity with imported products is on average 79%. The results of the study done by Balabanis and Diamantopoulos (2008) showed that correct identification of COO is significantly influenced by congruency of brand names and COO.

In accordance with that, this research also shows a higher level of correct COO identification based on brand names, or based on emphasizing the name and place of the producer on the product packaging, which obviously leads consumers to focus on the information on COO and causes a higher level of familiarity with a COO. Furthermore, the results show an extremely high rate of familiarity with COO of mineral water, especially for domestic brands of mineral water, with a matching rate of 99%. That result is conditioned by the good position held by the domestic brand "Sarajevski kiseljak", but also by the traditional presence of the brands from the neighbouring countries: "Jamnica", "Knjaz Miloš" and "Radenska". The fact is that, in the mineral water category, there is a domestic brand that is quite competitive with foreign brands and also holds a large market share, which is not the case with two other observed categories. In the case of the milk category, it is interesting to notice that the "Meggle" brand is correctly matched with B&H as the country of production by 86% of respondents. "Meggle" milk is perceived as a domestic product, although it is a German brand, which again supports consumers' high level of familiarity with a COO in the case of this research. The level of consumer familiarity with the COO of refrigerators is lower in comparison with familiarity with the COO of mineral water and milk. Namely, 25% of respondents did not indicate COO in the open-end question for refrigerator category. A total of 70% of the respondents who answered the question correctly matched COO with the brand of refrigerator that they owned in their household.

Pecotich and Rosenthal (2001) stated that a real market context undoubtedly creates a situation in which the COO effect can be made possible or reduced by product cues such as quality or brand. In this research, two thirds of the respondents stated that COO played a significant role in the purchasing process. According to the results, quality is the most important for consumers across product categories. Quality and price are the most important to the consumers in two

of the three observed product categories. COO and brand are among the six most important cues in the purchasing process of the observed product categories. Considering the fact that it is harder to recognize the country of production for refrigerators, brand is more important than COO in the case of refrigerators. Uddin et al. (2013) have found that the consumers' understanding of the technological superiority of a refrigerator is of higher importance than brand origin information. In the purchasing process of mineral water and milk, COO is more important to consumers than brand. However, the overall analysis shows that the importance of certain cues cannot be observed outside the context of product categories. This research confirms the results of earlier studies which found that the importance of COO varies depending on the product category (Balabanis & Diamantopoulos, 2004; Pecotich & Rosenthal, 2001).

The results of this study show that, in the set of socioeconomic and demographic variables, consumer ethnocentrism is the most important; therefore, ethnocentric consumers have proved to be significantly more inclined towards COO (Balabanis & Diamantopoulos, 2004; Dmitrovic & Vida, 2007; Vida & Dmitrovic, 2001). From the ethnocentric consumers' point of view, the products' COO has the function of the classification criterion of domestic vs. imported products (Dmitrovic & Vida, 2007). Therefore, COO information has a significant diagnostic value to ethnocentric consumers. According to the results of this research, consumer ethnocentrism initiates a motivational process of searching for information about COO, which was also shown by studies cited above. On the other hand, the lack of a clear pattern between ethnocentrism and the level of consumers' familiarity with the COO suggests a conclusion that consumer ethnocentrism is not the only consumer characteristic that influences COO importance and, consequently, the level of knowledge about the products' COO. Considering the fact that socioeconomic characteristics of consumers and demographics have not been proved as rele-

vant factors influencing COO importance, it can be assumed that psychographics and/or other variables play a significant role, which can be a starting point for further research.

## 7. IMPLICATIONS AND CONCLUSIONS

Although a certain number of studies have questioned the significance of COO in the modern global environment, marketing practice has seen an advertising trend that directly suggests congruency of COO and specific brands ("Volkswagen, Das Auto") or the COO of specific product categories ("Barilla, Italian Food"). Such marketing communication leads consumers towards the COO information, and uses it for differentiation and positioning in the consumers' perception. Considering the fact that the focus of informing the consumers may be manipulated by marketing communication strategies, the COO information can be used in different ways (Gurhan-Canli & Maheswaran, 2000). Within so-called multi-characteristic surroundings, end users have been established to exploit their product-country knowledge as a surrogate indicator from which they infer beliefs about a product's superior functions (Hossain, 2015). Therefore, it seems important to increase consumers' familiarity with a COO and its products to improve the consumers' overall perception (Ahmed, 2008).

Market practice, as well as the great body of academic research on the subject, provides the conclusion that COO can be a useful tool for marketing managers. This study also reveals empirical evidence that COO has a diagnostic value to consumers. As a precondition of using COO as a marketing tool, it is important to consider consumer characteristics, product characteristics, and the specificities of market conditions. Consumer ethnocentrism as a consumer characteristic can play an important role in motiva-

tional searching for COO information in favor of domestic origin. But also, recent studies show that consumer ethnocentrism is not an inelastic concept that leads consumers towards purchasing of domestic products without consideration of product characteristics. "Although ethnocentric consumers are willing to make sacrifice in relation to price and purchase domestic products, they are not willing to delude themselves considering product quality" (Pecotich & Rosenthal, 2001, p. 58). COO can be used as an informational cue and lead to better acceptance and positioning of products in the market conditions when a product has high performance, and the COO is perceived by consumers as a competent and reliable producer. Relating a product to a country which is well-known for finer producing commodities often increases evaluations of the product (Pecotich & Rosenthal 2001).

This research study contributes to the limited number of COO studies that consider the importance of COO to the consumers and consumer actual familiarity with a COO in the purchasing process. The findings of this study also contribute to the understanding of the relationship between COO and consumer ethnocentrism. Consumer ethnocentrism as a construct that entails normative and emotional elements can significantly upgrade the cognitive perspective of COO evaluations.

The limitations of this study are mostly linked to the limited range of researched product categories, as well as to the fact that the survey was conducted in the market context of B&H only. Further studies on the importance of COO for consumers should include a wider range of product categories with a different type of consumer involvement in the cross-cultural research setting. Despite its limitations, this study contributes to the thesis that the importance of the COO to consumers is not necessarily over-estimated but rather *mis*-estimated (Herz & Diamantopoulos, 2013).

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