

A Work Project, presented as part of the requirements for the Award of a Master's Degree in  
Management from the NOVA – School of Business and Economics.

Country-of-origin, Consumer Ethnocentrism and National Identification: An  
empirical investigation of Portuguese consumers' home-country bias

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**Abstract**

This dissertation aims to investigate Portuguese consumers' home-country bias, which is a poorly understood phenomenon. This research project was based on a review of the relevant literature and on the collection of empirical data through an online questionnaire. The findings underline that Portuguese consumers show a positive bias towards domestic products, but this is not paired with a negative distortion in the perception of foreign products. Additionally, it is shown that consumer ethnocentrism has a weak or no impact on the country-of-origin effect. The main conclusion is that the nationalist sentiment helps to understand Portuguese consumers' home-country bias.

**Keywords:** country-of-origin effect; consumer ethnocentrism; national identification; home-country bias.

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## 1. Introduction

In the new global economy with the lowering of trade barriers and more fierce competition, country-of-origin (COO) has become a central issue in international marketing research. The COO effect can be defined as the impact, either positive or negative, that the country of production has on consumers' choice behavior, through their perception and evaluation of products (Iacob, 2014). It has been argued that COO is a complex phenomenon composed of cognitive, affective and normative aspects. This means that COO is not only an extrinsic cue used to infer product quality, but might also be associated with "status, identity, national pride and past experiences", as well as with consumer's perception of a country's policies and practices (Verlegh and Steenkamp, 1999, 537). Thus, companies might use the COO of their products and services as a competitive differentiator (Dinnie, 2004).

Previous studies have suggested that consumers show a positive home-country bias, i.e., they tend to perceive and evaluate domestic products more favorably. Additionally, they might show a negative distortion in the perception and evaluation of foreign products. (Verlegh, 2001). As argued by Verlegh (2001) there are two main reasons that explain home-country bias: consumer ethnocentrism (CE) and national identification (NI). CE is defined by Shimp and Sharma (1987) as the consumers' beliefs about the appropriateness of buying foreign products, while NI reflects the desire for national identity. The latter is related to national pride and to the ties that one feels with one's own country (Verlegh, 2001).

In a time when trade agreements do not usually allow the implementation of protectionist barriers home-country bias can be used as a protectionist measure. Indeed, not only have countries sponsored "Buy National" campaigns but also companies have associated themselves with their COO (Verlegh, 2001; Silva, 2014). An example is the campaign "*Portugal Sou Eu*" to sensitize Portuguese consumers to the importance of purchasing domestic products

(“Portugal Sou Eu”, 2019). Nevertheless, some studies have shown that home-country bias is not as strong as it would be expected and that consumers are aware of the weaknesses of domestic production (Papadopoulos, Heslop, and Bamossy, 1990).

It has been found that perceptions of countries may vary across different product categories. Roth and Romeo (1992) concluded that consumers’ willingness to buy a country’s product will be higher when the country image matches a relevant feature of the product category. Furthermore, studies have shown that consumers might buy products of a specific category produced in a specific country because of their superior reputation. This might be the case of French wine or Italian shoes (Diamantopoulos, Schlegelmilch, and Palihawadana, 2011).

Despite a large number of studies on this topic, Dinnie (2004) and Iacob (2016) argue that further research on the COO effect in consumer behavior is needed, due to the controversy around its effect on attitudes and to the complexity of the phenomenon. Iacob (2016) also argues that more studies are needed to clarify the link between the COO effect and CE.

The present study adopts the multidimensional perspective of the COO construct presented by Wang, Barnes, and Ahn (2012). The COO’s dimensions considered are the cognitive and the affective components of country image and product image. Being the cognitive component related to the beliefs that people have about a country, the considered dimensions of this component are: economic development, living standards, industrialization, technological advancement, environmental concern and characteristics of the country workforce (Wang et al., 2012; Allred, Chakraborty, and Miller, 2000; Verlegh, 2001). The affective component is composed of positive and negative feelings towards a country (Verlegh, 2001). As for the product image, it refers to consumer’s beliefs of a specific product made in a particular country. For instance, one’s beliefs that Portugal’s workforce is highly efficient would be included in the cognitive component of country image, while pleasant feelings towards Portugal would be

part of the affective component. Also, the belief that Portuguese wine is very tasty and of great quality would be part of the product image that a consumer has about the wine produced in Portugal. CE and NI are considered as antecedent variables since, as shown in previous studies, they help to understand the relationship between COO, country image and product image.

The present dissertation focuses on the Portuguese market, as the Portuguese perception of their country might have improved due to tourism awards, to important events that took place in the national territory, such as the Web Summit, to the economic stability that has attracted more companies and capital and to the nomination of Portuguese personalities to important international positions (Valente, 2018). Furthermore, few studies have focused on the Portuguese market and Portugal's COO effect is barely known and understood.

The product categories chosen to develop this study are beer, clothes and fruits. This choice is mainly justified by the fact that Portuguese consumers are familiar with these products, that they are both imported and produced domestically and that they show different levels of popularity among Portuguese consumers. It is assumed that if a product is more popular, consumers will have a more positive product image. Thus, if the present study only included popular Portuguese products, such as olive oil, wine, and *pastel de nata*, the results obtained could be biased and could have a low level of generalization.

In line with the above discussion, the overall aim of this research is to understand Portuguese consumers' home-country bias. Two main research tools will be used to facilitate this study: a review of relevant literature and the collection and analysis of empirical data, which were collected using an online questionnaire. Specifically, within the context of COO, the objectives of this research are to a) explore if Portuguese consumers have a more positive image of Portugal than the one they have of foreign countries; b) identify in which product categories Portuguese consumers have a more positive image of domestic products over foreign products;

c) investigate if the constructs CE and NI are antecedents of country image and product image.

All in all, from a theoretical perspective, the present study contributes to the COO literature by exploring the COO phenomenon in Portugal, which has not been deeply explored and investigated. Additionally, this study intends to deepen the knowledge about the COO effect on the perception and evaluation of domestic products. From a managerial perspective, understanding that for some product categories Portuguese consumers evaluate domestic products more positively than foreign products may affect the way companies promote, place and price their products. Also, exploring the constructs CE and NI contributes to a better capacity in segmentation and positioning.

This dissertation first provides a brief theoretical background, which leads to the development of the proposed conceptual model and of some key hypotheses. Then, the method is outlined, followed by the presentation of the results. The last section concludes with a reflection on the theoretical and managerial implications of the findings, the limitations of this study and the provision of recommendations for further research.

## **2. Literature Review**

### **2.1 Country Image (cognitive and affective components) and Product Image**

The analysis of country image is of extreme importance in the context of COO since it might explain why consumers prefer the products produced in one country over the ones produced in another country. Despite a large number of studies on this matter, no convergence has been attained. Some authors define country image as being composed only of cognitive factors but a few studies make reference to the affective component (Roth and Diamantopoulos, 2009). The distinction between the cognitive and affective component of country image is important since emotions can have a much stronger effect on consumers' reactions than cognitions (Roth and Diamantopoulos, 2009) and people may hold inconsistent cognitive

perceptions and affective evaluations of a particular country (Wang et al., 2012).

The multidimensionality of the country image construct is considered in the present study as both the cognitive and affective components of a country's image are explored. In this study cognitive country image refers to consumer's beliefs of a country and the following dimensions are considered: economic development, living standards, industrialization, technological advancement, environmental concern and characteristics of the country's workforce (Allred, Chakraborty, and Miller, 2000; Verlegh, 2001; Wang et al., 2012). The affective component is composed of positive and negative feelings towards a country (Verlegh, 2001).

Several studies have shown that attitudes towards a country's products vary by product category (Bilkey and Nes, 1982). Thus, one can have a positive image of Portuguese beer while having a negative image of smartphones made in Portugal. The differences in the COO effect across different product categories create the necessity of introducing the product image construct. In the present paper, product image refers to consumer's beliefs of a specific product made in a particular country.

## **2.2 Preference for domestic products, CE and NI**

Several studies have shown that consumers tend to prefer domestic over foreign products (Verlegh, 2001; Balabanis and Diamantopolous, 2004). This home-country bias can be seen as ingroup bias. Verlegh (2001) argues that consumers perceive their own country as ingroup and this perception makes them evaluate their own country and its products more positively. This author proposes two motives for home-country bias: CE and NI.

The concept of CE was introduced by Shimp and Sharma (1987, 280) and it is defined as "the beliefs held [...] by consumers about the appropriateness, indeed morality, of purchasing



foreign-made products.” The authors defended that ethnocentric consumers believe that purchasing domestic products is good for the domestic economy and protects jobs and that buying foreign products might have a negative effect on the domestic economy and cause the loss of jobs. Thus, CE can be interpreted as the economic motive of home-country bias (Verlegh, 2001), and it has been shown that it may vary in magnitude according to the product categories (Balabanis and Diamantopolous, 2004).

On the other hand, NI might be defined as the social-psychological motive for home-country bias, as people tend to identify themselves with their own country and display a positive ingroup bias. NI reflects the desire for a positive national identity, which is created by the need for a positive evaluation of private and social selves. And a more positive evaluation of domestic products is a way of enhancing group- and self-esteem (Verlegh, 2001; Lantz and Loeb, 1996).

Nevertheless, other characteristics, such as quality and price, might overcome the home-country bias effect (Verlegh, 2001; Iacob, 2014). For instance, if a Portuguese consumer believes that Japanese smartphones are better than the Portuguese, even though he/she identifies with Portugal and believes that it is good to buy domestic products because that improves the national economy, he/she might prefer to buy Japanese smartphones.

### **2.3 Portugal’s image**

There is a relatively small body of literature concerned with the COO effect of Portugal. Filipe (2010) states that Portuguese products tend to be penalized due to their COO, i.e., Portugal and its products have a negative image. Nevertheless, the COO effect is proven to be dynamic over time and the image of Portugal might have been improved over the last few years, as discussed above (Dinnie, 2004; Valente, 2018).

The literature found tends to focus on categories that Portugal is famous for, such as olive oil, footwear and wine (Silva, 2017; Silva, 2014; Silva and Saraiva, 2016) and none of the studies analyzed investigated the impact of national identification on the Portuguese COO effect. The present study tries to overcome this gap in the literature by analyzing product categories that show different levels of popularity among Portuguese consumers and by investigating how the bond with the nation affects their evaluation of domestic and foreign countries.

Having contextualized this study and introduced and defined the concepts on its basis, it is now possible to present the conceptual model and the hypotheses tested in this dissertation.

### 3. Conceptual Model and Hypotheses

#### 3.1 Conceptual Model

The conceptual model presented in Figure 1 is based on the frameworks proposed by Verlegh (2001) and Wang et al. (2012) and it was developed to meet the aim of the present dissertation, which is to reach an understanding of Portuguese consumers' home-country bias.

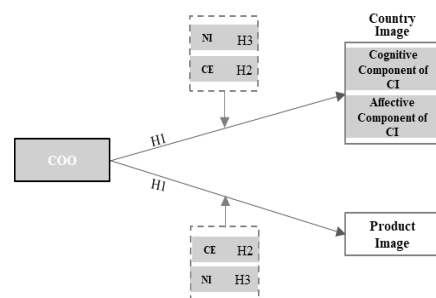


Figure 1. Conceptual model proposed.

The present study intends to explore if Portuguese consumers have a more positive image of Portugal than the one they have of foreign countries and investigate in which product categories Portuguese have a better image of domestic products over foreign ones. In order to access consumers' perceptions about the countries and their products, the cognitive and affective components of country image and product image are examined, as shown in Figure 1. These three constructs compose the COO effect as defined in this paper. Additionally, it focuses on two antecedents of the COO effect identified in the literature as being two of the motives of home-country bias: NI and CE. The goal is to understand the influence of Portuguese

consumers' level of NI and CE on their evaluation of their own country and of domestic products and on the evaluation of foreign countries and their products. The influence of NI on the COO effect has been little investigated, though.

By testing the formulated hypotheses, it is expected to deepen the understanding of consumers' home-country bias.

### **3.2 Hypotheses**

H1: Portuguese consumers have a more positive image of their own country and of Portuguese products than the image they have of foreign countries and of their products.

Several studies have shown that consumers tend to have a better image of their own country and of domestic products. This might be paired with a negative distortion in the evaluation of foreign countries and their products. Therefore, it is expected that Portuguese consumers evaluate their own country and domestic products more positively than foreign countries and their products (Verlegh, 2001; Balabanis and Diamantopolous, 2004).

H2a) More Ethnocentric Portuguese consumers evaluate Portugal and its products more positively.

H2b) More Ethnocentric Portuguese consumers evaluate foreign countries and their products less positively.

As stated in the literature review, previous studies claim that ethnocentric consumers tend to have more favorable attitudes towards the products produced in their own country and that CE leads to an overestimation of the quality of domestic products and to an underestimation of the quality of those produced in foreign countries (Balabanis and Diamantopolous, 2004; Shimp and Sharma, 1987). Consequently, it is expected that more ethnocentric consumers will hold more positive beliefs regarding the products produced in Portugal and less positive beliefs

regarding the ones produced in a foreign country.

Sharma, Shimp, and Shin (1995) argued that CE is related to the love and concern that one feels towards one's own country. Therefore, it is also expected that more ethnocentric consumers have a better image of their own country and a worse perception of foreign countries.

H3a) Portuguese consumers with higher levels of NI evaluate Portugal and its products more positively.

H3b) Portuguese consumers with higher levels of NI evaluate foreign countries and their products less positively.

As stated previously, in order to enhance the esteem of their group and their own self-esteem, consumers tend to see their country as ingroup and to better evaluate it. It has been proved that the strength of this ingroup bias is directly related to the level of one's identification with the nation (Duckitt and Mphuthing, 1998). Additionally, consumers tend to evaluate domestic products more positively since that is seen as enhancing their own country. This positive bias in the perception of one's own country and of domestic products might be paired with a negative distortion in the perception of foreign countries and products (Verlegh, 2001). Therefore, it is expected that the higher the level of consumer's NI, the more positive the consumer's perception of his/her own country and of Portuguese products will be and the less positive consumer's perception of foreign countries and products will.

The hypotheses presented in this section will be tested for each one of the product categories chosen.

## **4. Research Methodology**

### **4.1 Study Design and Measures**

The formulated hypotheses are tested in an empirical study conducted in Portugal. The

research strategy chosen is survey-based with the use of an online questionnaire. This method allows the collection of data from a large number of respondents, as well as a diverse sample and the guarantee of the anonymity of the respondents which is crucial to ensure the authenticity of the answers. Additionally, questionnaires have been widely used in COO research. The scales used in this research are quantitative, as quantitative methods allow a more rigorous statistical treatment and they are less subjective than qualitative ones.

The set of COOs taken into consideration is composed of Portugal and Spain. These countries were chosen to guarantee a certain degree of familiarity of Portuguese consumers with the products produced in the selected countries. Also, less developed countries were not considered because consumers tend to perceive their products as having lower quality (Verlegh and Steenkamp, 1999). As discussed earlier, this investigation focuses on beer, clothes and fruits.

This study measures are based on scales used and validated in the reviewed literature, which were adapted to its purpose and translated to Portuguese. Table 1 shows the number of items of each scale used to measure the studied variables and their sources.

For all the presented measures, respondents had to indicate their agreement with each one of the statements that composed the scales on a 5-point Likert scale, ranging from 1, “strongly disagree”, to 5, “strongly agree”. This scale has been widely used in COO studies and, as it has a neutral point (3– “neither agree nor disagree”), respondents are not forced to take a stand (Leung, 2011). The 5-point Likert scale was used instead of the 7-point Likert scale in order to diminish the possible boredom of participants. All the measures were tested for reliability. The Cronbach’s alpha of each measure (Table 1) shows satisfactory levels of internal consistency since all the alphas obtained are above 0.7 (Hair et al., 2014). All the scales used are presented in the questionnaire exhibited in Appendix A.

Table 1. Measures sources and Cronbach's alpha.

Variable	N° of items	Sources	Cronbach's alpha
<b>Cognitive Component of Country image</b>	10	Personal elaboration adapted from Allred, Chakraborty, and Miller (2000), Wang et al. (2012), and Verlegh (2001, chap. 4)	0.706
<b>Affective Component of Country image</b>	6	Scale for positive and negative feelings employed by Verlegh (2001, chap.4)	0.779
<b>Product Image: beer</b>	6	Personal elaboration adapted from Chryssochoidis, Krystallis, and Perreas (2007)	0.882
<b>Product Image: clothes</b>	6	Personal elaboration adapted from Kumar, Kim, and Pelton (2009) and Swinker and Hines (2006)	0.785
<b>Product Image: fruits</b>	6	Personal elaboration adapted Verlegh (2001, chap.4)	0.817
<b>CE</b>	10	10-item version of the CETSCALE developed by Shimp and Sharma (1987)	0.911
<b>NI</b>	5	Verlegh (2001, chap.4)	0.702

## 4.2 Data Collection

Data collection was made through a self-administered questionnaire posted on social networks. Two versions of the questionnaire were developed, being version 1 about Portugal and version 2 about Spain. Each of the two versions is divided into three parts. The first part concerns the image that Portuguese consumers have of the country addressed in their version. The next part asks participants about their beliefs regarding beer, clothes and fruits produced in the examined country. Finally, they are confronted with questions regarding CE and NI and demographic variables (age, income, gender, educational level and place of residence). Questions regarding CE and NI were placed in the last part of the questionnaire since exposing participants to ethnocentric and nationalist statements makes them more sensitive to their own bias (Drozdenco and Jensen, 2009). Both versions are presented in Appendix A.

A pretest of the two versions of the questionnaire was performed with 20 individuals in order to identify possible errors and interpretation difficulties. After the pretest, some questions were reformulated with the intention of being more clear.

After the collection, all the data was uploaded and analyzed in the software IBM SPSS Statistics 24.

## 4.3 Sample

A total of 648 participants completed the web-based questionnaire. Version 1 of the questionnaire was completed by 356 participants and version 2 by 292 participants. Most of the participants are female (70.5%) and the majority of them belong to the age groups 31-40 (29.2%) and 41-50 (30.1%). Regarding the participants' educational level, most of the participants (58.3%) have at least a Bachelor's Degree, however the category that registered the highest percentage of responses was High School (39.2%). The majority of the participants (59.7%) have a monthly household net income lower than 2000€. Additionally, 497 respondents (76.7%) live in Portugal while 151 (23.2%) live in a foreign country. More details regarding the demographic profile of the respondents are presented in Appendix B.

## **5. Results**

### **5.1 Preliminary analysis**

Descriptive statistics for the studied variables were obtained. Interestingly, on average, respondents evaluated Spain (3.306) (SD=0.430) more positively than Portugal (3.151) (SD=0.475). Apart from the workforce dimension, Spain was better evaluated than Portugal in all the dimensions studied. Furthermore, the estimated mean value of the affective component of country image <sup>1</sup> is lower for Portugal (3.690) (SD=0.642) than for Spain (3.714) (SD=0.621). Respondents have more positive feelings for Portugal, but they also have more negative feelings for it. Regarding product image, all the Portuguese products (beer, clothes, fruits) were evaluated more favorably when compared with the Spanish ones. Additionally, data collected lead to the estimation of a mean CE at 2.972 (SD=0.809), revealing a non-ethnocentric sample of consumers. Regarding NI, the estimated mean has a value of 4.203 (SD=0.581), meaning

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<sup>1</sup> The statements regarding negative feelings were recoded so that a higher value of the affective component of CI could reveal a more positive affective image of the country.

that the sample obtained shows high levels of NI. More detailed information is presented in Appendix C.

In order to further analyze the obtained data, it is first necessary to verify the distribution of the dependent variables. Histograms were built for each one of the variables of this study and Kolmogorov-Smirnov tests<sup>2</sup> were performed ( $p < 0.05$ ) and it was possible to conclude that the distribution of the variables is not normal. Nevertheless, due to a large number of observations collected ( $n=648$ ), it is possible to use the Central Limit Theorem, which allows us to make inference when the underlying data is not normal.

In order to determine how strongly the dependent variables are related, a Spearman's correlation matrix was obtained. Its analysis allows concluding that there is a positive weak relationship between the components of country image. Additionally, the correlation between the components of country image and product image of the different products studied is positive, yet weak or very weak. On the other hand, there is a positive linear weak to moderate relationship between the product image of the different products selected, meaning that when the product image of one of the products is more positive, the product image of the other products is also more positive. Another correlation matrix was obtained to analyze the relationship between CE and NI, and it was concluded there is a very weak positive linear relationship between them. Both of the correlation matrixes are presented in Appendix C.

## **5.2 Hypothesis testing and discussion of the results**

In order to test the formulated hypotheses using ANOVAs, which are presented in Appendix D, the variables CE and NI were transformed into binary variables using the median

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<sup>2</sup> In the present dissertation, all the tests were performed using a significance level of 0.05 corresponding to a confidence level of 95%.



split method. The values lower than the median were coded as 0, “Low level”, and the values higher than the median were coded as 1, “High level”, for each one of the two variables. For all the obtained ANOVAs, Levene tests were performed in order to check if the homoscedasticity assumption was verified. When it was not verified, the results obtained were interpreted more cautiously. In those cases, a significance level of 0.01 was considered.

H1: Portuguese consumers have a more positive image of their own country and of Portuguese products than the image they have of foreign countries and of their products.

A one-way ANOVA was performed and the null hypothesis “The mean is the same for the two groups” was rejected for all the dependent variables ( $p < 0.05$ ), except for the affective component of country image ( $p > 0.05$ ) (Figure 2). Therefore, the findings suggest that Portuguese consumers have a better cognitive image of Spain than the cognitive image they have of their own country (Figure 3). These results are interesting, since, as stated in the literature review, consumers tend to see their own country as ingroup and to evaluate it more positively in order to endear it. Nevertheless, this might be explained by the fact that the Portuguese consumers might not see Spain as a competitor and by the fact that European consumers tend to show a European identity (Fligstein, Polyakova, and Sandholtz, 2012; Verlegh, 2001). Regarding product image, the findings suggest that Portuguese consumers have a more positive image of the products produced in Portugal than the products produced in Spain (Figures 4 to 6). These findings are consistent with the conclusion reached by Samiee (1994) in his review of the literature which stated that consumers tend to perceive domestic products as being better than foreign products. Therefore, H1 is only partially supported.

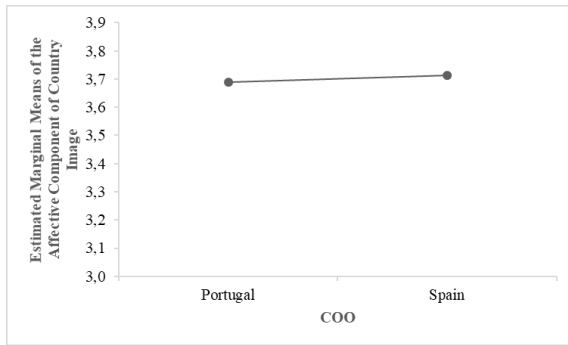


Figure 2. Line Chart (effect of COO on the Affective Component of Country Image). More detailed information on Tables D1 and D2 of Appendix D.

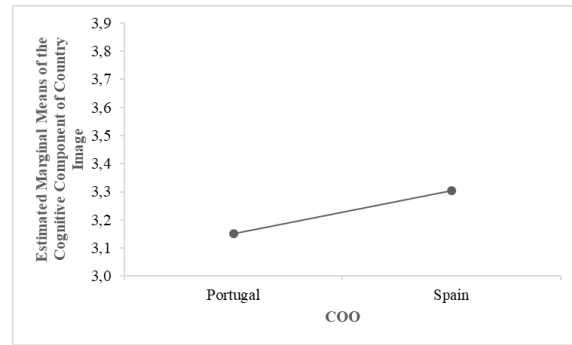


Figure 3. Line Chart (effect of COO on the Cognitive Component of Country Image). More detailed information on Tables D1 and D2 of Appendix D.

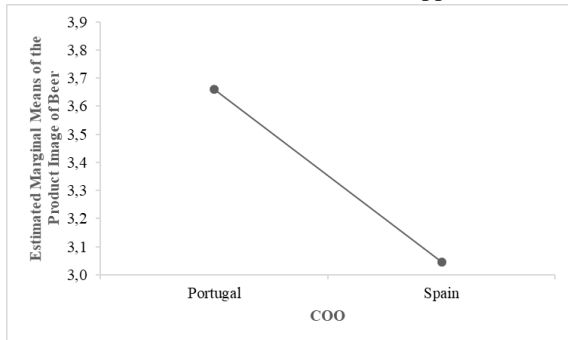


Figure 4. Line Chart (effect of COO on the Product Image of Beer). More detailed information on Tables D1 and D2 of Appendix D.

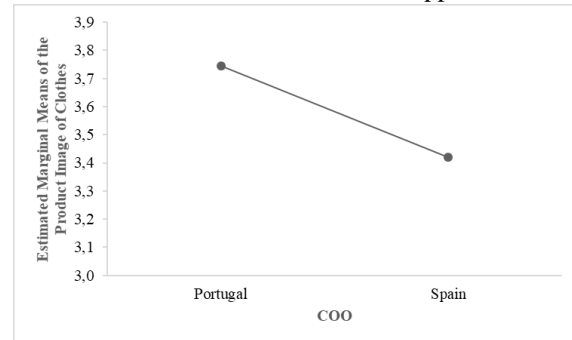


Figure 5. Line Chart (effect of COO on the Product Image of Clothes). More detailed information on Tables D1 and D2 of Appendix D.

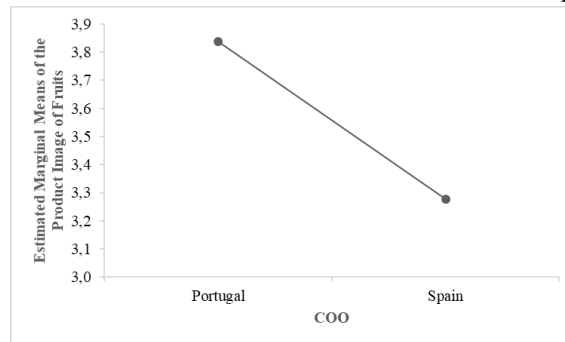


Figure 6. Line Chart (effect of COO on the Product Image of Fruits). More detailed information on Tables D1 and D2 of Appendix D.

H2a): More Ethnocentric Portuguese consumers evaluate Portugal and its products more positively.

H2b) More Ethnocentric Portuguese consumers evaluate foreign countries and their products less positively.

Two-way ANOVAs that examined the effect of COO and CE on country image and product image and post hoc tests were conducted. The interaction between the effects of COO

and CE on all the dependent variables was found not to be statistically significant ( $p > 0.05$ ). The post hoc tests revealed that Portuguese consumers that hold high levels of CE have a more positive cognitive image of Portugal (Figure 7) and hold less positive feelings for both Portugal and Spain (Figure 8). Regarding product image, the findings suggest that Portuguese consumers who have a higher level of CE have a better image of the clothes produced in Portugal (Figure 10). As shown by Figures 9, 10 and 11, these results further support the idea that the impact of CE on the COO effect may vary in magnitude across different product categories (Balabanis and Diamantopolous, 2004). Therefore, H2a) and H2b) are not fully supported by the results obtained, which seem to be consistent with previous studies that showed that CE has a weak or no effect on consumer's perceptions of a country and on the evaluation of imported products (Sharma, 2011; Yagci, 2001). Additionally, Yagci (2001) concluded that CE only becomes a significant predictor of consumers' attitudes towards a product when the product is originated from a perceived less-developed country which is not the case of Spain.

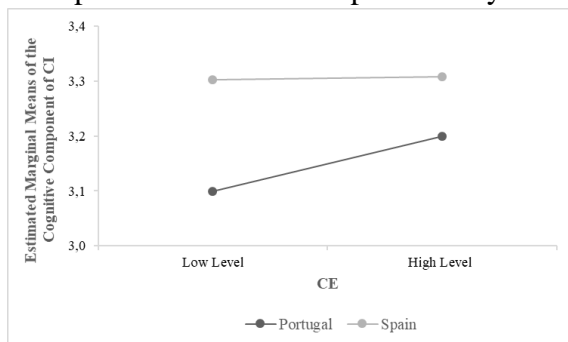


Figure 7. Line Chart (effect of COO and CE on the Cognitive Component of Country Image). More detailed information on Tables D3, D4 and D5 of Appendix D.

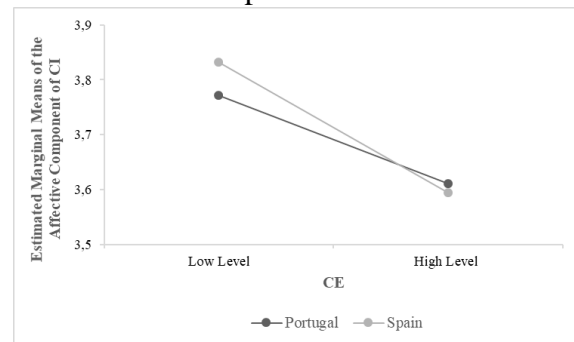


Figure 8. Line Chart (effect of COO and CE on the Affective Component of Country Image). More detailed information on Tables D3, D4 and D5 of Appendix D.

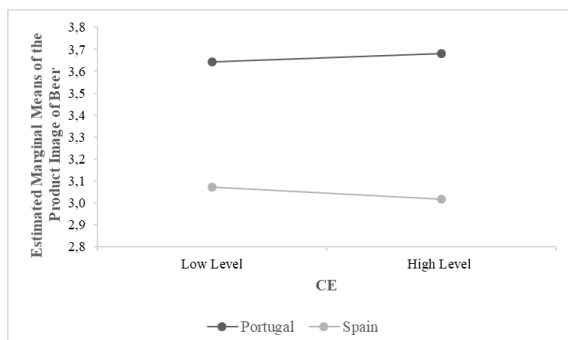


Figure 9. Line Chart (effect of COO and CE on the Product Image of Beer). More detailed information on Tables D3, D4 and D5 of Appendix D.

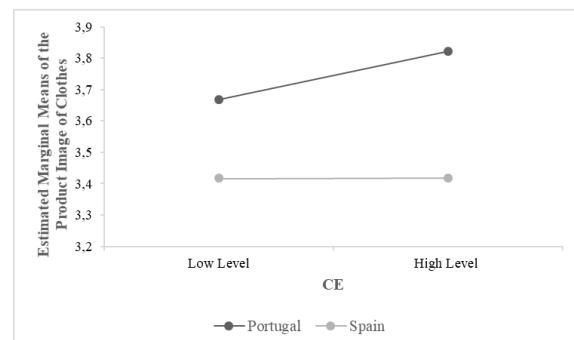


Figure 10. Line Chart (effect of COO and CE on the Product Image of Clothes). More detailed information on Tables D3, D4 and D5 of Appendix D.

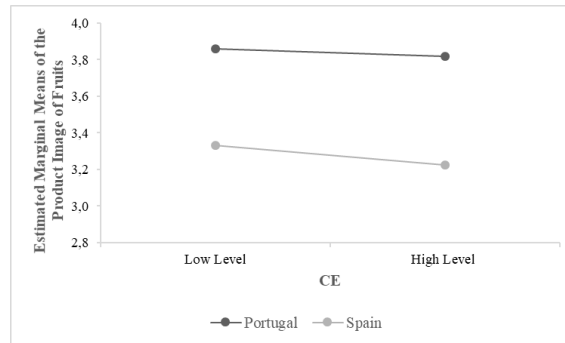


Figure 11. Line Chart (effect of COO and CE on the Product Image of Fruits). More detailed information on Tables D3, D4 and D5 of Appendix D.

H3a) Portuguese consumers with higher levels of NI evaluate Portugal and its products more positively.

H3b) Portuguese consumers with higher levels of NI evaluate foreign countries and their products less positively

Two-way ANOVAs that examined the effect of COO and NI on country image and product image and post hoc tests were conducted. There was a statistically significant interaction between the effects of COO and NI on all the dependent variables ( $p < 0.05$ ). As expected, the results of the post hoc tests suggest that Portuguese consumers with high levels of NI not only have a better image of their own country but also evaluate domestic products more positively (Figures 12 to 16). These results are in agreement with those obtained by Verlegh (2001). Therefore, the hypothesis H3a) is supported by the results obtained. Nevertheless, the results suggest that Portuguese consumers with high levels of NI do not have a less positive image of Spain and its products. Therefore, the hypothesis H3b) is not supported by the findings. These results are aligned with previous studies that showed that consumers' desire to enhance their own group is better demonstrated by a positive distortion in the perception of their own group rather than by a negative distortion in the perception of other groups (Verlegh, 2001). Moreover, Brewer (1999, 442) concluded that "ingroup love is not a necessary precursor of outgroup hate". Another possible explanation is that Portuguese

consumers might not perceive Spain as an outgroup due to the proximity of the two countries.

To verify the robustness of the results obtained regarding the relationship between CE and NI and the dependent variables examined, the variables CE and NI were transformed into categorical variables with three categories, the cut-off points were the percentiles 33 and 66. After this, one-way ANOVAs were performed, as each COO was analyzed separately. Additionally, a linear regression analysis was executed using the variables CE and NI as continuous variables. Most of the results discussed above are also verified when these two different methods are applied. The most relevant differences were observed in the relationship between the variables NI and product image of clothes produced in Portugal and between the variables CE and cognitive image of Portugal being none of these relationships significant. A table summarizing and comparing the results obtained using these methods is presented in

Appendix E.

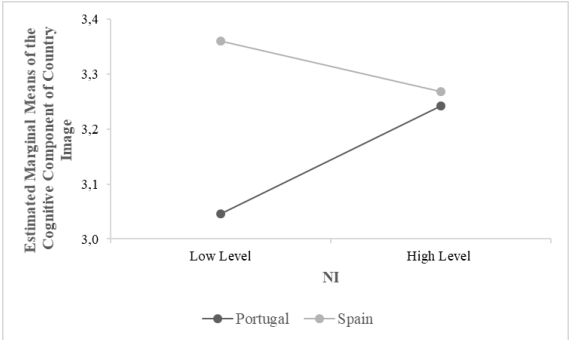


Figure 12. Line Chart (effect of COO and NI on the Cognitive Component of Country Image). More detailed information on Tables D6, D7 and D8 of Appendix D.

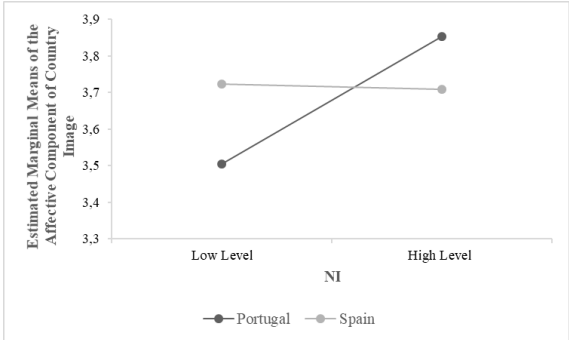


Figure 13. Line Chart (effect of COO and NI on the Affective Component of Country Image). More detailed information on Tables D6, D7 and D8 of Appendix D.

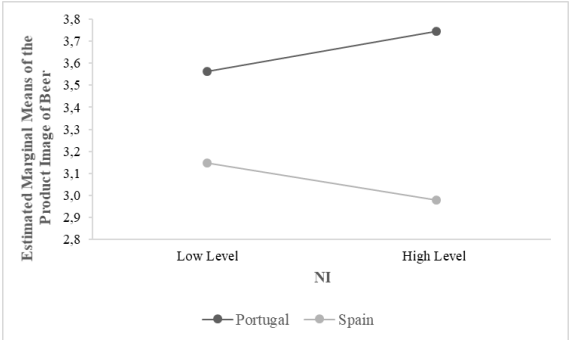


Figure 14. Line Chart (effect of COO and NI on the Product Image of Beer). More detailed information on Tables D6, D7 and D8 of Appendix D.

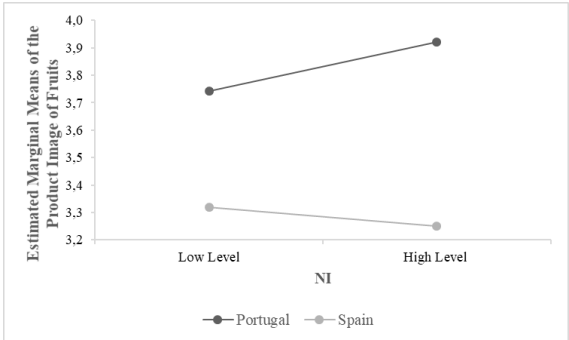


Figure 15. Line Chart (effect of COO and NI on the Product Image of Fruits). More detailed information on Tables D6, D7 and D8 of Appendix D.

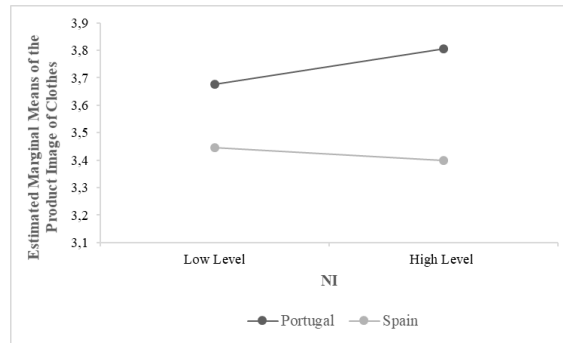


Figure 16. Line Chart (effect of COO and NI on the Product Image of Clothes). More detailed information on Tables D6, D7 and D8 of Appendix D.

## 6. Conclusion

### 6.1 Research objectives: summary of findings and conclusions

The overall aim of the present dissertation was to understand Portuguese consumers' home-country bias. Within the context of COO, the specific research objectives were: 1) to explore if Portuguese consumers have a more positive image of Portugal than the one they have of foreign countries; 2) to identify in which product categories Portuguese consumers have a more positive image of domestic products over foreign ones; and, 3) to investigate if the constructs CE and NI are antecedents of country image and product image. The literature review and the statistical analysis of the data collected through an online questionnaire allowed to achieve these objectives.

Regarding the first specific objective, it was shown that Portuguese consumers do not have a more positive image of Portugal than the one they have of Spain. In fact, it was shown that Portuguese consumers evaluate Spain more positively than Portugal and it was not possible to state that the affective image that they hold of Portugal is different from the one they hold of Spain.

Concerning the second objective, it was possible to verify that Portuguese consumers evaluate domestic products more positively than foreign ones. This was proven for all the product categories (beer, clothes, and fruits) studied.

As regards the last specific objective, in the case of Portuguese consumers' perceptions of Portugal and its products, it was proven that NI is an antecedent of both country image and product image. Nevertheless, it was not proven that CE is an antecedent of the COO effect. The only significant relationship found was between CE and the product image of clothes, which is positive. In the case of Portuguese consumers' perceptions of Spain and its products neither of these constructs seems to be an antecedent of country image and product image.

The results of this study have proven that Portuguese consumers show a positive bias in the evaluation of domestic products and that favorable consumers' perceptions of their own country and its products are positively impacted by the nationalist sentiment. So, NI helps to understand why Portuguese consumers perceive domestic products as being better than foreign ones. Thus, the overall aim of this research was met.

## **6.2 Implications, Limitations and Recommendations for Future Research**

From a theoretical perspective, this study contributes to a better understanding of consumers' home-country bias. Firstly, it shows that Portuguese consumers do perceive domestic products as being better than foreign products. Secondly, it proves that NI has a positive effect on the home-country image and on its products image and, consequently, it helps to explain what the origin of consumers' preference for domestic products is. Finally, it demonstrates that CE has a weak or no impact at all on the COO effect. In a practical perspective, this dissertation confirmed that consumers with a stronger bond with their nation evaluate domestic products more positively so NI may be a useful construct for targeting segments that are receptive to nationalist appeals and its strength should be enhanced at the point of purchase by marketing actions (Verlegh, 2001). As the link between CE and product image was not proven, marketers should focus more on the nationalist sentiment rather than on CE when defining marketing strategies for national products.

The present dissertation is not exempt from limitations: firstly, it was used a convenience sample of the Portuguese population, rather than a truly random sample, in which there is a demographic concentration that can lead to biased study results. Thus, the use of a more representative sample of the Portuguese population is suggested. Secondly, a limited number of countries and product categories was considered. As it has been proven in previous studies the COO effect is country- and product-specific, so in future researches more countries and product categories should be analyzed in order to examine the generability of the results obtained. Also, the constructs CE and NI were considered as antecedents of the COO effect and as the link between CE and the COO effect was not proven to be significant it would be relevant to test other variables as antecedents. The inclusion of the cosmopolitanism construct is suggested since, as shown by Lee et al. (2014) cosmopolitan consumers possess a low preference for domestic products. Finally, another possible limitation of this study is the usage of country image and product image as dependent variables. It would be interesting if future research could examine actual purchases and work backwards in order to better understand consumers' decision-making process and further understand consumers' home country bias.

## **7. Reference List**

**Allred, Anthony, Goutam Chakraborty, and Stephen J. Miller.** 2000. "Measuring Images of Developing Countries: A Scale Development Study." *Journal of Euromarketing*, 8 (3): 29–49.

**Balabanis, George, and Adamantios Diamantopolous.** 2004. "Domestic Country Bias, Country- of-Origin Effects, and Consumer Ethnocentrism: A Multidimensional Unfolding Approach." *Journal of the Academy of Marketing Science*, 32 (1): 80–95.

**Bilkey, Warren J., and Erik Nes.** 1982. "Country-of-Origin Effects on Product Evaluations." *Journal of International Business Studies*, 13 (1): 89–100.



- Brewer, Marilyn B.** 1999. "The Psychology of Prejudice: Ingroup Love or Outgroup Hate?" *Journal of Social Issues*, 55 (3): 429–44.
- Diamantopoulos, Adamantios, Bodo Schlegelmilch, and Dayananda Palihawadana.** 2011. "The Relationship between Country-of-Origin Image and Brand Image as Drivers of Purchase Intentions: A Test of Alternative Perspectives." *International Marketing Review*, 28 (5): 508–24.
- Dinnie, Keith.** 2004. "Country-of-Origin 1965-2004: A Literature Review." *Journal of Customer Behaviour*, 3 (2): 165–213.
- Drozdanko, Ronald, and Marlene Jensen.** 2009. "Pricing Strategy & Practice: Translating Country-of-Origin Effects into Prices." *Journal of Product and Brand Management*, 18 (5): 371–78.
- Duckitt, J., and T. Mphuthing.** 1998. "Group Identification and Intergroup Attitudes: A Longitudinal Analysis in South Africa." *Journal of Personality and Social Psychology*, 74 (1): 80–85.
- Filipe, Sara Brito.** 2010. "O Estado Da Arte Da Marca Portugal." *GESTIN: Revista Da Escola Superior de Gestão*, May. <https://repositorio.ipcb.pt/handle/10400.11/515>.
- Fligstein, Neil, Alina Polyakova, and Wayne Sandholtz.** 2012. "European Integration, Nationalism and European Identity." *Journal of Common Market Studies*, 50 (1): 106–22.
- Hair, Joseph F., William C. Black, Barry J. Babin, and Rolph E. Anderson.** 2014. *Multivariate Data Analysis*. 7<sup>th</sup> ed. Harlow: Pearson Education Limited.
- Iacob, Andreaa Ioana.** 2014. "Country-of-Origin Effect and Consumer Brand Perception." PhD diss. Aalborg University.

- Lantz, Garold, and Sandra Loeb.** 1996. "Country of Origin and Ethnocentrism: An Analysis of Canadian and American Preferences Using Social Identity Theory." *NA - Advances in Consumer Research*, 23: 374–78.
- Lee, Kyung Tae, You Il Lee, and Richard Lee.** 2014. "Economic Nationalism and Cosmopolitanism: A Study of Interpersonal Antecedents and Differential Outcomes." *European Journal of Marketing*, 48 (5–6): 1133–58.
- Leung, Shing On.** 2011. "A Comparison of Psychometric Properties and Normality in 4-, 5-, 6-, and 11-Point Likert Scales." *Journal of Social Service Research*, 37 (4): 412–21.
- Papadopoulos, Nicolas, Louise A. Heslop, and Gary Bamossy.** 1990. "A Comparative Image Analysis of Domestic versus Imported Products." *International Journal of Research in Marketing*, 7 (4): 283–94.
- Portugal Sou Eu.** 2019. Portugal Sou Eu. <https://portugalsoueu.pt/>. (accessed October 29, 2019).
- Roth, Katharina P., and Adamantios Diamantopoulos.** 2009. "Advancing the Country Image Construct." *Journal of Business Research*, 62 (7): 726–40.
- Samiee, Saeed.** 1994. "Customer Evaluation of products in a global market." *Journal of International Business Studies*, 25: 579–604.
- Sharma, Piyush.** 2011. "Country of Origin Effects in Developed and Emerging Markets: Exploring the Contrasting Roles of Materialism and Value Consciousness." *Journal of International Business Studies*, 42 (2): 285–306.
- Sharma, Subhash, Terence A. Shimp, and Jeongshin Shin.** 1995. "Consumer Ethnocentrism: A Test of Antecedents and Moderators." *Journal of the Academy of Marketing Science*, 503 (1): 26–37.

- Shimp, Terence A., and Subhash Sharma.** 1987. "Consumer Ethnocentrism: Construction and Validation of the CETSCALE." *Journal of Marketing Research*, 24 (3): 280–89.
- Silva, Carlos.** 2014. "Do Efeito País de Origem Ao Uso Da Origem Portugal Como Estratégia de Marca : Contributo Das Atitudes Dos Consumidores Portugueses Relativamente Ao Tomate Processado e Ao Azeite Nacionais." PhD diss. Universidade Aberta.
- Silva, Guilherme.** 2017. "Imagem Do País de Origem : Antecedentes e Consequentes Para o Calçado Português e Italiano." Master's diss. Universidade de Coimbra.
- Silva, Susana, and Lucénio Saraiva.** 2016. "Understanding Changes on the Country-of-Origin Effect of Portugal." *Studia Universitatis Babe-Bolyai Oeconomica*, 61 (3): 3–19.
- Valente, Ana Rita.** 2018. "O Valor Da Marca «made In» Portugal." Master's diss. Escola Superior Do Porto.
- Verlegh, Peeter W. J., and Jan-Benedict E.M. Steenkamp.** 1999. "A Review and Meta-Analysis of Country-of-Origin Research." *Journal of Economic Psychology*, 20: 521–46.
- Verlegh, Peeter W J.** 2001. *Country-of-Origin Effects on Consumer Product Evaluations*. Wageningen: Wageningen Universiteit.
- Wang, Cheng Lu, Dongjin Li, Bradley R. Barnes, and Jongseok Ahn.** 2012. "Country Image, Product Image and Consumer Purchase Intention: Evidence from an Emerging Economy." *International Business Review*, 21 (6): 1041–51.
- Yagci, Mehmet I.** 2001. "Evaluating the Effects of Country-of-Origin and Consumer Ethnocentrism: A Case of a Transplant Product." *Journal of International Consumer Marketing*, 13 (3): 63–83.

## Appendix A: Questionnaire

### Questionnaire – Version 1

My name is Francisca dos Santos and I am developing my dissertation of the master's in management at Nova School of Business and Economics. This aims to understand the effect of country-of-origin on Portuguese consumers' evaluation of different products.

Since the focus of this dissertation is Portuguese consumers, this questionnaire is directed to everyone with Portuguese nationality.

This questionnaire is anonymous and there are no right or wrong answers, the goal is for you to respond honestly. If you have not had previous experience with the products mentioned in the present questionnaire, please, answer based on your perception.

For any clarification, you can contact me through the following email address:  
33303@novasbe.pt.

Thank you for your collaboration!

1. Please indicate how much you agree or disagree with each of the following statements:

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
1. Portugal is an affluent country.					
2. Portugal is a developed country.					
3. Portugal has advanced technology.					
4. Portugal has high living standards.					
5. In Portugal, people have a good standard of life.					
6. Portugal is very concerned about the environment.					
7. Portugal has hardworking workers.					

8. Portugal has efficient workers.					
9. Portugal has meticulous workers.					
10. Portugal has creative workers.					

2. Please indicate how much you agree or disagree with each of the following statements:

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
1. I have positive feelings for Portugal.					
2. I have pleasant feelings for Portugal.					
3. I feel enthusiasm about Portugal.					
4. I am distrustful about Portugal. (recoded)					
5. I feel irritated about Portugal. (recoded)					
6. I have hostile feelings for Portugal. (recoded)					

3. Please indicate how much you agree or disagree with each of the following statements regarding Portuguese beer.

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
1. It is tasty.					
2. It contains natural ingredients.					
3. It smells good.					
4. It has a pleasant texture.					
5. It has good quality.					

6. It is good value for money.					
7. In shops, it stands out from beer produced in other countries.					

4. Please indicate how much you agree or disagree with each of the following statements regarding clothes produced in Portugal.

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
j1. They are trendy.					
2. They have a good design.					
3. They are long-lasting.					
4. They have a pleasant texture.					
5. They have good quality.					
6. They are good value for money.					
7. In shops, they stand out from clothes produced in other countries.					

5. Please indicate how much you agree or disagree with each of the following statements regarding Portuguese fruits.

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
1. They are tasty.					

2. They do not contain additives.					
3. They are nutritive.					
4. They look good.					
5. They have good quality.					
6. They are good value for money.					
7. In shops, they stand out from fruits grown in other countries.					

6. Please indicate how much you agree or disagree with each of the following statements:

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
1. Only those products that are unavailable in Portugal should be imported.					
2. Portuguese products, first, last and foremost.					
3. Purchasing foreign-made products is unpatriotic.					
4. It is not right to purchase foreign products, because it puts Portuguese people out of jobs.					
5. A true Portuguese should always buy Portugal-made products.					
6. We should purchase products manufactured in Portugal instead of letting other countries getting rich at our expense.					
7. The Portuguese should not buy foreign products, because this is bad for the Portuguese business and causes unemployment.					

8. It may cost me in the long run, but I prefer to support Portuguese products.					
9. We should buy from foreign countries only those products that we cannot obtain within our own country.					
10. Portuguese consumers who purchase products made in other countries are responsible for putting their fellow Portuguese out of work.					

7. Please indicate how much you agree or disagree with each of the following statements:

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
1. I am proud to be Portuguese.					
2. Being Portuguese is not important to me. (recoded)					
3. I don't like it when someone has a negative opinion about Portugal.					
4. I don't feel any ties with Portugal. (recoded)					
5. Being Portuguese means a lot to me.					

8. Gender

<input type="checkbox"/>	Female
<input type="checkbox"/>	Male

9. Age

<input type="checkbox"/>	<18
<input type="checkbox"/>	18-30
<input type="checkbox"/>	31-40
<input type="checkbox"/>	41-50
<input type="checkbox"/>	51-60
<input type="checkbox"/>	>60



## 10. Educational level

	Lower than High School
	High School
	Bachelor's Degree
	Postgraduate Degree
	Master's Degree
	Doctorate

## 11. Monthly household net income

	<1000€
	1001€-2000€
	2001€-3000€
	>3000€

## 12. Residence

	Portugal
	Foreign Country

## Questionnaire – Version 2

My name is Francisca dos Santos and I am developing my dissertation of the master's in management at Nova School of Business and Economics. This aims to understand the effect of country-of-origin on Portuguese consumers' evaluation of different products.

Since the focus of this dissertation is Portuguese consumers, this questionnaire is directed to everyone with Portuguese nationality.

This questionnaire is anonymous and there are no right or wrong answers, the goal is for you to respond honestly. If you have not had previous experience with the products mentioned in the present questionnaire, please, answer based on your perception.

For any clarification, you can contact me through the following email address:

33303@novasbe.pt.

Thank you for your collaboration!

1. Please indicate how much you agree or disagree with each of the following statements:

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
1. Spain is an affluent country.					
2. Spain is a developed country.					
3. Spain has advanced technology.					
4. Spain has high living standards.					
5. In Spain, people have a good standard of life.					
6. Spain is very concerned about the environment.					
7. Spain has hardworking workers.					
8. Spain has efficient workers.					
9. Spain has meticulous workers.					
10. Spain has creative workers.					

2. Please indicate how much you agree or disagree with each of the following statements:

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
1. I have positive feelings for Spain.					
2. I have pleasant feelings for Spain.					
3. I feel enthusiasm about Spain.					
4. I am distrustful about Spain. (recoded)					
5. I feel irritated about Spain. (recoded)					

6. I have hostile feelings for Spain. (recoded)					
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3. Please indicate how much you agree or disagree with each of the following statements regarding Spanish beer.

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
1. It is tasty.					
2. It contains natural ingredients.					
3. It smells good.					
4. It has a pleasant texture.					
5. It has good quality.					
6. It is good value for money.					
7. In shops, it stands out from beer produced in other countries.					

4. Please indicate how much you agree or disagree with each of the following statements regarding clothes produced in Spain.

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
1. They are trendy.					
2. They have a good design.					
3. They are long-lasting.					

4. They have a pleasant texture.					
5. They have good quality.					
6. They are good value for money.					
7. In shops, they stand out from clothes produced in other countries.					

5. Please indicate how much you agree or disagree with each of the following statements regarding Spanish fruits.

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
1. They are tasty.					
2. They do not contain additives.					
3. They are nutritive.					
4. They look good.					
5. They have good quality.					
6. They are good value for money.					
7. In shops, they stand out from fruits grown in other countries.					

6. Please indicate how much you agree or disagree with each of the following statements:

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree

1. Only those products that are unavailable in Portugal should be imported.					
2. Portuguese products, first, last and foremost.					
3. Purchasing foreign-made products is unpatriotic.					
4. It is not right to purchase foreign products, because it puts Portuguese people out of jobs.					
5. A true Portuguese should always buy Portugal-made products.					
6. We should purchase products manufactured in Portugal instead of letting other countries getting rich at our expense.					
7. The Portuguese should not buy foreign products, because this hurts the Portuguese business and causes unemployment.					
8. It may cost me in the long run, but I prefer to support Portuguese products.					
9. We should buy from foreign countries only those products that we cannot obtain within our own country.					
10. Portuguese consumers who purchase products made in other countries are responsible for putting their fellow Portuguese out of work.					

7. Please indicate how much you agree or disagree with each of the following statements:

	Totally Disagree	Disagree	Neither Agree nor Disagree	Agree	Totally Agree
1. I am proud to be Portuguese.					
2. Being Portuguese is not important to me. (recoded)					
3. I don't like it when someone has a negative opinion about Portugal.					

4. I don't feel any ties with Portugal. (recoded)					
5. Being Portuguese means a lot to me.					

### 8. Gender

	Female
	Male

### 9. Age

	<18
	18-30
	31-40
	41-50
	51-60
	>60

### 10. Educational level

	Lower than High School
	High School
	Bachelor's Degree
	Postgraduate Degree
	Master's Degree
	Doctorate

### 11. Monthly household net income

	<1000€
	1001€-2000€
	2001€-3000€
	>3000€

12.Residence

	Portugal
	Foreign Country

## Appendix B: Demographic profile of participants

Table B1. Demographic profile of participants (n=648).

		<b>Frequency</b>	<b>Percent</b>
<b>Gender</b>	Female	457	70.5%
	Male	191	29.5%
<b>Age</b>	< 18	14	2.2%
	18-30	163	25.2%
	31-40	189	29.2%
	41-50	195	30.1%
	>50	87	13.4%
<b>Educational level</b>	Lower than High School	16	2.5%
	High School	254	39.2%
	Bachelor's Degree	235	36.3%
	Postgraduate Degree	32	4.9%
	Master's Degree	87	13.4%
	Doctorate	24	3.7%
<b>Monthly household net income</b>	<1000€	121	18.7%
	1001€-2000€	266	41.0%
	2001€-3000€	135	20.8%
	>3000€	126	19.4%
<b>Residence</b>	Portugal	497	76.7%
	Foreign country	151	23.3%
	Total	648	100.0%



## Appendix C: Descriptive Statistics

Table C1. Descriptive Statistics of the dependent variables (n=648).

Country		Cognitive component of CI	Affective component of CI	PI: beer	PI: clothes	PI: fruits
Portugal	Mean <sup>1</sup>	3.151	3.690	3.661	3.746	3.838
	Std. Deviation	0.475	0.642	0.583	0.521	0.491
Spain	Mean <sup>1</sup>	3.306	3.714	3.047	3.419	3.278
	Std. Deviation	0.430	0.621	0.512	0.476	0.506

**Note** <sup>1</sup>:1=strongly disagree; 2=disagree; 3=neither agree nor disagree; 4=agree; 5=strongly agree.

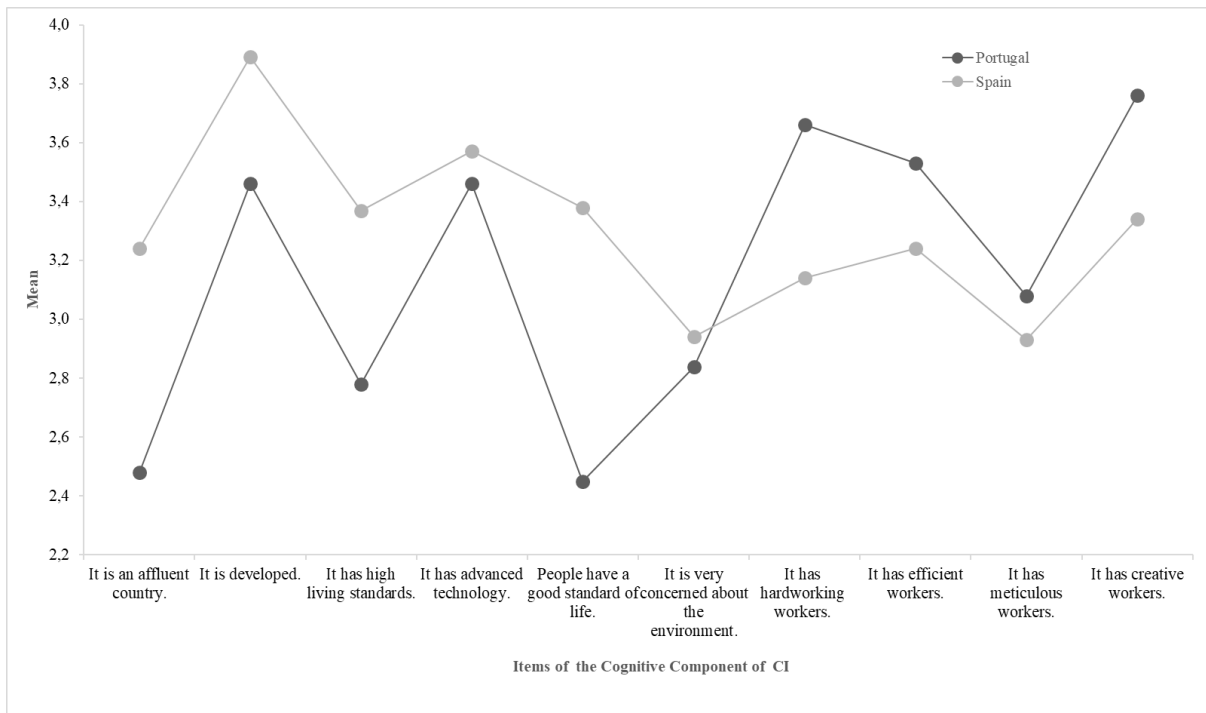


Figure C1. Line Chart (means of the items that measure the Cognitive Component of Country Image for Portugal and Spain). In this figure, the values of the items used to measure the affective component of country image are not recorded.

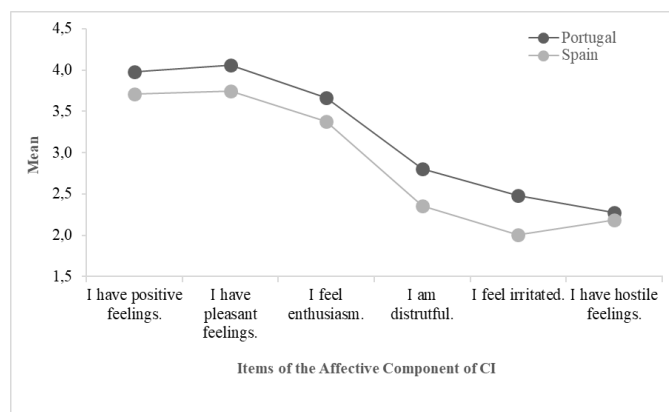


Figure C2. Line Chart (means of the items that measure the Affective Component of Country Image for Portugal and Spain).

Table C2. Descriptive Statistics of CE and NI (n=648).

	Mean <sup>1</sup>	Median <sup>1</sup>	Std. Deviation
<b>CE</b>	2.972	3.000	0.809
<b>NI</b>	4.203	4.200	0.581

**Note** <sup>1</sup>:1=strongly disagree; 2=disagree; 3=neither agree nor disagree; 4=agree; 5=strongly agree.

Table C3. Spearman's correlation matrix for the dependent variables.

		Cognitive component of CI	Affective component of CI	PI: beer	PI: clothes	PI: fruits
<b>Cognitive component of CI</b>	Correlation Coefficient	1.000	.251**	0.029	.203**	.080*
	Sig. (2-tailed)	.	0.000	0.459	0.000	0.041
	N	648	648	648	648	648
<b>Affective component of CI</b>	Correlation Coefficient	.251**	1.000	.216**	.177**	.200**
	Sig. (2-tailed)	0.000	.	0.000	0.000	0.000
	N	648	648	648	648	648
<b>PI:beer</b>	Correlation Coefficient	0.029	.216**	1.000	.328**	.443**
	Sig. (2-tailed)	0.459	0.000	.	0.000	0.000
	N	648	648	648	648	648
<b>PI:clothes</b>	Correlation Coefficient	.203**	.177**	.328**	1.000	.450**
	Sig. (2-tailed)	0.000	0.000	0.000	.	0.000
	N	648	648	648	648	648
<b>PI:fruits</b>	Correlation Coefficient	.080*	.200**	.443**	.450**	1.000
	Sig. (2-tailed)	0.041	0.000	0.000	0.000	.
	N	648	648	648	648	648

**Note:** \*\* Correlation is significant at the 0.01 level (2-tailed); \* Correlation is significant at the 0.05 level (2-tailed).

Table C4. Spearman's correlation matrix for CE and NI.

		CE	NI
<b>CE</b>	Correlation Coefficient	1	.181**
	Sig. (2-tailed)	.	0
	N	648	648
<b>NI</b>	Correlation Coefficient	.181**	1
	Sig. (2-tailed)	0	.
	N	648	648

**Note:** \*\* Correlation is significant at the 0.01 level (2-tailed).

## Appendix D: Hypothesis testing

Table D1. One-way ANOVA table investigating the impact of COO on Country Image and Product Image.

		Sum of Squares	df	Mean Square	F	Sig.
<b>Cognitive component of CI</b>	Between Groups	3.850	1	3.850	18.582	0.000
	Within Groups	133.841	646	0.207		
	Total	137.691	647			
<b>Affective component of CI</b>	Between Groups	0.093	1	0.093	0.231	0.631
	Within Groups	258.638	646	0.400		
	Total	258.731	647			
<b>PI:beer<sup>a</sup></b>	Between Groups	60.643	1	60.643	199.126	0.000
	Within Groups	196.738	646	0.305		
	Total	257.381	647			
<b>PI:clothes</b>	Between Groups	17.208	1	17.208	68.497	0.000
	Within Groups	162.292	646	0.251		
	Total	179.500	647			
<b>PI:fruits</b>	Between Groups	50.222	1	50.222	202.876	0.000
	Within Groups	159.918	646	0.248		
	Total	210.140	647			

<sup>a</sup> The homoscedasticity assumption was not verified for this variable.

Table D2. Estimated Marginal Means of the dependent variables by COO.

Dependent Variable	COO	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
<b>Cognitive Component of Country Image</b>	Portugal	3.151	0.024	3.103	3.198
	Spain	3.305	0.027	3.253	3.358
<b>Affective Component of Country Image</b>	Portugal	3.69	0.034	3.625	3.756
	Spain	3.714	0.037	3.642	3.787
<b>Product Image of Beer</b>	Portugal	3.661	0.029	3.604	3.718
	Spain	3.046	0.032	2.983	3.11
<b>Product Image of Clothes</b>	Portugal	3.746	0.027	3.694	3.798
	Spain	3.419	0.029	3.361	3.476
<b>Product Image of Fruits</b>	Portugal	3.838	0.026	3.786	3.890
	Spain	3.278	0.029	3.221	3.336

Table D3. Two-way ANOVA table investigating the effect of COO and CE on Country Image and Product Image.

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
<b>Corrected Model</b>	Cognitive component of Country Image	4.752 <sup>a</sup>	3	1.584	7.674	0.000
	Affective component of Country Image	6.490 <sup>b</sup>	3	2.163	5.523	0.001
	Product Image of Beer	60.991 <sup>c</sup>	3	20.33	66.668	0.000
	Product Image of Clothes	19.323 <sup>d</sup>	3	6.441	25.896	0.000
	Product Image of Fruits	51.272 <sup>e</sup>	3	17.091	69.28	0.000
<b>Intercept</b>	Cognitive component of Country Image	6683.626	1	6683.626	32377.69	0.000

	Affective component of Country Image	8795.952	1	8795.952	22457.08	0.000
	Product Image of Beer	7214.637	1	7214.637	23658.21	0.000
	Product Image of Clothes	8230.754	1	8230.754	33092.16	0.000
	Product Image of Fruits	8122.797	1	8122.797	32927.12	0.000
<b>CE</b>	Cognitive component of Country Image	0.452	1	0.452	2.188	0.140
	Affective component of Country Image	6.343	1	6.343	16.194	0.000
	Product Image of Beer	0.018	1	0.018	0.06	0.807
	Product Image of Clothes	0.958	1	0.958	3.851	0.050
	Product Image of Fruits	0.934	1	0.934	3.785	0.052
<b>COO</b>	Cognitive component of Country Image	3.893	1	3.893	18.857	0.000
	Affective component of Country Image	0.077	1	0.077	0.196	0.658
	Product Image of Beer	60.613	1	60.613	198.763	0.000
	Product Image of Clothes	17.069	1	17.069	68.628	0.000
	Product Image of Fruits	50.346	1	50.346	204.087	0.000
<b>CE * COO</b>	Cognitive component of Country Image	0.362	1	0.362	1.754	0.186
	Affective component of Country Image	0.232	1	0.232	0.592	0.442
	Product Image of Beer	0.342	1	0.342	1.122	0.290
	Product Image of Clothes	0.948	1	0.948	3.812	0.051
	Product Image of Fruits	0.188	1	0.188	0.764	0.382
<b>Error</b>	Cognitive component of Country Image	132.939	644	0.206		
	Affective component of Country Image	252.241	644	0.392		
	Product Image of Beer	196.39	644	0.305		
	Product Image of Clothes	160.177	644	0.249		
	Product Image of Fruits	158.868	644	0.247		
<b>Total</b>	Cognitive component of Country Image	6857.96	648			
	Affective component of Country Image	9135.698	648			
	Product Image of Beer	7677.843	648			
	Product Image of Clothes	8570.885	648			
	Product Image of Fruits	8542.183	648			
<b>Corrected Total</b>	Cognitive component of Country Image	137.691	647			
	Affective component of Country Image	258.731	647			
	Product Image of Beer	257.381	647			
	Product Image of Clothes	179.5	647			
	Product Image of Fruits	210.14	647			
	<sup>a</sup> R Squared = .035 (Adjusted R Squared = .030)					
	<sup>b</sup> R Squared = .025 (Adjusted R Squared = .021)					
	<sup>c</sup> R Squared = .237 (Adjusted R Squared = .233)					
	<sup>d</sup> R Squared = .108 (Adjusted R Squared = .103)					
	<sup>e</sup> R Squared = .244 (Adjusted R Squared = .240)					

Table D4. Estimated Marginal Means of the dependent variables by CE and COO.

Dependent Variable	CE	COO	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Cognitive component of Country Image	Low Level	Portugal	3.099	0.034	3.032	3.167
		Spain	3.303	0.037	3.229	3.376
	High Level	Portugal	3.200	0.034	3.134	3.266
		Spain	3.308	0.038	3.234	3.382
Affective component of Country Image	Low Level	Portugal	3.772	0.047	3.679	3.865
		Spain	3.832	0.052	3.731	3.933
	High Level	Portugal	3.611	0.047	3.520	3.703
		Spain	3.595	0.052	3.493	3.697
Product Image of Beer	Low Level	Portugal	3.643	0.042	3.561	3.725
		Spain	3.074	0.046	2.985	3.164
	High Level	Portugal	3.679	0.041	3.598	3.759
		Spain	3.018	0.046	2.928	3.108
Product Image of Clothes	Low Level	Portugal	3.668	0.038	3.594	3.742
		Spain	3.418	0.041	3.338	3.499
	High Level	Portugal	3.822	0.037	3.749	3.895
		Spain	3.419	0.041	3.337	3.500
Product Image of Fruits	Low Level	Portugal	3.859	0.038	3.786	3.933
		Spain	3.333	0.041	3.253	3.414
	High Level	Portugal	3.817	0.037	3.745	3.890
		Spain	3.223	0.041	3.142	3.304

Table D5. Pairwise Comparisons table (factors COO and CE).

Dependent Variable	COO	(I) CE	(J) CE	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
							Lower Bound	Upper Bound
Cognitive component of Country Image	Portugal	Low Level	High Level	-.101*	0.048	0.037	-0.195	-0.006
		High Level	Low Level	.101*	0.048	0.037	0.006	0.195
	Spain	Low Level	High Level	-0.006	0.053	0.917	-0.110	0.099
		High Level	Low Level	0.006	0.053	0.917	-0.099	0.110
Affective component of Country Image	Portugal	Low Level	High Level	.161*	0.066	0.016	0.031	0.291
		High Level	Low Level	-.161*	0.066	0.016	-0.291	-0.031
	Spain	Low Level	High Level	.237*	0.073	0.001	0.093	0.381
		High Level	Low Level	-.237*	0.073	0.001	-0.381	-0.093
Product Image of Beer <sup>a</sup>	Portugal	Low Level	High Level	-0.036	0.059	0.544	-0.15	0.079
		High Level	Low Level	0.036	0.059	0.544	-0.079	0.150
	Spain	Low Level	High Level	0.057	0.065	0.380	-0.07	0.184
		High Level	Low Level	-0.057	0.065	0.380	-0.184	0.070
Product Image of Clothes <sup>a</sup>	Portugal	Low Level	High Level	-.154*	0.053	0.004	-0.258	-0.05
		High Level	Low Level	.154*	0.053	0.004	0.05	0.258

	Spain	Low Level	High Level	0.000	0.058	0.995	-0.115	0.114
		High Level	Low Level	0.000	0.058	0.995	-0.114	0.115
<b>Product Image of Fruits</b>	Portugal	Low Level	High Level	0.042	0.053	0.425	-0.061	0.145
		High Level	Low Level	-0.042	0.053	0.425	-0.145	0.061
	Spain	Low Level	High Level	0.111	0.058	0.058	-0.004	0.225
		High Level	Low Level	-0.111	0.058	0.058	-0.225	0.004

Based on estimated marginal means

\* The mean difference is significant at the .05 level.

<sup>a</sup> The homoscedasticity assumption was not verified for this variable.

<sup>b</sup> Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table D6. Two-way ANOVA table investigating the effect of NI and COO on Country Image and Product Image.

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
<b>Corrected Model</b>	Cognitive component of Country Image	7.841 <sup>a</sup>	3	2.614	12.963	0.000
	Affective component of Country Image	10.812 <sup>b</sup>	3	3.604	9.362	0.000
	Product Image of Beer	65.571 <sup>c</sup>	3	21.857	73.384	0.000
	Product Image of Clothes	18.875 <sup>d</sup>	3	6.292	25.225	0.000
	Product Image of Fruits	53.414 <sup>e</sup>	3	17.805	73.16	0.000
<b>Intercept</b>	Cognitive component of Country Image	6530.519	1	6530.519	32388.61	0.000
	Affective component of Country Image	8560.908	1	8560.908	22238.05	0.000
	Product Image of Beer	7065.321	1	7065.321	23721.68	0.000
	Product Image of Clothes	8037.612	1	8037.612	32225.45	0.000
	Product Image of Fruits	7930.846	1	7930.846	32588.36	0.000
<b>NI</b>	Cognitive component of Country Image	0.437	1	0.437	2.166	0.142
	Affective component of Country Image	4.333	1	4.333	11.255	0.001
	Product Image of Beer	0.01	1	0.01	0.033	0.856
	Product Image of Clothes	0.277	1	0.277	1.109	0.293
	Product Image of Fruits	0.47	1	0.47	1.93	0.165
<b>COO</b>	Cognitive component of Country Image	4.554	1	4.554	22.584	0.000
	Affective component of Country Image	0.217	1	0.217	0.563	0.453
	Product Image of Beer	54.882	1	54.882	184.267	0.000
	Product Image of Clothes	15.881	1	15.881	63.671	0.000
	Product Image of Fruits	46.768	1	46.768	192.173	0.000
<b>NI* COO</b>	Cognitive component of Country Image	3.224	1	3.224	15.991	0.000
	Affective component of Country Image	5.143	1	5.143	13.358	0.000
	Product Image of Beer	4.8	1	4.8	16.117	0.000
	Product Image of Clothes	1.231	1	1.231	4.936	0.027
	Product Image of Fruits	2.43	1	2.43	9.984	0.002
<b>Error</b>	Cognitive component of Country Image	129.85	644	0.202		

	Affective component of Country Image	247.919	644	0.385
	Product Image of Beer	191.81	644	0.298
	Product Image of Clothes	160.625	644	0.249
	Product Image of Fruits	156.727	644	0.243
<b>Total</b>	Cognitive component of Country Image	6857.96	648	
	Affective component of Country Image	9135.698	648	
	Product Image of Beer	7677.843	648	
	Product Image of Clothes	8570.885	648	
	Product Image of Fruits	8542.183	648	
<b>Corrected Total</b>	Cognitive component of Country Image	137.691	647	
	Affective component of Country Image	258.731	647	
	Product Image of Beer	257.381	647	
	Product Image of Clothes	179.5	647	
	Product Image of Fruits	210.14	647	
<sup>a</sup> R Squared = .057 (Adjusted R Squared = .053) <sup>b</sup> R Squared = .042 (Adjusted R Squared = .037) <sup>c</sup> R Squared = .255 (Adjusted R Squared = .251) <sup>d</sup> R Squared = .105 (Adjusted R Squared = .101) <sup>e</sup> R Squared = .254 (Adjusted R Squared = .251)				

Table D7. Estimated Marginal Means of the dependent variables by NI and COO.

Dependent Variable	NI	COO	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>Cognitive component of Country Image</b>	Low Level	Portugal	3.046	0.035	2.977	3.114
		Spain	3.360	0.042	3.278	3.441
	High Level	Portugal	3.242	0.033	3.178	3.306
		Spain	3.269	0.034	3.202	3.336
<b>Affective component of Country Image</b>	Low Level	Portugal	3.505	0.048	3.410	3.599
		Spain	3.723	0.057	3.611	3.836
	High Level	Portugal	3.852	0.045	3.764	3.941
		Spain	3.708	0.047	3.616	3.801
<b>Product Image of Beer</b>	Low Level	Portugal	3.563	0.042	3.480	3.647
		Spain	3.146	0.050	3.047	3.245
	High Level	Portugal	3.746	0.040	3.669	3.824
		Spain	2.979	0.041	2.898	3.060
<b>Product Image of Clothes</b>	Low Level	Portugal	3.676	0.039	3.600	3.753
		Spain	3.447	0.046	3.356	3.537
	High Level	Portugal	3.807	0.036	3.736	3.878
		Spain	3.400	0.038	3.326	3.474
<b>Product Image of Fruits</b>	Low Level	Portugal	3.742	0.038	3.667	3.817
		Spain	3.320	0.046	3.231	3.410
	High Level	Portugal	3.922	0.036	3.851	3.992
		Spain	3.250	0.037	3.177	3.324

Table D8. Pairwise Comparisons table (factors: COO and NI).

Dependent Variable	COO	(I) NI	(J) NI	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
							Lower Bound	Upper Bound
<b>Cognitive component of Country Image</b>	Portugal	Low Level	High Level	-.196*	0.048	0.000	-0.29	-0.103
		High Level	Low Level	.196*	0.048	0.000	0.103	0.29
	Spain	Low Level	High Level	0.091	0.054	0.091	-0.015	0.196
		High Level	Low Level	-0.091	0.054	0.091	-0.196	0.015
<b>Affective component of Country Image</b>	Portugal	Low Level	High Level	-.348*	0.066	0.000	-0.477	-0.218
		High Level	Low Level	.348*	0.066	0.000	0.218	0.477
	Spain	Low Level	High Level	0.015	0.074	0.841	-0.131	0.16
		High Level	Low Level	-0.015	0.074	0.841	-0.16	0.131
<b>Product Image of Beer<sup>a</sup></b>	Portugal	Low Level	High Level	-.183*	0.058	0.002	-0.297	-0.069
		High Level	Low Level	.183*	0.058	0.002	0.069	0.297
	Spain	Low Level	High Level	.167*	0.065	0.011	0.039	0.295
		High Level	Low Level	-.167*	0.065	0.011	-0.295	-0.039
<b>Product Image of Clothes</b>	Portugal	Low Level	High Level	-.131*	0.053	0.014	-0.235	-0.027
		High Level	Low Level	.131*	0.053	0.014	0.027	0.235
	Spain	Low Level	High Level	0.047	0.06	0.435	-0.07	0.164
		High Level	Low Level	-0.047	0.06	0.435	-0.164	0.07
<b>Product Image of Fruits</b>	Portugal	Low Level	High Level	-.179*	0.052	0.001	-0.282	-0.076
		High Level	Low Level	.179*	0.052	0.001	0.076	0.282
	Spain	Low Level	High Level	0.07	0.059	0.237	-0.046	0.185
		High Level	Low Level	-0.07	0.059	0.237	-0.185	0.046

Based on estimated marginal means

\* The mean difference is significant at the ,05 level.

<sup>a</sup> The homoscedasticity assumption was not verified for this variable.

<sup>b</sup> Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).



## Appendix E: Verification of the robustness of the results

Table E1. Summary and comparison of the results obtained using three different methods.

		Two-way ANOVA with 2 categories of CE and NI	One-way ANOVA with 3 categories of CE and NI	Linear Regression
PORTUGAL	CE-CIcog	+	Not significant	Not significant
	CE-Claff	-	*	-
	CE-PI:beer	Not significant	Not significant	Not significant
	CE-PI:clothes	+	+	+
	CE-PI:fruits	Not significant	Not significant	Not significant
	NI-CIcog	+	+	+
	NI-Claff	+	+	+
	NI-PI:beer	+	+	+
	NI-PI:clothes	+	Not significant (p=0,056)	Not significant (p=0,100)
	NI-PI:fruits	+	+	+
SPAIN	CE-CIcog	Not significant	Not significant	Not significant
	CE-Claff	-	-	-
	CE-PI:beer	Not significant	Not significant	Not significant
	CE-PI:clothes	Not significant	Not significant	Not significant
	CE-PI:fruits	Not significant (p=0,062)	*	-
	NI-CIcog	Not significant	Not significant	Not significant
	NI-Claff	Not significant	Not significant	Not significant
	NI-PI:beer	-	Not significant (p=0,064)	-
	NI-PI:clothes	Not significant	Not significant	Not significant
NI-PI:fruits	Not significant	Not significant	Not significant	

**Note:** CIcog: cognitive component of country image; Claff: affective component of country image; CI: country image; PI: product image; +:positive relationship; -: negative relationship; Not significant: the null hypothesis was not rejected ( $p>0.05$ ); \*: the mean of the dependent variable increases/decreases between the low level and medium level categories of the independent variable and decreases/increases between the medium level and high level categories of the independent variable.