

## **Sustainability and country-of-origin effects on consumers' willingness to pay**

### **Maria Gabriela Montanari**

Assistant professor  
Department of Marketing and International Business  
University of Vienna, Austria  
Oskar-Morgenstern-Platz 1, 1090 Vienna  
T: +43-1-4277-38037  
gabriela.montanari@univie.ac.at

### **Michela Matarazzo**

Full Professor of Management and International Business  
Department of Economics and Business Sciences  
Guglielmo Marconi University, Italy  
Via Plinio, 44 – 00193 Roma  
Tel. +39-0637725648  
m.matarazzo@unimarconi.it

### **Adamantios Diamantopoulos**

Chaired professor of International Marketing  
Department of Marketing and International Business  
University of Vienna, Austria  
Oskar-Morgenstern-Platz 1, 1090 Vienna  
T: +43-1-4277-38031  
adamantios.diamantopoulos@univie.ac.at

The authors thank the Dr. Theo and Friedl Schöller Research Center for Business and Society for supporting this study

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### **Abstract**

This paper examines the impact of sustainability and country-of-origin (COO) on consumers' willingness to pay (WTP). Our findings do not show any sustainability or COO effects on WTP. Implications for theory and practice are considered and suggestions for future research made.

*Key words:* Sustainability, Country-of-origin, Willingness to Pay

## **1. Introduction and Objectives**

The importance of sustainability, i.e., the focus to deliver value to consumers based on economic, social and environmental aspects (Elkington, 2004) is increasing. Consumers are demanding sustainable products (Petro, 2022), companies are adopting sustainability initiatives (Winterich, 2021) and countries are promoting sustainable development (Dekhili, Crouch, & Moussawel, 2021). In this context, country-of-origin (COO), namely “the country in which the product is manufactured or assembled” (Hamzaoui-Essoussi & Merunka, 2007, p. 412) is increasingly becoming part of consumers’ evaluations of sustainable products (Dekhili & Nguyen, 2021) since the provenance of a product may directly involve sustainability issues (e.g., long-distance shipments or working conditions in different countries).

As a result, there has been growing interest on the link between COO and sustainability in recent years. Research has focused on country green/ecological image (e.g., Chan, 2000; Dekhili et.al, 2021), country-of-origin sustainability reputation (e.g., Cowan & Guzman, 2020), and eco-certification origin (Dekhili & Nguyen, 2021). The relative importance of COO versus sustainable product attributes in consumer decision making (e.g., Brand & Rausch, 2021) and the interaction between COO and social corporate responsibility (e.g., Magnusson, Westjohn, & Zdravkovic, 2015) have also been investigated.

Most studies linking COO and sustainability employ “soft” consumer responses (e.g., brand attitudes or purchase intentions) as outcome variables. Using such outcomes, however, ignores the so-called ‘attitude-behavior gap’ in sustainable purchasing behavior (Wiederhold & Martinez, 2018) since “sustainability attributes do not always drive consumer choice *even when consumers value sustainability attributes positively*” (Bangsa & Schlegelmilch, 2020, p.2, added emphasis). Price-related outcomes, on the other hand, are closer to actual behavior and include the sacrifice incurred by the consumer when actually purchasing a brand (Monroe, 2003). This is important as consumers can have positive attitudes towards sustainable products, but may not be willing to bear additional costs.

Against this background, we empirically examine the impact of sustainability and COO on consumers’ willingness to pay (WTP), namely “the maximum amount of money a customer is willing to spend for a product or service” (Homburg, Koschate, & Hoyer, 2005, p. 85). Specifically, we add to extant literature by investigating whether consumers are (un)willing to pay a price premium for a sustainable product and whether the relationship between sustainability and WTP is influenced by a more (or less) favorable COO. Our findings should be of value to international marketing managers seeking to capitalize on sustainability claims and product origin associations when developing their pricing strategies.

## 2. Method

One hundred and thirty-nine Austrian consumers (57.6% female,  $M_{age} = 31.65$ ,  $SD = 11.81$ ) were recruited online and randomly allocated to three experimental

groups, in a between-subjects design. *Within* each group, respondents were exposed to *two* fictitious brands of chocolate differing in their COO and/or presence/absence of a sustainability label (see Figure 1). Specifically, the first experimental group was exposed to two brands differing in their product origin (more favorable vs. less favorable) but including no sustainability information. The second group was exposed to a brand from a more favorable country without a sustainability label and a brand from a less favorable country but with such a label. Finally, the third group was exposed to a brand from a more favorable country with a sustainability label and a brand from a less favorable country without any label.

	<b>Country-of-origin</b>		<b>Sustainability</b>
<i>Experimental group 1</i>	Less favorable country + No label	More favorable country + No label	
<i>Experimental group 2</i>	Less favorable country + Sustainability label	More favorable country + No label	
<i>Experimental group 3</i>	Less favorable country + No label	More favorable country + Sustainability Label	

**Figure 1. Experimental design**

Sustainability information was manipulated with a Fairtrade label. The latter was chosen based on a pretest which showed consumers' high familiarity with this label as well as a high rate of correct association of the label with both social and environmental concerns (89%). We opted for a food product as stimulus due to the growing concern of society for social and environmental consequences of food production and consumption (Annunziata, Mariani, & Vecchio, 2019) as well as the great amount of public and private initiatives to communicate sustainability-related information about food (Lotz, Christandl, & Fetchenhauer, 2013). Fictitious brand names were employed to eliminate confounding effects of brand equity and familiarity (Dimofte, Johansson, & Ronkainen, 2008).

To manipulate product origin information, a "made in" claim was employed. Switzerland and Poland were selected as stimuli countries because they both have indigenous production of chocolates and are expected to differ substantially in terms of their country images; this was already shown in previous research in the same product category (see Herz & Diamantopoulos, 2017).

Following random allocation to the experimental conditions, consumers answered the four price questions (too cheap, cheap, expensive and too expensive) on Van Westendorp's (1976) price sensitivity meter, stating the relevant amounts

in Euros; WTP was computed as the average of the expensive and too expensive prices (see Diamantopoulos, Matarazzo, Montanari, & Petrychenko, 2021).

Next, only in those experimental conditions which *did* include a Fairtrade label, participants stated their recognition of, and familiarity with the label. They also completed established scales on country image (Roth & Romeo, 1992;  $\alpha_{\text{Switzerland}} = 0.59$ ,  $\alpha_{\text{Poland}} = 0.75$ ), product category involvement (Mittal & Lee, 1988;  $\alpha = 0.92$ ), price sensitivity (Wakefield & Inman, 2003;  $\alpha = 0.87$ ), and cause involvement (Hill & Lee, 2015;  $\alpha = 0.89$ ); the latter construct capturing the significance attached by consumers to environmental issues. Respondents were also confronted with an additional question regarding who should pay for sustainability (allocation of 100 points to government, companies, consumers, and 'others' on a constant-sum scale).

### 3. Findings

The COO manipulation worked as intended in the study. A paired-samples t-test across all experimental conditions showed that Switzerland's country image ( $M_{\text{Switzerland}} = 5.97$ ) was perceived as being significantly more favorable than Poland's ( $M_{\text{Poland}} = 3.29$ ;  $t(105) = 21.66$ ,  $p < 0.001$ ). Also consistent with expectations, respondents were familiar with the Fairtrade label, scoring well above the mid-point on the relevant seven-point scale ( $M = 6.13$ ,  $SD = 1.20$ ) and the majority (82.7%) accurately associated the label with both social and environmental concerns, thus confirming the successful manipulation of sustainability through this label.

To investigate the COO effect on consumers' WTP, we conducted a paired-sample t-test within the first experimental group, which allowed the comparison of the WTP for the two chocolate brands differing only in terms of their origin (Switzerland or Poland). No significant differences in WTP were shown ( $t(35) = 1.00$ ,  $p > 0.05$ ), indicating no COO effect.

To test the effect of sustainability, we performed independent-samples t-tests<sup>1</sup>, but now comparing the versions with and without the Fairtrade label, while keeping the product origin constant. No sustainability effect was revealed through these comparisons ( $t_{\text{Switzerland}}(71) = 1.14$ ,  $t_{\text{Poland}}(67) = 0.68$ ,  $p > 0.05$ ).

The analysis also revealed that consumers clearly believe that government and companies rather than themselves should carry most of the sustainability burden as they allocated, on average, 42.21 points to government, 35.29 points to companies, and only 22.21 points to consumers in response to the question on who should pay for sustainability.

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<sup>1</sup> Initially, product involvement, price sensitivity and cause involvement were included as covariates in an analysis of covariance (ANCOVA). However, as none of them turned out to be significant, they were dropped from further analysis and independent samples t-tests were performed instead.

#### **4. Discussion**

The current study sought to advance the debate on the interplay between COO and sustainability as informational cues influencing consumers' WTP. Surprisingly, while both COO and sustainable consumption literatures suggest a positive effect of a favorable country image (e.g., Hulland, Todino, & Lecraw, 1996; Koschate-Fischer, et. al, 2012) and an eco-labeled product (e.g., Del Giudice et al., 2018; Laroche, Bergeron, & Barbaro-Forleo, 2001) on consumers' WTP, our findings show neither a COO effect or a sustainability influence on WTP.

With regards to COO, these results might reflect the fact that differences in country image might not always translate into significant differences in price responses (Diamantopoulos, et al., 2021). Indeed, the COO effect varies across product categories (Tseng & Balabanis, 2011) and consumers do not necessarily allocate price premiums or discounts based on COO (Agrawal & Kamakura, 1999). The lack of influence of COO on WTP could also be related to the "made in" operationalization of product origin information used in our study. Consumers may place less emphasis on the country in which the product is made (Kabadayi & Lerman, 2011) and more on the origin of the brand (Magnusson, Westjohn, & Zdravkovic, 2011).

A potential explanation for the lack of an effect of sustainability on consumers' WTP may be related to consumers' perceptions as to *who* should carry the costs of sustainability. As our findings showed, consumers believe that this responsibility should rest mainly on the shoulders of government and companies. The absence of a significant sustainability effect on WTP might be also a consequence of the use of sustainable labels; such labels do not always have the intended effect on consumers, since they can trigger a sense of uncertainty as to how trustworthy products with these labels can be (Lee, Bae, & Kim, 2020). Furthermore, in certain product categories (e.g., animal-based food products), such labels do not influence WTP at all (Tebbe & von Blanckenburg, 2018).

#### **5. Conclusion**

Our findings, inevitably, question conventional wisdom suggesting that consumers are willing to pay more for sustainable products, particularly if the latter originate in countries with a strong image. However, there is a clear need for replications of the current study with different product categories, other COO as stimuli and other eco-labels (e.g., carbon footprint) to confirm (or otherwise) the observed absence of effects of sustainability on WTP. Attention should also be paid to potential moderating influences such as consumers' skepticism or credibility of the label as these could interact with COO (Dekhili et al., 2021) and potentially influence the effect of sustainability on WTP.

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