

# Northumbria Research Link

Citation: Josiassen, A. P., Pandit, Ameet and Karpen, I. (2008) Does product origin congruency moderate the country-of-origin - product evaluation relationship? In: Australian and New Zealand Marketing Academy (ANZMAC), 1-3 December 2008, Sydney, Australia.

URL: <http://pandora.nla.gov.au/pan/25410/20101006-0008/...>  
<[http://pandora.nla.gov.au/pan/25410/20101006-0008/www.anzmac2008.org/\\_Proceedings/Index.html](http://pandora.nla.gov.au/pan/25410/20101006-0008/www.anzmac2008.org/_Proceedings/Index.html)>

This version was downloaded from Northumbria Research Link:  
<http://nrl.northumbria.ac.uk/id/eprint/8832/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)

# **Does Product Origin Congruency Moderate the Country-of-Origin – Product Evaluation Relationship?**

**Alexander Josiassen, Victoria University  
Ameet Pandit and Ingo Karpen, The University of Melbourne**

## **Abstract**

Since Schooler's influential article (1965) the effect of country-of-origin (COO) biases on consumer attitudes has been an issue of continuing interest. Over the past four decades the interest of researchers has continuously shifted as new challenges presented themselves. A key challenge is the identification and investigation of potential variables that moderate the influence of COO. Recently it has been suggested that perceived product origin incongruence may significantly reduce the importance consumers place on the COO cue (Chao, 2001). In this study, we address these unresolved issues surrounding the influence of product origin congruency. Specifically, we explore empirically how customer perceived product origin congruency can influence COO-image effects on product evaluations. This in turn provides a test of the external validity of the product origin congruency and contributes to the growing literature that advocates a multidimensional view of COO. The findings show that when consumers consider a product from a higher image product-origin, the positive relationship between COO image and product evaluation is strengthened the more the consumer perceives that the product origins are congruent. The authors draw some pertinent implications from this finding.

## **Introduction**

Since Schooler's influential article (1965) the effect of country-of-origin (COO) biases on consumer attitudes has been an issue of continuing interest. Over the past four decades the interest of researchers has continuously shifted as new challenges presented themselves. A key challenge is the identification and investigation of potential variables that moderate the influence of COO. Recently it has been suggested that perceived product origin incongruence may significantly reduce the importance consumers place on the COO cue (Chao, 2001). This, however, has only been tested in the confines of an experiment that used two scenarios – complete congruence and complete incongruence. As such, the issue remains to be hypothesis tested in a survey. Furthermore, the literature does not provide any studies that hypothesize the influence of product origin congruency under more than two levels (complete congruency and complete incongruence).

In this study, we address these unresolved issues surrounding the influence of product origin congruency. Specifically, we explore empirically how customer perceived product origin congruency can influence COO-image effects on product evaluations. This in turn provides a test of the external validity of the product origin congruency and contributes to the growing literature that advocates a multidimensional view of COO.

This paper is organised as follows. First we present the hypothesis development. Then we explain our research methodology. Next, we present our findings, concluding with a discussion.

## Hypothesis Development

### Product Origin Congruency

In a market place with increasing global sourcing, products often originate in more than one country (e.g. designed in country X and manufactured in country Y). Product origin congruency refers to the extent to which consumers perceive that a given product's origin of manufacture, design, parts and association is the same (Josiassen, Lukas, & Whitwell, 2008). Only in recent years has the issue of differing product origin facets come into prominence in the COO literature (e.g. Li, Murray, & Scott, 2000). An increasing amount of COO studies recognise the mounting presence of multi-origin products. For example, an experiment has indicated that product origin congruency may have an influence as to how consumers evaluate products (Chao, 2001).

The theoretical underpinning for congruency effects was first proposed by Osgood and Tannenbaum (1955). The congruency effect postulates that because incongruent information creates dissonance, congruent information will be preferred and relied on to a greater extent. Information is more congruent when more sources of information point in the same direction. If, for instance, a brand that is associated with high quality is sold in a high quality outlet, then those two indicators of quality would be congruent. If, on the other hand, the brand was sold in a low-quality outlet, such as a discount store, then the two quality indicators would be incongruent.

The congruency effect is well researched in the marketing literature. For example, congruency between a celebrity endorser and the type of product has been found to follow the congruency principle (Friedman & Friedman, 1979; Kamins, 1990; Misra & Beatty, 1990). Leclerc et al. (1994) found that incongruence between foreign branding (perceived origin based on the brand name) and supplied actual origin information diminished the effect of the foreign branding effort itself.

Chao (2001) in an experiment constructed a low congruency setting and a high congruency setting. Based on the results it was suggested that product origin congruency may enhance the importance of COO image in consumers' product evaluation. We extend Chao's (2001) experimental work in a survey setting while providing an operationalisation of product origin congruency such that it can be measured under a variety of congruency levels.

*H1: The relationship between country-of-origin image and product evaluation will become stronger with increasing product origin congruency.*

### Control Variables

In order to isolate the impact of the principal variables of interest we chose to control for the influence of four variables that have previously been shown to affect how consumers evaluate products from different origins (Balabanis, Mueller, & Melewar, 2002; Schooler, 1965). Specifically, gender, income, education and sojourn are used as control variables.

### **Demographic Variables**

Demographics play an important role in determining the effect COO image has on product evaluations (e.g. Good & Huddleston, 1995; Lawrence, Marr, & Prendergast, 1992; Schooler, 1971; Wall & Heslop, 1986). Females tend to rate foreign products higher than males (Bilkey & Nes, 1982; Mittal & Tsiros, 1995; Schooler, 1971), consumers with higher education tend to evaluate foreign products more favourably than consumers with less education (Mittal et al., 1995) and consumers with higher incomes will evaluate foreign products more positively than will consumers with lower incomes (Han & Terpstra, 1988). These three demographic variables have been included in several studies that focus on consumers' origin bias (e.g. Balabanis, Diamantopoulos, Mueller, & Melewar, 2001; Hsieh, Pan, & Setiono, 2004; Mittal et al., 1995).

### **Sojourn**

It would seem fair to assume that living in a foreign country for a period of time affects how consumers evaluate products from such a country. Findings in the social stereotyping literature suggest that direct contact with a country can influence evaluations about that country (Hilton & von Hippel, 1996). It has further been suggested that direct contact with a country has an influence on consumers' product perceptions (Balabanis et al., 2002). As such, we include a measure of sojourn in order to account for its influence on consumer evaluations.

## **Research Method**

To test our hypothesis, questionnaires were distributed to 524 university students at a major Australian university. 304 completed questionnaires were returned and used, resulting in a questionnaire response rate of 58%. The respondents were asked to answer the questionnaire with regard to the latest purchase in one of the following product categories: cars, electronics, watches and electrical household appliances. Two main criteria were used in selecting the empirical context. First, our independent variable needed to exhibit substantial variation. Second, our moderator variable needed to manifest itself in the setting to various degrees. With respect to the first criterion, each of the four product classes allowed for a substantial variance in terms of their product origin. With respect to the second criterion, the four product classes were expected to show substantial variation along the hypothesised moderator variable.

### **Measures**

We operationalised the constructs in our conceptual framework by employing reflective scales. Except for the control variables, a seven-point response format was used.

*Country-of-origin image.* The measure for country-of-origin was adopted from Josiassen et al. (2008). This measure captures the category-specific image which consumers have of the product origin that they associate the focal product with. The scale consists of four items anchored by "strongly agree" and "strongly disagree" and displays good reliability ( $\alpha = .891$ ).

*Product evaluation.* The measure for product evaluation was adopted from Lim et al., (1994). The scale displays good reliability ( $\alpha = .901$ ).

*Product origin congruency.* We mapped consumers' perceived product-origin congruency using the respondent-answer congruency method (Josiassen et al., 2008). This method results in a single item.

*Control variables.* We also controlled for gender, income, education level and sojourn. These variables have been used by prior research examining COO phenomena (e.g. Balabanis & Diamantopoulos, 2004; Balabanis et al., 2002).

### Measure Validation Procedures

To verify unidimensionality we subjected the model to confirmatory factor analysis. We used a combination of fit indices to evaluate the overall fit of the data to the specified model. All indices were satisfactory ( $\chi^2/DF = 1.7$ , RMSEA = .04, IFI = .99, CFI = .99, AGFI = .96, GFI = .98).

### Results

We used hierarchical regression analysis with interactions. The independent variable was mean-centred. Table 1 reports the means, standard deviations and correlation coefficients for the involved variables. Table 2 reports the regression analysis results. The reported significance levels in Table 2 are two-tailed tests.

TABLE 1  
Descriptive Statistics and Correlations

Variable	1	2	3	4	5	6	7
Mean	5.21	.51	13,736 .80	.21	18.70	5.08	2.95
Standard Deviation	1.33	.50	7,181 .50	.41	103.79	1.29	.84
1. PE	1.00						
2. Gender	-.05	1.00					
3. Income	.01	.21***	1.00				
4. Education	-.10*	.03	.18***	1.00			
5. Sojourn	.10*	.08 <sup>†</sup>	-.04	-.06	1.00		
6. COO Image	.67***	-.04	-.01	.09 <sup>†</sup>	.09 <sup>†</sup>	1.00	
7. COO Congruency	.17***	.01	.06	-.02	-.01	.23***	1.00

\*\*\* Statistically significant at the .001 level.

\*\* Statistically significant at the .01 level.

\* Statistically significant at the .05 level.

<sup>†</sup> Statistically significant at 0.1 level

**TABLE 2**  
**Hierarchical Moderated Regression Analysis for the impact of COO Image** <sup>a</sup>

Variables	Product Evaluation	
	<i>Main Effects Only</i>	<i>Interaction Term Included</i>
Constant	-0.11	-0.11
Control Variables		
Gender	-0.03	-0.02
Income	0.03	0.03
Education Level	-0.05	-0.05
Sojourn	0.04	0.04
Direct Effects		
COI	0.66***	0.41**
Congruency	0.02	0.02
Interaction Terms		
COI _ Congruency		0.26 <sup>†</sup>
<i>R</i> <sup>2</sup>	.45***	.46***
Change in <i>R</i> <sup>2</sup>		.01 <sup>†</sup>

<sup>a</sup> Beta values are reported.

\*\*\* Statistically significant at the .001 level.

\*\* Statistically significant at the .01 level.

\* Statistically significant at the .05 level.

<sup>†</sup> Statistically significant at 0.1 level

From the restricted regression model, without the interaction terms included, it can be observed that COO image has a direct and positive influence on product evaluation ( $\beta = .66$ ;  $p < .001$ ). However, it should be noted that this highly significant direct effect weakens ( $\beta = .41$ ;  $p < .01$ ) once the interaction term is inserted. The improvement of the full model on the restricted model as indicated by the significant change in the multiple squared correlation coefficient ( $R^2$ ) shows that the full model explains more than the restricted model.

H1 hypothesises that consumers who perceive a higher degree of product origin congruency will see the origin image as more reliable and in turn make more use of it in product evaluations. We investigated this suggestion and our results indicate that there is indeed a congruency effect such that the effect of COO image on product evaluation is higher when the consumer perceives the COO information as more congruent. The interaction term is significant, although only marginally so. This suggests that product origin congruency interacts positively with COO image to increase its effect on product evaluation ( $\beta = .26$ ,  $p < .1$ ).

## Discussion

The results of this study indicate that COO image has a different effect on product evaluation depending on the context.

The findings show that consumers rely more on the COO cue when the product origin facets are perceived as congruent. Higher perceived product origin congruency increases the perceived reliability of the COO image held by consumers. As a consequence this image is used more when evaluating products and considering a purchase. In other words, when consumers consider a product from a higher image product-origin, the positive relationship between COO image and product evaluation is strengthened the more the consumer perceives that the product origins are congruent.

We found that consumers utilise COO image more when making product evaluations if they perceive that the product origins are more congruent than if they perceive that the product origins are less congruent. In addition to augmenting our knowledge of the conditions under which COO image is more or less salient, our study is an extension of research that aims to examine the role of the various facets of COO (Ahmed & d'Astous, 2004; Chao, 2001; Kleppe, Iversen, & Stensaker, 2002; Laroche, Papadopoulos, Heslop, & Murali, 2005; Li et al., 2000). These are important findings as product origin congruency is a key variable that differentiates products as perceived by consumers. In addition, the present results highlight the value of a contingency perspective.

For marketers, COO image is an important tool for influencing product attitudes and behaviour (Winter, 2004). It is especially important for the international marketing practitioner to know under which conditions the cue is more salient. For industrial organisations and governmental initiatives the significant interactions mean that funding used for country- or industry-specific origin branding can be directed towards those segments with the highest pay-off. The findings regarding the interaction effect of product origin congruency on product evaluations suggests that consumers rely more on the image of the product origin that they associate with the product when they perceive high origin congruence.

The results of our study are subject to certain limitations. The study was set in an Australian context and caution should be used in extrapolating our results to other contexts. We used students and while this is a limitation it should be noted that there is evidence showing that there is no significant difference between student and non-student samples when investigating COO effects (Verlegh & Steenkamp, 1999). A natural extension of our study would be to test our conjunctures with a dataset consisting of consumers.

## References

- Ahmed, S. A., & d'Astous, A., 2004. Perceptions of countries as producers of consumer goods: A T-shirt study in China. *Journal of Fashion Marketing and Management* 8(2), 187-200.
- Balabanis, G., & Diamantopoulos, A., 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.
- Balabanis, G., Diamantopoulos, A., Mueller, R. D., & Melewar, T. C., 2001. The impact of nationalism, patriotism and internationalism on consumer ethnocentric tendencies. *Journal of International Business Studies* 32(1), 157-169.
- Balabanis, G., Mueller, R., & Melewar, T. C., 2002. The human values' lenses of country of origin images. *International Marketing Review* 19(6), 582-598.
- Bilkey, W. J., & Nes, E., 1982. Country-of-origin effects on product evaluations. *Journal of International Business Studies* 13(1), 89-100.

- Chao, P., 2001. The moderating effects of country of assembly, country of parts, and country of design on hybrid product evaluations. *Journal of Advertising* 30(4), 67.
- Friedman, H. H., & Friedman, L., 1979. Endorser Effectiveness by Product Type. *Journal of Advertising Research* 19(5), 63-71.
- Good, L. K., & Huddleston, P., 1995. Ethnocentrism of Polish and Russian consumers: are feelings and intentions related. *International Marketing Review* 12(5), 35.
- Han, C. M., & Terpstra, V., 1988. Country-Of-Origin Effects For Uni-National And Bi-National Products. *Journal of International Business Studies* 19(2), 235-255.
- Hilton, J. L., & von Hippel, W., 1996. Stereotypes. *Annual Review of Psychology* 47(1), 237.
- Hsieh, M.-H., Pan, S.-L., & Setiono, R., 2004. Product-, Corporate-, and Country-Image Dimensions and Purchase Behavior: A Multicountry Analysis. *Journal of the Academy of Marketing Science* 32(3), 251.
- Josiassen, A. P., Lukas, B. A., & Whitwell, G., 2008. Country-of-Origin Contingencies: Competing Perspectives on Product Familiarity and Product Involvement. *International Marketing Review* 25(4).
- Kamins, M. A., 1990. An Investigation Into The 'Match-Up' Hypothesis In Celebrity Advertizing. *Journal of Advertising* 19(1), 4-14.
- Kleppe, I. A., Iversen, N. M., & Stensaker, I. G., 2002. Country images in marketing strategies: Conceptual issues and an empirical Asian illustration. *Journal of Brand Management* 10(1), 61-74.
- Laroche, M., Papadopoulos, N., Heslop, L. A., & Mourali, M., 2005. The influence of country image structure on consumer evaluations of foreign products. *International Marketing Review* 22(1), 96-115.
- Lawrence, C., Marr, N. E., & Prendergast, G. P., 1992. Country-of-Origin Stereotyping: A Case Study in the New Zealand Motor Vehicle Industry. *European Journal of Marketing* 26(3), 37.
- Leclerc, F., Schmitt, B. H., & Dube, L., 1994. Foreign branding and its effects on product perceptions and attitudes. *Journal of Marketing Research* 31(2), 263-270.
- Li, Z. G., Murray, L. W., & Scott, D., 2000. Global sourcing, multiple country-of-origin facets, and consumer reactions. *Journal of Business Research* 47(2), 121-133.
- Lim, J.-S., W. K. Darley, et al. (1994). "An assessment of country of origin effects under alternative presentation formats." *Journal of the Academy of Marketing Science* 22(3): 274-282.



Misra, S., & Beatty, S. E., 1990. Celebrity Spokesperson and Brand Congruence: An Assessment of Recall and Affect. *Journal of Business Research* 21(2), 159-171.

Mittal, V., & Tsiros, M., 1995. Does Country of Origin Transfer Between Brands? *Advances in Consumer Research* 22(1), 292-296.

Osgood, C. E., & Tannenbaum, P. H., 1955. the Principle of Congruity in Prediction of Attitude Change. *Psychological Review* 62, 42-55.

Schooler, R. D., 1965. Product bias in the Central American common market. *Journal of Marketing Research* 2(000004), 394-397.

Schooler, R. D., 1971. Bias Phenomena Attendant to the Marketing of Foreign Goods in the US. *Journal of International Business Studies* 2(1), pp. 71-80.

Verlegh, P. W. J., & Steenkamp, J.-B. E. M., 1999. A review and meta-analysis of country-of-origin research. *Journal of Economic Psychology* 20(5), 521-546.

Wall, M., & Heslop, L. A., 1986. Consumer Attitudes Toward Canadian-Made Versus Imported Products. *Journal of the Academy of Marketing Science* 14(2), 27.

Winter, M., 2004. the Power of Origins. *Marketing*, 46-47.