

Brand origin and country of production congruity: Evidence from the UK and China

First author: Teck-Yong Eng, University of Southampton

Second author: Sena Ozdemir, University of Essex

Third author: Grant Michelson, Macquarie University

Submission: February 2015

Revision: December 2015

Acceptance: January 2016

Send correspondence to Teck-Yong Eng, Southampton Management School, University of Southampton, Building 2, Highfield Campus, Southampton, SO17 1BJE, UK,
T.Y.Eng@soton.ac.uk.

Brand origin and country of production congruity: Evidence from the UK and China

Abstract

The process of manufacturing and marketing international products is increasingly complex and especially for multinational corporations that strive to lower production costs while adapting their products and services to match local preferences. Localization of international business has been shown to generate differing country of origin (COO) effects in terms of the brand origin and country of production (COP) congruity issue. Both country of production and brand origin may not be the same, which questions the effect of incongruity on a brand, consumer ethnocentrism and localization issues particularly when a well known brand is from a developed country and COP is in a developing country. This study extends past studies on the COO effect to examine whether a negative COP affects consumer product perception and consumer purchase decision of a well-known brand. Hypotheses are tested empirically against survey consumer data from the UK (developed country) and People's Republic of China (developing country) using Sony as a global brand. The main findings show that both brand origin and COP are particularly important for consumers in a developed country in their product evaluations while perceived brand image of a developing country and price are key factors for consumers in a developing country. In addition, knowledge of the extent of consumer ethnocentrism can be a major determinant for branding decisions related to using product information cues about country of production and/or an international brand image.

Keywords: Brand image, Brand loyalty, Consumer ethnocentrism, Developed country, Developing country.

1. Introduction

In today's global business environment, it is increasingly challenging for managers to create value by accessing cheaper resources in developing countries such as for attractive government incentives, tax benefits and low cost labour, and product components. Although access to low cost resources may enhance a firm's competitiveness in a global market place, country of origin (COO) has been shown to have an indirect influence on consumer purchasing behaviour (e.g., Berry, Mukherjee, Burton, & Howlett, 2015; Gurhan-Canli & Maheswarn, 2000; Koschate-Fischer, Diamantopoulos, & Oldenkotte, 2012; Samiee, 1994). The COO effect can be differentiated between brand origin and country of production (COP) considering the fact that a poorly perceived country of manufacturing may devalue the brand (e.g., Godey, Pederzoli, Aiello, Donvito, Chan, Oh, Singh, Skorobogatykh, Tsuchiya, & Weitz, 2012; Haubl & Elrod, 1999; Nebenzahl & Jaffe, 1996). For example, a 'Made in China' label has been a subject of debate in terms of perceived product quality and its influence on consumer purchase decision. In this sense, COP can be examined by comparing its effect between a developed country and developing country on an international brand.

While a product manufactured in a developed country rather than in a developing country may positively influence the product's brand and consumer purchasing decision, little is known about COP effects from both developed and developing countries on an international brand origin. Specifically, no research has yet examined and compared the effect of both brand origin and COP on consumer purchasing decision in the context of a developed country and developing country. Prior research on COO has reported inconsistent results in terms of whether a poorly perceived country of production (COP) may devalue a brand (e.g., Han & Terpstra, 1988). Past studies have mainly examined consumer perception of COO in developed countries (e.g., the United States) without cross examining the effects of both brand origin and COP in a developed country and developing country on consumer perception and purchase decision. In addition, the general observation of the past studies on products manufactured in developing countries may not provide

an accurate representation for consumers in developing countries and well-known individual international brands.

As such, the present study compares perceptions of consumers from a developed country, United Kingdom, and a developing country, China, on products of a specific international brand, Sony, manufactured in both, a developed country, Japan, and a developing country, Malaysia. In particular, the study examines how the relationship between brand origin and COP congruity of Sony branded products affect the evaluations and decisions of British and Chinese consumers when the products are manufactured in Japan, which also represents the brand of origin, and in Malaysia as a reference for a developing COP.

In this study, country of production (COP) refers to the country where the product is 'made-in', which may or may not coincide with the home country of the brand, that is, the brand origin (Jaffe & Nebenzahl, 2006). By comparing brand origin and COP congruity in the context of a developed country, United Kingdom, and a developing country, China, the present study adds to the extant COO studies about the individual and joint effect of brand origin and COP on product evaluations, price, motivation and brand loyalty. In addition, this study addresses a gap concerning nationality and consumer ethnocentrism in terms of the extent to which nationality and patriotism of Chinese consumers influence consumer purchase decision.

From a managerial perspective, knowledge of the effects of brand origin and COP congruity and incongruity in both developed and developing countries is crucial for branded products such as Sony to help managers determine the extent to which global localization requires adaptation. This influences a firm's decisions concerning brand leverage, integration of local factors with marketing communications, and choice of country of production. Furthermore, knowledge of differences between consumers in developed and developing countries about brand loyalty, price and motivation can help managers make better informed decisions in terms of localizing and matching consumer behaviour in international markets. Thus, brand origin and COP congruity for a branded product in contrasting economic development of two countries represent a highly relevant area for

research.

This study extends COO studies by conceptualizing brand loyalty and ethnocentrism in the context of congruity between brand name and COP, which increases cohesiveness of the brand and the lack of congruity diffuses the brand image (Haubl & Elrod, 1999). Country of origin (COO) serves as an extrinsic informational cue for consumers' perceptions and evaluations of a product (Verlegh & Steenkamp, 1999). Although congruity underpins by attitude theory shows that consistency among the beliefs an individual holds about a particular attitude object such as a brand increases cohesiveness (Tse & Lee, 1993), local factors associated with COP and foreign brand image may influence consumer perception and purchase decision. Past studies have shown that developed countries have a more favorable brand image than their developing countries counterpart, both as brand origin and as COP. The present study adds to this stream of research by cross examining COP effects on a branded product in developed and developing countries especially under the influence of the nationality of consumers.

The remainder of this article is structured as follows. The next section introduces the theoretical background and reviews the literature, on which the key hypotheses are derived and developed. This is followed by description of the methodology and the results of the study. The implications for theory and managers are then discussed. Finally, the article concludes with main contributions, limitations and future research.

2. Literature review

2.1. COO and consumer product evaluations

Country of origin (COO) can be defined as the country which a consumer associates with a certain product or brand as being its source, regardless of where the product is actually produced (Jaffe & Nebenzahl, 2006; Koschate-Fischer et al., 2012). Prior research on COO shows that a product's COO conveys a signal of product quality, influences consumers' perceptions of risk and value, and directly affects the likelihood of purchase (for a review, see Jaffe & Nebenzahl, 2006; Pharr, 2005; Phau & Chao, 2008; Wilcox, 2005). COO cues have been examined in terms of the

influence of cognitive, affective, and normative associations with a particular country on consumer attitudes (Koschate-Fischer et al., 2012). As an information cue for consumer product evaluations, Hong and Wyer (1989) note that COO can influence consumers' judgement of product quality by: (a) triggering concepts and knowledge that affect the interpretation of other available product attribute information; (b) heuristically inferring the quality of the product without considering other attribute information; (c) portraying a feature of a product in the same way as other specific product attributes; and (d) influencing attention on country of origin rather than other attribute information. In this sense, COO may impact on consumer perceptions and behaviours through a cluster of cues of the cognitive approach (Batra, Ramaswamy, Alden, Steenkamp, & Ramachander, 2000; Bilkey & Nes 1982; Koschate-Fischer et al., 2012).

Thus, an international brand such as Sony comprises different attributes in terms of brand origin and COP that affect consumer choice. Sony is an established international brand suitable for the purpose of this study – Sony's products are manufactured at home as well as in selected developing countries. By focusing on one brand (Sony) rather than numerous brands, this study provides a deeper understanding of the effect of brand origin and COP on consumer product evaluations rather than compounded by biases from different brands. The COP is the country that produces or assembles the branded product (Insch & McBride, 2004; Laufer, Gillespie, & Silvera, 2009; Van Pham, 2006). Consumers often will deduce country-specific information from a product's brand name by means of association or 'mental links' to the brand (Ettenson, Klein, & Morris, 1998). High brand equity can be strongly associated with brand origin. If consumer product evaluations are based on product attributes, incongruent COP information is expected to change consumers' beliefs regarding the country in which the product is manufactured (which is different from the brand origin), but to have no significant effect on other salient product beliefs. In contrast, low equity brands in general have weak brand associations and hence incongruent COP information is likely to produce widespread effect on all salient product beliefs (Hui & Zhou, 2003).

2.2. COP and consumer product evaluations

However, today's international products and brands can be manufactured in more than one country such as design, assembly, etc. (Samiee, 2010). Although COO may signal a favorable country-image, COP may also play a part in influencing consumer product evaluations. Drawing on information processing theory, Gurhan-Canli and Maheswaran (2000) show that consumer motivation affects COP evaluations. They found that low motivation consumers are likely to use COP as a cognitive short cut to form their product quality judgements while high motivation consumers regard COP as one of the information attributes. High motivation customers may assess the implications of product information regardless of whether the COP information is presented (Hong & Wyer, 1989; Suri & Thakor, 2013). Typically, when product information prior to purchase is limited (Cui, Wajda, & Hu, 2012; Hans & Terpstra, 1988), COP may be an important cue to influence a certain group of consumers' choice. COP effect has been shown to be more favorable when information is dispersed rather than condensed (Gurhan-Canli & Maheswaran, 2000). It can be argued that motivated consumers are more interested in a Sony product and unlikely to base their judgement of the product solely on the COP, which means more likely to purchase a Sony product made in developing country. In contrast, less motivated consumers have less interest in a Sony product and are likely to base their judgement of the product solely on the COP. However, it is not clear the extent to which COP in both developed and developing countries affects consumer perception of an international brand. From the above, it can be hypothesized that:

Hypothesis 1a: Country of production in a developed country has a positive effect on evaluation for Sony products.

Hypothesis 1b: Country of production in a developing country has a negative effect on evaluation for Sony products.

Hypothesis 2a: High consumer motivation is positively associated with consumer choice of Sony product made in developing country.

Hypothesis 2b: Low consumer motivation is negatively associated with consumer choice of Sony product made in developing country.

2.3. Brand origin (BO) and COP

Previous studies have examined COO in terms of brand origin (BO) and COP to provide an understanding of how COO drives brand equity (Ahmed & d'Astous, 2008; Chao, 1993; Fetscherin & Toncar, 2010; Hamzaoui & Merunka, 2007; Thakor & Lavack, 2003). Although past studies have shown that COP can influence consumer purchasing decision, it is also important to consider brand origin associated with its country's image and brand equity of a branded product in consumer product evaluations. Roth and Romeo (1992) suggest that a country's image arises from a series of dimensions that qualify a nation in terms of its production profile. Such dimensions include innovative approach (superior, cutting-edge technology); design (style, elegance, balance); prestige (exclusiveness, status of the national brands); and workmanship (reliability, durability, quality of national manufacturers).

Some studies have shown that consumer evaluations of a branded product tend to favor economically developed countries more than less developed ones, where brand origin from a developed country is valued more highly than from lower economic development countries (Batra et al., 2000; Bilkey & Nes, 1982; Guo, 2013; Sharma, 2011). Some scholars argue that COP may provide a weaker brand association than brand origin (Johansson & Nebenzahl, 1986; Thakor & Lavack, 2003). For example, Mercedes has strong associations with Germany (BO) but less strong associations with the various countries that manufacture or assemble Mercedes automobiles (Hamzaoui-Essoussi, Merunka, & Bartikowski, 2011). Although brand origin may be associated with brand equity to command a higher value than the COP effect, little is known about incongruous effects between brand origin and COP for an international product in both developed and developing countries. As in the case of Sony, if brand origin and COP information is given to consumers about a certain Sony product, it is unclear whether consumers will choose a product with a congruent brand origin and COP or not be influenced by the COP in a developing country, Malaysia especially for Chinese consumers. Accordingly, it can be hypothesized that:

Hypothesis 3a: A congruent brand origin and country of production has a joint positive effect on

evaluation for Sony products.

Hypothesis 3b: An incongruent brand origin and country of production has a joint negative effect on evaluation for Sony products.

Brand equity is the source of brand value added to a product or service in the marketplace (Aaker, 1992; Cai, Zhao, & He, 2015). Brand equity serves as one important means to create and maintain consumer attachment to particular brands (Keller, 1993; Cai et al., 2015). High brand equity possesses certain strengths, including differentiation, satisfaction, loyalty, perceived quality, leadership, popularity, perceived value, brand personality, organizational associations, brand awareness, market share, market price and distribution coverage (Aaker, 1991). One important source and antecedent of brand equity is brand loyalty. Brand loyalty is a deep commitment to repurchase or a consistent preference for a product/service, which leads to certain marketing advantages such as reduced cost, profitability, and favorable word-of-mouth (Aaker, 1991; Ahluwalia, Unnava, & Burnkrant, 2001; Oliver, 1999; Stahl, Heitmann, Lehmann, & Neslin, 2012). Brand loyalty is one of the most valuable assets to a firm and loyal customers may well oversee the incongruity of COP information and continue to purchase their favourite brand (Han & Terpstra, 1988; Lecterc, Schmitt, & Dube, 1994). However, some argue that even for Sony, it would be difficult to reduce the impact of unfavorable COP information on product evaluations (Tse & Gorn, 1993). An established brand may have a strong brand image with stable associations and it exists in consumers' long-term memory (Keller, 1993). Consumers frequently recognize brand origin, even if the design of a branded product no longer occurs in the origin country (Lim & O'Cass, 2001). For example, a strong brand image may compensate for less favorable perception of a product manufactured in developing country. In addition, price rather than quality evaluations offers a relevant test of COO as price represents the amount of money consumers must part in exchange for a product (Monroe, 2003). Price consciousness has been shown as one of the key dimensions that affects young Chinese consumers' purchasing decision-making style (Cui et al., 2012; Fan & Xiao, 1998). Similarly, in a study by Koschate-Fischer et al. (2012) consumers in the United States (a

developed country) are willing to pay higher prices for branded products from a COO with a favorable country image than for products from a COO with a less favorable image. Price consciousness reveals the extent to which consumers' perceptions of different COOs are reflected in differences in the amount that those consumers are prepared to pay for products associated with each COO (Cui et al., 2012; Lichtenstein, Bloch, & Black, 1988). In this sense, high price implies association of a product with favorable brand origin and COP. Thus:

Hypothesis 4: Brand image has a positive effect on evaluation for Sony products regardless of the country of production.

Hypothesis 5: Brand loyalty has a positive effect on evaluation for Sony products regardless of the country of production.

Hypothesis 6: In a developing country, price has a negative effect on consumer purchasing decision of Sony products.

2.4. Consumer ethnocentrism

Ethnocentrism describes the tendency of rejecting people who are culturally dissimilar and favoring those who are similar (Batra et al., 2000). Consumer ethnocentrism is “a domain specific concept for the study of consumer behavior with marketing implications” (Sharma, Shimp, & Shin 1995, pg. 27). It is assumed to lead consumers to prefer domestic brands to imported brands (Levine & Campbell, 1972; Zarkada-Fraser & Fraser, 2002). Consumer ethnocentrism is largely based on external social norms or a prescriptive course of actions, i.e., what consumers should do with respect to their consumption practices in order to prevent adverse effects on domestic employment and the economic welfare of their country (Pecotich & Rosenthal, 2001; Sharma et al., 1995). It may also be driven by consumer animosity which refers to “remnants of antipathy related to previous or ongoing military, political, or economic events which affect consumer purchase behaviour in the international marketplace” (Klein, Ettenson, & Morris, 1998, p. 90; Shankarmahesh, 2006). For example, the event known as the Nanjing Massacre led to Chinese consumers' animosity toward Japanese products (Klein et al., 1998).

However, empirical studies have observed some inconsistent findings with regards to the effect of consumer ethnocentrism on the evaluation of foreign products. While some studies report that consumer ethnocentrism negatively influence consumers' evaluation of foreign products (Sharma et al., 1995; Zarkada-Fraser & Fraser, 2002), others observe that ethnocentric consumers may also hold positive evaluations of imported foreign products (Javalgi, Khare, Gross, & Scherer, 2005). Such contradictory findings may be explained by several reasons. First, when domestic products with acceptable standards are not available, even the ethnocentric consumer may be forced to use an imported product (Herche, 1992). Second, low involvement purchases may not be necessarily evaluated as a significant contributor to an economy, and thus may not evoke emotional responses to purchase a domestic product (Herche, 1992; Javalgi et al., 2005). Third, pricing considerations may surpass the role of ethnocentrism in the purchase of domestic products (Bruning, 1997). Fourth, the negative effect of consumer ethnocentrism on the purchase of imported products may diminish when consumers hold certain psychological characteristics such as global orientation (Guo, 2013). Fifth and importantly, COO-like effects such as identifying a brand with one particular COO becomes increasingly difficult for consumers due to the growing number of multinational companies (e.g. Coca Cola, Tesco, Sony) with global brand names, products marketed under the same (or very similar) brand name in several markets, and local or regional manufacturing facilities in different parts of the world (Batra et al., 2000; Papadopoulos, 1993). As a result, it may be that reduced identification of brands with a particular COO might diminish consumers' ethnocentric sentiments against them (Batra et al., 2000). Indeed, ethnocentric consumers may perceive such brands contributing to their local and regional economy. Thus,

Hypothesis 7: Consumer ethnocentrism has a positive effect on consumer purchasing decision of Sony's products.

3. Methodology

3.1. Data collection

A self-administered questionnaire was prepared for data collection using adapted measures from

past studies. This approach of collecting data about consumer ethnocentrism has been employed successfully in previous COO studies (e.g., Ahmed & d'Astous, 2003; Balabanis & Diamantopoulos, 2004, 2008). In this study, the population of interest includes a developed country, the United Kingdom, and a developing country, People's Republic of China. Two versions of the questionnaire were developed: (a) an English version for British consumers and (b) a Chinese Mandarin version translated from the English questionnaire and then back translated into English to ensure accuracy. The questionnaire was pretested with 25 respondents from each country and the feedback revealed that the respondents are familiar with the brand Sony and personal high-tech products such as headphones and the camcorder. To minimize the potential bias of choosing China as the developing COP for Sony, Malaysia was used as an example of a developing COP in the survey. Sony's brand was chosen because it is technologically sophisticated in which its COO and COP may be highly diagnostic information for consumer preferences and purchase decision (Balabanis & Diamantopoulos, 2008).

The sampling frame of this study consisted of 500 random consumers email addresses in the UK (London, Manchester, Birmingham) and China (Beijing, Shanghai, Tianjin) respectively, which were obtained from market research agencies. These major cities provided an appropriate context with strong purchasing power and knowledge of foreign brands (Kwan, Yeung, & Au 2003). An email survey was conducted via an online questionnaire website (www.my3q.com) for a period of three months from May until July 2013. The two samples were screened to fit the criteria of nationality of respondents in each country and Sony as an international brand from Japan. A prize draw of about USD\$150 in local currency of the countries was included in the survey as an incentive to increase participation in the study. The survey generated a total of 409 complete cases, with 203 British respondents and 206 Chinese respondents. The respondents were 52.7% male (UK), 61.7% male (China), and the average age was 32.19 years (UK) and standard deviation (SD) of 9.47, and 36.05 years, SD of 12.68 (China).

3.2.Measures

The questionnaire is designed using a ten-point Likert scale whenever appropriate and it ranges according to appropriate answers for each question, e.g., strongly agree to strongly disagree (please see Appendix A for measurement scale items). The items were adapted to solicit dichotomous outcomes based on an average of each construct. Wittink and Bayer (2003) noted that a ten-point Likert scale can improve measurement reliability, reduced multicollinearity problems and minimized skewness in the distribution of the data. The dependent measure of COO and/or COP were examined by asking respondents to rank relevant attributes influencing their purchase decision and/or preference for either foreign (Sony brand) or own-country products. Specifically, perceived brand image (BIM) was adapted from Roth and Romeo (1992) to account for a country brand image in terms of the overall perception consumers form of products from a developed/developing country based on their prior perceptions of the country's production and marketing strengths and weaknesses. Brand loyalty (BLO) was measured by examining the extent of consumers' psychological commitment to a brand (Beatty & Kahle, 1988; Ahluwalia et al., 2001). Perceived image of a country includes a developed country (DCIM) and a developing country (CIMA), and both measures were based on technological competency of a country (Martin & Eroglu, 1993) to be consistent with Sony as a technologically sophisticated product. Brand origin (BO) was measured by examining the extent of consumers' preference for either home country products or foreign made products (Keller, 1993). Consumer motivation (MOT) focused on familiarity of consumers with high-tech products (Srinivasan, Jain, & Sikand, 2004) and hence, their motivation to buy home country products or foreign made products. Price consciousness (P) was adapted from Lichtenstein, Bloch and Black (1988) by examining willingness of consumers to pay for Sony brand manufactured in Japan or a developing country as regard price acceptability. Price conscious consumers have lower levels of price acceptability and hence, are less likely to pay higher prices or expect compensating returns in product quality. Consumer ethnocentrism was measured by the CETSCALE developed originally by Shimp and Sharma (1987). This study examined a shortened version used by Klein, Ettenson and Morris (1998) where 10 attributes were chosen. The average of

these attributes has been used as a final indicator of consumer ethnocentrism. The empirical model of the study can be represented as a logistic regression equation where the dependent variable Y takes the form of probability of a binary outcome from a set of predictor variables:

$$Y = \beta_0 + \beta_1 BIM + \beta_2 BLO + \beta_3 DCIM + \beta_4 CIMA + \beta_5 BO + \beta_6 MOT + \beta_7 P + \beta_8 CETS + \varepsilon$$

The binomial logistic model was estimated by the maximum likelihood method to provide values of unknown parameters (Hosmer, Lemeshow, & Sturdivant, 2013). The model tested the main effects of the independent variables and the hypothesized interactions between British consumers and Chinese consumers for Sony manufactured in Japan and Sony manufactured in Malaysia, a developing country. The algorithms of maximum likelihood estimation involved computation of regression coefficients, maximum likelihood ratios, significance and Wald (z) statistic (similar to t-test). Data were coded to fulfil the binary requirement and analyzed using Statistical Analysis System (SAS version 9.3). Prior to building the model initial reliability tests were carried out to inspect unidimensionality through unrotated exploratory factor analysis. The extracted factors correspond to the proposed model and the Cronbach alphas of all constructs are over the threshold of 0.70 (see Table 1). This fulfils a key assumption of logistic regression model that the predictors are meaningful and linearly related to the log odds of an event (Hosmer et al., 2013). The correlations presented in Table 1 suggest no concern for multicollinearity and confirmed by the variance inflation factors (VIFs) of all independent variance in the regression models are below 0.50.

Table 1 here.

4. Results

Table 2 here.

The descriptive statistics of the importance rates for each product information cue are summarized in Table 2. The results provide an overall comparison between British and Chinese consumers, which would be further analyzed in terms of brand origin and COP for Sony products. Consumers give higher ratings to price and their motivation to buy as primary attributes in consumer purchase decision. Higher ratings are also associated with brand loyalty in this sample, Sony as a trusted brand of consumer electronics and high-tech entertainment products. While perceived brand origin of Sony (Japan) is important in the buying decision, Chinese consumers choice of Sony products is more concerned with COP than British consumers. The importance ratings show that Chinese consumers are more likely to avoid buying Japanese products compared to British consumers. This reflects the collective culture of Chinese society ($SD = 1.49$) compared to the individualistic behavior of British society ($SD = 3.63$) (see Hofstede 1993).

Table 3 here.

In hypothesis testing, the results of binomial models of the British and Chinese samples are presented in Table 3. The binomial logit model reports the estimated coefficient (r) and its significance in Wald (z) statistic. These values show whether the independent variables are statistically significant related to response variable. The corresponding p-value of Wald statistic (also known as z statistic) is compared to the default significance level of 0.05, i.e., $p\text{-value} < 0.05$. The statistical significance of individual regression coefficients can be considered as the local test. The likelihood ratio test provides the 'goodness-of-fit' statistics as part of the global null hypothesis

test, the rho-squared (calculated based on log-likelihood at zero). In this study, the rho-squared of the models explain a percentage of 31% of the population. Likelihood ratio (LR) statistics suggest that the hypothesis according to which the coefficients are null can be rejected at an acceptable level of significance. All the estimated coefficients have acceptable level of significance between 90% and 95% with the exception of consumer motivation.

As shown in Table 3, the results of hypothesis test for H1a and H1b support that British consumers are sensitive to perceived image of COP in terms of similarity between COO and COP. But the results of H1a and H1b are non-significant for Chinese consumers. The results are consistent with the importance ratings (Table 2) that British consumers perceived image for COP in a developing country less favorably than a developed country. Thus, British consumers are less likely than Chinese consumers to choose Sony products manufactured in developing countries.

Hypotheses H2a and H2b concerning whether consumer motivation is related to consumer choice of Sony product made in a developing country/developed country are not supported. The results indicate that the extent of consumer motivation is not an overriding criterion or a major determinant of consumer choice when only COP is available product information cue.

Hypotheses 3a and 3b show contrasting results between British and Chinese consumers, where a congruent brand origin and COP is significant for British consumers (H3a) when Sony's products are manufactured in Japan. This joint effect is not significant for British consumers when Sony's products are manufactured in developing country but only significant for Chinese consumers (H3b). The results are consistent with H1a and H1b in terms of brand origin congruency with country of production.

Hypothesis 4 states that brand image has a positive effect on evaluation of Sony's products regardless of country of production. This is not supported for British consumers but significant for Chinese consumers. Although Chinese consumers may not be influenced by Japan as COP for Sony, their evaluations would be less favorable for Sony's products manufactured in a developing country. In this sense, Chinese consumers regard brand image of imported foreign brands as important in

their product evaluations of COP in a developing country.

In H5, there is only support for brand loyalty of British consumers for Sony manufactured in Japan. This finding suggests that brand congruity with COP can be important for building brand loyalty especially for consumers in developed countries. The non-significant result of Chinese consumers may be influenced by consumer ethnocentrism as well as independently by brand image of COP.

The results of H6 are significant for both British and Chinese consumers when Sony's products are manufactured in a developing country. Consumers are less willing to pay a high price for products manufactured in developing countries. Price differences may be regarded as too large to be acceptable for products manufactured in a developing country. As such, brand congruity with COP would be important for brands originating from developed countries.

Finally, H7 states that consumer ethnocentrism has a positive effect on consumer purchasing decision of Sony's products. The results only provide support for Chinese consumers when considering Sony's products manufactured in a developing country. Chinese consumers may be influenced by their bias attitude against products made in Japan. They are also more likely to purchase Sony's products manufactured in developing countries.

5. Implications for Theory

In this study, the roles of brand origin and COP in the consumer purchasing decisions are examined. While previous studies investigate how these concepts influence consumer evaluations, the present study cross-examined the effects of both brand origin and COP in a developed (i.e. Japan) country and developing country (i.e. Malaysia) on consumers' purchasing decision in a developed country (i.e. UK) and developing country (i.e. China) (Haubl & Elrod, 1999; Thakor & Lavack, 2003). This study shows that British consumers have less favorable perceptions toward COP of Sony in a developing country (i.e. Malaysia), which negatively affect their purchase decision and against their preference for Sony's products manufactured in a developed country (Japan). Similarly, Laforet and Chen's (2012) study of COO show that British consumers have a

greater preference for brands originated from developed countries than developing countries compared to Chinese consumers. The findings extend a new perspective to the extant empirical findings that suggest a devaluing role of poorly perceived country of manufacturing (COP) on a brand (e.g., Han & Terpstra, 1988; Chu, Chang, Chen, & Wang, 2010).

Interestingly, the findings show that British consumers are also positively influenced by a congruence between brand origin and COP when a Sony product is manufactured in Japan (i.e. developed country). Although Chinese consumers may not be influenced by Japan as COP for Sony, they are negatively influenced by incongruent brand origin and country of production of Sony products manufactured in a developing country (i.e. Malaysia). These findings support Haubl and Elrod's (1999) study which show that consumers' judgments about the quality of a product are more favorable when there is congruity between brand name and COP than when there is no such congruity.

The results also show that consumer motivation is not an overriding criterion or a major factor of British and Chinese consumers' choice when COP is only available product information cue. This result was different from Gurhan-Canli and Maheswaran's (2000) study which suggest that consumers with low motivation utilize more COP information as a basis for judgment of products than high motivation consumers.

Furthermore, brand image has significant effects only on Chinese consumers' choice when a Sony product is manufactured in a developing country. This finding adds to the previous research which has identified brand image, among other factors such as COP, as the most powerful driver of product-country association affecting consumers' decisions to purchase (Usunier & Cestre, 2007). In this sense, the current study shows that brand image is not necessarily a powerful driver of British consumers' choice of a Sony product regardless of its COP and Chinese consumers' choice in the context of a Sony product produced in a developed country.

The results of this study suggest that both British and Chinese consumers are concerned with price when a Sony product is manufactured in a developing country (i.e. Malaysia). This is

consistent with the extant literature that COO has a positive impact on willingness to pay (Koschate-Fischer et al., 2012). While previous studies identify price as an important determinant of British and Chinese consumers' brand choice (Laforet & Chen, 2012), the sample of this study suggests that price may not necessarily influence consumers' choice when a Sony product is produced in a developed country (Japan).

Consistent with prior research, consumer ethnocentrism has a positive influence on the choice of a Sony product produced in a developing country (i.e. Malaysia) only in the case of Chinese consumers. This finding has addressed the inconsistencies in previous studies in terms of the positive or negative role played by consumer ethnocentrism in the purchase of a non-local product (Sharma et al., 1995; Zarkada-Fraser & Fraser, 2002; Javalgi et al., 2005). Consumer ethnocentrism may positively influence consumers' choice for products produced in a similar setting (e.g. in a developing country). In addition, COP in a developing country of Sony's products may alleviate Chinese consumers' animosity, and their ethnocentric evaluations, against purchasing products originated from Japan.

As stated earlier, British consumers' judgement of a Sony product manufactured in a developed country and brand origin of Japan is consistently significant in their purchase decisions. Some researchers have also noted that British consumers' loyalty towards Sony's products manufactured in Japan (Lecterc et al., 1994). In contrast, the findings reveal that Sony's brand did not develop loyalty from Chinese consumers even when it is produced in a developing country. This study shows that both brand origin and COP are particularly important for consumers in a developed country in their product evaluations while perceived image of developing country and brand image of a product are key factors for consumers in developing countries.

6. Managerial Implications

Like Sony, many major firms operating in the consumer electronics industry are constantly striving to lower production costs as they compete in the international market. Inevitably, managers for an established brand from a developed country (e.g., Sony from Japan, Phillips from France)

need to shift their cost centres especially manufacturing and product assembly to countries or locations where it would be economical and profitable to compete on a global scale. However, at the same time these firms need to consider consumers' perceptions toward brand origin and COP congruity when choosing and promoting their locations for manufacturing. The present study shows that COO effects in terms of brand origin and COP vary for consumers in developed and developing countries. In a developed country, it is important for consumers in their product evaluations that both brand origin and COP of their products are associated with a developed country (e.g. Japan). Such an association need to be emphasized by firms including Sony when promoting products to consumers in developed countries. In addition, in the case of consumers from a developed country, brand loyalty only occurs in the choice of a product (e.g. Sony branded product) produced in a developed country. In this sense, delivering messages on COP in a developed country is likely to strengthen loyalty of consumers in the developed world. In a developing country such as China, consumers' choice is influenced by the product brand image of Sony more than congruent brand origin and COP. Thus, managers must continue to invest in developing and promoting a strong brand image when targeting consumers in a developing country (e.g. China).

However, international firms need to consider consumer ethnocentrism as they promote their imported brands and compete with domestic and local brands. The evidence in this study suggests that Chinese consumers exhibit animosity toward Japan as COP whether stemming from social pressures or ethnocentrism. With general knowledge of potential consumer ethnocentrism particularly consumer animosity in the public domain or through market surveys, managers can mitigate negative consumer emotions in COO and branding decisions. For example, it can be advantageous for an international firm to locate its production facility in a host country where there is consumer ethnocentrism and consumer animosity. This may generate a sense of belonging while provide an opportunity for the international firm to adapt its product offerings to local preferences (Fong et al., 2014). Allied to this, managers responsible for a brand in a hostile host country can communicate values of the brand that are international (rather than specific to the COO) (Balabanis,

Diamantopoulos, Mueller, & Melewar, 2001) as well as explore partnership potential with major local firms. For example, Tesco, a major international UK grocery retailer, chose to partner with Samsung in South Korea where consumer ethnocentrism is significant, when it first entered the country in 1999 under the name of Samsung Tesco.

7. Conclusions, limitations and future research

The present study addresses a gap about country-of-origin and country-of-production, which serves to better inform international firms for marketing high-tech consumer electronics in countries with contrasting pace of economic development namely in the context of a developed country (UK) and a developing country (China) using a well-established brand, Sony. Although there have been many studies on brand origin and consumer ethnocentrism using the CETSCALE, there is little research comparing consumers in developed and developing countries about their perceptions of a specific high-tech product (Sony) manufactured originally in Japan (a developed country) or in a developing country (e.g., Malaysia). Many international firms (brands) based in developed countries may establish manufacturing production in developing countries while exporting their products worldwide in today's global supply chains. The results of this study suggest that brand congruency is significant for consumers in a developed country (UK) in terms of their less favorable perceived brand image of products made in a developing country. Although the evidence suggests that Chinese consumers may be influenced by ethnocentrism, they also do not exhibit a favorable brand image of products manufactured in a developing country. This may reflect technological competency of a developed country and consumer ethnocentrism. As such, the country-of-production is one of the key determinants in consumer buying decision especially when the type of product is technologically sophisticated and where the product is manufactured differed from country-of-origin.

This study also contributes to further understanding of the joint effect of brand origin and country-of-production. As the prices consumers are willing to pay (or accept) for a high-involvement product (e.g., high-tech goods) are related to country-of-origin, the choice of country-

of-production and the way in which this information is used in marketing strategy for countries with contrasting pace of economic development would be important for success. Economic gains for a firm from locating its production plant in a developing country may not be favorably construed as the same for sophisticated products originated from a developed country. In this case, the brand image of the product from a developed country rather than COP would be emphasized in marketing communications. At the same time, an established foreign product manufactured in a developing country would need to adapt to cultural elements of local customers where consumer ethnocentrism plays a part in their buying decision.

There a number of limitations in this study, which present opportunities for further research. This study is limited by the characteristics of the sample, which consisted of Chinese and British consumers in major cities and in two countries. Further research could use a more comprehensive sampling of the population as well as comparison of international brands from a developing country. The two socio-demographic characteristics (age and gender) were not found to have a significant effect on purchasing decisions of a Sony product. Future work might include socio-economic variables such as occupation and income of respondents, which may reveal characteristics of consumers' preferences for import brands. Although the consumer ethnocentrism construct captured national identification stemming from nationalism or patriotism for two distinct nationalities (British and China), more research is needed to examine consumer animosity as a separate construct not based solely on nationality. For instance, this study found that Sony's brand image is correlated positively with Chinese consumer preference and purchase decision. Yet, Chinese consumers demonstrated significant consumer ethnocentrism and did not place a high importance of brand origin (Japan) for a Sony product. It is possible that moral obligation of animosity towards Japan led to rejection of Japan as COP. Future studies may also use a range of moderators which may positively influence the relationships proposed in this research. For example, certain personality characteristics as well as previous experience with a brand may be used as moderators to test the effect of brand origin and COP congruency. The binomial logit model

dispensed with both the latent and error variables by assuming that the choice itself is a random variable predicted by the linear predictor. The data analysis could be extended to incorporate two models of different structures: one with fixed coefficients of the data and the other based on a hypothesized normal distribution of random draws. This would allow assessment of the 'goodness-of-fit' statistics between fixed coefficients and simulated random draws, which may further highlight heterogeneity of consumers between two countries.

References

- Aaker, D.A. (1991). *Managing brand equity: capitalizing on the value of a brand name*. New York: The Free Press.
- Aaker, D.A. (1992). The Value of Brand Equity. *Journal of Business Strategy*, 13(4), 27 – 32.
- Ahluwalia, R., Unnava, H.R., & Burnkrant, R.E. (2001). The moderating role of commitment on the spillover effect of marketing communications. *Journal of Marketing Research*, 38(4), 458-470.
- Ahmed, S.A., & d' Astous, A. (2008). Antecedents, moderators and dimensions of country-of-origin evaluations. *International Marketing Review*, 25(1), 75-106.
- Ahmed, S.A., & D' Astous, A. (2003). Product-Country Images in the Context of NAFTA: A Canada-Mexico study. *Journal of Global Marketing*, 17(1), 23-43.
- Balabanis, G., & Diamantopoulos. A. (2008). Brand Origin Identification by Consumers: A Classification Perspective. *Journal of International Marketing*, 16(1), 39–71.
- 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), 157-175.

- Batra, R., Ramaswamy, V., Alden, D.L., Steenkamp, J-B.E.M., & Ramachander, S. (2000). Effects of Brand Local and Nonlocal Origin on Consumer Attitudes in Developing Countries. *Journal of Consumer Psychology*, 9(2), 83-95.
- Beatty, S.E., & Kahle, L.R. (1988). Alternative hierarchies of the attitude-behavior relationship: the impact of brand commitment and habit. *Journal of the Academy of Marketing Science*, 16(2), 1-10.
- Berry, C., Mukherjee, A., Burton, S., & Howlett, E. (2015). A COOL Effect: The Direct and Indirect Impact of Country-of-Origin Disclosures on Purchase Intentions for Retail Food Products. *Journal of Retailing*, 91(3), 533-542.
- Bilkey, W. J., & Nes, E. (1982). Country-of-origin effects on product evaluations. *Journal of International Business Studies*, 13(1), 89-100.
- Bruning, E.R. (1997). Country of origin, national loyalty and product choice: The case of international air travel. *International Marketing Review*, 14(1), 59 – 74.
- Cai, Y., Zhao, G., & He, J. (2015). Influences of two modes of intergenerational communication on brand equity. *Journal of Business Research*, 68 (3), 553-560.
- Chao, P. (1993). Partitioning country of origin effects: consumer evaluations of a hybrid product. *Journal of International Business Studies*, 24(2), 291-306.
- Chu, P.Y., Chang, C.C., Chen, C.Y., & Wang, T.Y. (2010). Countering negative country-of-origin effects: The role of evaluation mode. *European Journal of Marketing*, 44(7/8), 1055-1076.

- Cui, A.P., Wajda, T.A., & Hu, M.Y. (2012). Consumer animosity and product choice: might price make a difference? *Journal of Consumer Marketing*, 29(7), 494 – 506.
- Ettenson, R., Klein, J. G., & Morris, M. (1998). The animosity model of foreign product purchase: An empirical test in the People's Republic of China. *Journal of Marketing*, 62(1), 89-100.
- Fan, J. X., & Xiao, J. J. (1998). Consumer decision-making styles of young-adult Chinese. *Journal of Consumer Affairs*, 32(2), 275-294.
- Fetscherin, M., & Toncar, M. (2010). The effects of the country of brand and the country of manufacturing of automobiles: An experimental study of consumers' brand personality perceptions. *International Marketing Review*, 27(2), 164-178.
- Fong, C-M., Lee, C-L., & Du, Y. (2014). Consumer animosity, country of origin, and foreign entry-mode choice: A cross-country investigation. *Journal of International Marketing*, 22(1), 62-76.
- Godey, B., Pederzoli, D., Aiello, G., Donvito, R., Chan, P., Oh, H., Singh, R., Skorobogatykh, I.I., Tsuchiya, J., & Weitz, B. (2012). Brand and country-of-origin effect on consumers' decision to purchase luxury products. *Journal of Business Research*, 65(10), 1461-1470.
- Guo, X. (2013). Living in a global world: Influence of consumer global orientation on attitudes toward global brands from developed versus emerging countries. *Journal of International Marketing*, 21(1), 1-22.
- Gurhan-Canli, Z., & Maheswaran, D. (2000). Determinants of country-of-origin evaluations. *Journal of Consumer Research*, 27(1), 96-108.

- Hamzaoui, I., & Merunka, D. (2007). The impact of country of design and country of manufacture on consumer perceptions of a bi-national products' quality: An empirical model based on the concept of fit. *Journal of Consumer Marketing*, 23(3), 145-155.
- Hamzaoui-Essoussi, L., Merunka, D., & Bartikowski, B. (2011). Brand origin and country of manufacture influences on brand equity and the moderating role of brand typicality. *Journal of Business Research*, 64(9), 973-978.
- 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.
- Haubl, G., & Elrod, T. (1999). The impact of congruity between brand name and country of production on consumers' product quality judgement. *International Journal of Research in Marketing*, 16(3), 199-215.
- Herche, J. (1992). A Note on the Predictive Validity of the CETSCALE. *Journal of Academy of Marketing Science*, 20(3), 261-264.
- Hofstede, G. (1993). Cultures and organizations, software of the mind. *Administrative Science Quarterly*, 38(1), 132-134.
- Hong, S.T., & Wyer, R. S. Jr. (1989). Effects of country-of-origin and product-attribute information on product evaluation: An information processing perspective. *Journal of Consumer Research*, 16(2), 175-187.
- Hosmer, Jr, D. W., Lemeshow, S. and Sturdivant, R.X. (2013). *Applied logistic Regression*. John Wiley & Sons.

- Hui, M., & Zhou, L. (2003). Country-of-manufacture effects for known brands. *European Journal of Marketing*, 37(1/2), 133-153.
- Insch, G.S., & McBride, J.B. (2004). The impact of country-of-origin cues on consumer perceptions of product quality: A binational test of the decomposed country-of-origin construct. *Journal of Consumer Psychology*, 16(3), 232-239.
- Jaffe, E.D., & Nebenzahl, I.D. (2006). *National Image and Competitive Advantage*. Copenhagen: Copenhagen Business School Press.
- Javalgi, R., Khare, V., Gross, A., & Scherer R. (2005). An Application of the Consumer Ethnocentrism Model to French Consumers. *International Business Review*, 14(3), 325-344.
- Johansson, J. K., & Nebenzahl, I. D. (1986). Multinational production: Effect on brand value. *Journal of International Business Studies*, 17(3), 101-126.
- Keller, K.L. (1993). Conceptualizing, measuring, managing customer-based brand equity. *Journal of Marketing*, 57(1), 1-22.
- Klein, J. G., Ettenson, R., & Morris, M. D. (1998). The animosity model of foreign product purchase: An empirical test in the People's Republic of China. *Journal of Marketing*, 62(1), 89-100.
- Koschate-Fischer, N., Diamantopoulos, A., & Oldenkotte, K. (2012). Are consumers really willing to pay more for a favorable country image? A study of country-of-origin effects on willingness to pay. *Journal of International Marketing*, 20(1), 19-41.

- Kwan, C.Y., Yeung, K.W., & Au, K.F. (2003). A statistical investigation of the changing apparel retailing environment in China. *Journal of Fashion Marketing and Management*, 7(1), 87.
- Laforet S, & Chen J. (2012). Chinese and British consumers' evaluation of Chinese and international brands and factors affecting their choice. *Journal of World Business*, 47(1), 54–63.
- Laufer, D., Gillespie, K., & Silvera, D. (2009). The role of country of manufacture in consumers' attributions of blame in an ambiguous product-harm crisis. *Journal of International Consumer Marketing*, 21(3), 189-201.
- Lecterc, F., Schmitt, B., & Dube, L. (1994). Foreign branding and its effects on product perceptions and attitudes. *Journal of Marketing Research*, 41(5), 263-270.
- Levine, R. A., & Campbell, D. T. (1972). *Ethnocentrism: Theories of conflict, ethnic attitudes, and group behavior*. New York: John Wiley & Sons, Inc.
- Lichtenstein, D.R., Bloch, P.H., & Black, W.C. (1988). Correlates of price acceptability. *Journal of Consumer Research*, 15(2), 243-252.
- Lim, K., & O'Cass, A. (2001). Consumer brand classifications: An assessment of culture-of-origin versus country-of-origin. *Journal of Product Brand Management*, 10(2), 120-136.
- Martin, I.M., & Eroglu, S. (1993). Measuring a multi-dimensional construct: country image. *Journal of Business Research*, 28(3), 191-210.
- Monroe, K.B. (2003). *Pricing: Making profitable decisions*. Boston: McGraw-Hill/Richard D. Irwin.

- Nebenzahl, I.D., & Jaffe, E.D., (1996). Measuring the joint effect of brand and country Image in consumer evaluation of global products. *International Marketing Review*, 13(4), 5–22.
- Oliver, R.L. (1999). Whence customer loyalty? *Journal of Marketing*, 63(4), 33-44.
- Papadopoulos, N. (1993). What product and country images are and are not. In N. Papadopoulos, & L. Heslop (Eds.), *Product-Country Images: Impact and Role in International Marketing* (pp. 3-38). New York, NY: International Business Press.
- Pecotich, A., & Rosenthal, M. (2001). Country of origin, quality, brand and consumer ethnocentrism. *Journal of Global Marketing*, 15(2), 31-60.
- Pharr, J.M. (2005). Synthesizing country-of-origin research from the last decade: Is the concept still salient in an era of global brands. *Journal of Marketing Theory & Practice*, 13(4), 34-45.
- Phau, I., & Chao, P. (2008). Country-of-origin: State of the art review for international marketing strategy and practice. *International Marketing Review*, 25(4), 349-353.
- Roth, M.S., & Romeo, G.G. (1992). Matching product category and country image perceptions: A framework for managing country of origin effects. *Journal of International Business Studies*, 23(3), 477-497.
- Samiee, S. (2010). Advancing the country image construct – A commentary essay. *Journal of Business Research*, 63(4), 442-445.
- Samiee, S. (1994). Customer evaluation of products in a global market. *Journal of International Business Studies*, 25(3), 579-604.

- Sharma, P. (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, S., Shimp, T.A., & Shin, J. (1995). Consumer ethnocentrism: A test of antecedents and moderators. *Journal of the Academy of Marketing Science*, 23(1), 26-37.
- Shankarmahesh, M.N. (2006). Consumer ethnocentrism: an integrative review of its antecedents and consequences. *International Marketing Review*, 23(2), 146 – 172.
- Shimp, T. A., & Sharma, S. (1987). Consumer ethnocentrism: Construction and validation of the CETSCALE. *Journal of Marketing Research*, 24(3), 280-289.
- Srinivasan, N., Jain, S. C., & Sikand, K. (2004). An experimental study of two dimensions of country-of-origin (manufacturing country and branding country) using intrinsic and extrinsic cues. *International Business Review*, 13(1), 65-82.
- Stahl, F., Heitmann, M., Lehmann, D.R., & Neslin, S.A. (2012). The impact of brand equity on customer acquisition, retention, and profit margin. *Journal of Marketing*, 76(4), 44 –63.
- Suri, R., & Thakor, M.V. (2013). ‘Made in Country’ Versus ‘Made in County’: Effects of Local Manufacturing Origins on Price Perceptions. *Psychology & Marketing*, 30(2): 121–132.
- Thakor, M.V., & Lavack, A.M. (2003). Effect of perceived brand origin associations on consumer perceptions of quality. *Journal of Product Brand Management*, 12(6), 394-407.
- Tse, D.K., & Gorn, G.J. (1993). An experiment on the salience of country-of-origin in the era of

global brands. *Journal of International Marketing*, 1(1), 57-76.

Tse, D.K., & Lee, W. (1993). Removing negative country images: Effects of decomposition, branding, and product experience. *Journal of International Marketing*, 1(4), 25–48.

Usunier, J-C., & Cestre, G. (2007). Product Ethnicity: Revisiting the Match between Products and Countries. *Journal of International Marketing*, 15 (3), 32-72.

Van Pham K-Q. (2006). Strategic offshoring from a decomposed coo's perspective: A cross-regional study of four product categories. *Journal of American Academy of Business*, 8(2), 59-66.

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.

Wilcox, D. (2005). Country-of-origin bias: A literature review and prescription for the global world. *Developments in Marketing Science*, 28(3), 87-97.

Wittink, D.R., & Bayer, L.R. The measurement imperative. *Marketing Research*, 15(3), 14-22.

Zarkada-Fraser, A., & Fraser, C. (2002). Store patronage prediction for foreign-owned supermarkets. *International Journal of Retail & Distribution Management*, 30(6) 282 – 299.

**(Editable versions of all tables are available and
submitted separately in a PPT file.)**

Appendix A: Measurement items

Perceived brand image

Sony made in Japan / manufactured in Malaysia can be considered as a reliable brand.

Brand loyalty

When another brand of consumer electronics is on sale, I generally purchase it rather than my usual brand.

Perceived country image

Japan / Malaysia is manufacturer of technologically sophisticated consumer electronics.

Brand origin

I would buy a domestic product brand rather than a foreign made product brand.

Consumer motivation

I keep abreast of consumer electronics and high-tech products.

Price consciousness

I would be willing to pay more for a Sony product manufactured in Japan than manufactured in Malaysia.

CETSCALE

Chinese / British products, first, last, and foremost.

Purchasing foreign-made products is un-Chinese / British.

It is not right to purchase foreign products, because it put Chinese / British out of jobs.

We should purchase products manufactured in China / the UK instead of letting other countries get rich off of us.

We should buy from foreign countries only those products we cannot obtain within our own country.

Chinese / British consumers who purchased products made in other countries are responsible for putting their fellow Chinese / British out of work.

I dislike foreign-made products

I feel angry toward foreign-made products.

Foreign made products are taking over business in my country.

Table 1: Descriptive statistics and correlation matrix

	1	2	3	4	5	6	7	8	9	10
1. BIM	<i>0.86</i>									
2. BLO	0.42**	<i>0.73</i>								
3. DCIM	0.36*	0.24**	<i>0.78</i>							
4. CIMA	0.17	-0.03	-0.07	<i>0.82</i>						
5. BO	0.04**	0.14*	0.26**	0.15	<i>0.75</i>					
6. MOT	0.12	0.06	-0.10	-0.22	-0.13	<i>0.87</i>				
7. PC	0.10	-0.08	-0.03	0.15**	0.27*	-0.24	<i>0.71</i>			
8. CET	0.18	0.36	0.29	0.38**	0.34**	0.21	0.08	<i>0.91</i>		
9. Gender	-0.32	-0.09	0.00	0.14	-0.06	-0.01	0.02	-0.03	-	
10. Age	0.01	0.12	-0.02	0.03	-0.12	0.11	-0.01	-0.01	0.04	-

Notes:

Diagonal in italics represents Cronbach Alpha reliabilities. ** $p < 0.01$; * $p < 0.05$

BIM=perceived brand image; BLO=brand loyalty; DCIM=Perceived image of a developed country as manufacturing country; CIMA=perceived image of a developing country as a manufacturing country; BO=brand origin; MOT=consumer motivation; PC=price consciousness.

Table 2: Summary of importance ratings between British and Chinese consumers

Variable (with reference to Sony products)	British consumers		Chinese consumers		B/C ratio
	Mean	Variance	Mean	Variance	
Brand image	4.67	3.42	7.13	1.42	0.65
Brand loyalty	6.49	2.76	6.38	2.84	1.02
COP perceived image	5.21	3.73	6.42	2.95	0.81
Brand origin	6.42	2.94	6.51	3.18	0.99
Consumer motivation	7.18	3.58	8.32	2.74	0.86
Price	6.82	2.71	7.14	3.15	0.96
Consumer ethnocentrism	3.17	1.63	8.31	1.49	0.38

Table 3: Model results of hypothesis testing

Dependent measure Variable	Sony manufactured in Japan		Sony manufactured in a developing country	
	British consumers Est. (z-statistic) [S.E.]	Chinese consumers Est. (z-statistic) [S.E.]	British consumers Est. (z-statistic) [S.E.]	Chinese consumers Est. (z-statistic) [S.E.]
Brand image	-0.246 (-8.5) [0.041]	0.126 (1.5)** [0.026]	-0.192 (-6.8) [0.033]	0.239 (5.3)** [0.028]
Brand loyalty	1.109 (1.3)* [0.016]	-5.418 (-3.8) [0.031]	2.315 (5.7) [0.042]	1.225 (7.4) [0.086]
Perceived image developed country	0.909 (3.4)** [0.038]	2.138 (6.9) [0.059]		
Perceived image developing country			0.427 (2.9)* [0.021]	0.517 (3.2) [0.072]
Brand origin	0.423 (1.6)** [0.027]	0.691 (3.5) [0.061]	2.426 (11.3) [0.068]	0.336 (1.7)** [0.032]
Consumer motivation	-2.358 (4.2) [0.046]	-0.875 (5.1) [0.083]	-8.731 (-4.1) [0.088]	-8.641 (-4.6) [0.055]
Price	1.427 (1.8) [0.032]	1.049 (4.8) [0.048]	0.853 (2.5)*** [0.016]	2.173 (1.9)** [0.029]
Consumer ethnocentrism	0.430 (2.0) [0.013]	0.428 (3.2) [0.039]	0.739 (1.5) [0.027]	1.572 (1.0)** [0.003]
Number of observations	103	106	103	106
Degree of freedom	7	8	7	8
Log-likelihood	-462.823	-462.823	-462.823	-462.823
R2	0.313	0.307	0.315	0.309
Adjusted R2	0.306	0.298	0.308	0.294
Likelihood ratio statistic	-277.728	-315.202	-294.639	-362.017