Country-of-origin fit’s effect on consumer product evaluation in cross-border strategic brand alliance

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ABSTRACT

This study examines the effect of country-of-origin (COO) fit on consumer brand attitude and finds that cross-border strategic brand alliance (SBA) is a viable market entry strategy for host and partner brands. Specifically, cross-border SBA creates positive synergistic effects when the images of countries involved are both favorable. In addition, the partner brand suffering from less favorable country image is able to leverage COO fit and gains favorable brand image and consumer product evaluation. Mediation analysis further examines the role of cross-border SBA and provides implications and suggestions for future research in this area.

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1. Introduction

As competition in the marketplace continues to elevate, introducing a new brand becomes increasingly laden with financial risk. Therefore, many companies today resort to strategic brand alliance (SBA), allowing a new brand to leverage off an existing brand’s equity (Bluemelhuber, Carter, & Lambe, 2007). SBA helps companies create new markets and provides an effective means to introduce new products or services (Cooke & Ryan, 2000). The percentage of annual revenue that the 100 largest U.S. companies generate from brand alliances continues to increase, from less than 2% in 1980 to an estimated 35% by 2002 (Booz Allen Hamilton, 2001).

Increasingly, SBA is also a viable market entry strategy in the global economy (He & Balmer, 2006; Kippenberger, 2000; Xie & Johnston, 2004). Ninety-three percent of U.S. companies that engage in SBA are successful (Trendsetter Barometer, 2010). SBA also outperforms other conventional business development approaches such as venture capital and mergers and acquisitions (Pekar & Allio, 1994). Given that cross-border SBA is often sought as a prime engine for growth in business (Kalmbach & Roguss, 1999) and a tactic for remaining competitive in the global marketplace, an in-depth investigation of how it works is timely. Such studies provide important implications for practitioners to consider.

SBA literature extensively investigates the concepts of product fit and brand fit. Simonin and Ruth (1998) find that product fit and brand fit are important factors in consumer product evaluation. Researchers generally find that high fit is better at generating positive consumer response than low fit (Aaker & Keller, 1990; Park, Milberg, & Lawson, 1991; Simonin & Ruth, 1998). Since cross-border SBA involves brands from different countries, researchers should understand the role of country-of-origin (COO). Unfortunately, researchers have done few studies on COO fit. This paper provides an organized theoretical approach toward understanding the effects of cross-border SBA on consumer product evaluation with a focus on COO fit. Specifically, an experimental study addresses the question of how cross-border SBA affects consumers’ brand attitudes at different levels of COO fit. Findings provide needed insights into how consumers process COO information and, subsequently, evaluate brands in the context of cross-border SBA.

2. Literature review

2.1. Definitions of cross-border strategic brand alliance

Researchers study SBA under various terms such as ingredient brand alliance, co-branding, co-marketing, cross-promotion, joint branding, joint promotion, and symbiotic marketing (Desai & Keller, 2002; Kippenberger, 2000; Norris, 1992; Smith & Park, 1992; Ugglia, 2004, 2006). These terms all refer to collaborative partnerships that link or integrate the attributes of the host/leader/modified brand and the partner/modifier brand to offer a new or perceptually improved...
product or service to consumers (Cooke & Ryan, 2000; Xie & Johnston, 2004). Elmuti and Kathawala (2001) consider SBA “a partnership of two or more corporations or business units that work together to achieve strategically important objectives that are mutually beneficial” (p. 205). From the standpoint of brand alliance, Simonin and Ruth (1998) define SBA as “the short- or long-term association or combination of two or more individual brands, products, and/or other distinctive proprietary assets” (p. 30).

Cross-border SBA is a unique form of brand alliance with one company headquartered in one country and the other company headquartered in another country or market (Bluemelhuber et al., 2007). Due to high uncertainty and competition in the global market, a single company will likely not develop or build resources in all fields necessary for successful market entry (Beverland & Bretherton, 2001). Brand alliances provide various benefits for the partner companies by helping them obtain new technology, gain distribution channels to specific markets, reduce financial and political risks, and achieve competitive advantage (Elmuti & Kathawala, 2001; Javalgi, Radulovich, Pendleton, & Scherer, 2005). In particular, SBA allows partner brands with less familiarity to leverage off the established brand equity of the host brands. Therefore, companies seek cross-border SBA as a highly desirable tactic to help brands compete effectively in the global market (Leitch & Richardson, 2003; Murray, Kotabe, & Zhou, 2005; Xie & Johnston, 2004).

Among different types of SBA, ingredient branding is a common practice in which key attributes of one brand are incorporated into another brand as ingredients (Desai & Keller, 2002; Norris, 1992; Vaidyanathan & Aggarwal, 2000). The ingredient of the partner brand embedded in the host brand enhances the host brand’s image (“e.g., Intel inside Dell computers”). Meanwhile, ingredient branding also helps build positive partner brand image by sending a strong signal to consumers that a highly recognized host brand indirectly endorses a partner brand (“e.g., Safeway Select chocolate chip cookies with Hershey chocolate chips”) (Vaidyanathan & Aggarwal, 2000; Votolato & Uzuna, 2006; Washburn, Till, & Priluck, 2004). However, consumers’ product evaluations become complex when the brands are from different countries, as is often the practice in cross-border SBA.

### 2.2. Key factors in cross-border SBA

Past SBA research identifies product fit and brand fit as key factors that influence consumer response. Product fit is how the product categories of two brands complement or relate to each other (Simonin & Ruth, 1998). When two product categories fit well functionally (“e.g., car and audio system”), consumers easily understand the combination. However, when the fit is low, consumers may be confused why the two categories are combined (Park, Jun, & Shocker, 1996) and try to resolve this incongruity with other information (Gammoh, Voss, & Chakraborty, 2006; Samu, Krishnan, & Smith, 1999; Voss & Gammoh, 2004).

Brand fit is primarily an image-based assessment (Bluemelhuber et al., 2007) that refers to the consistency in the brand images of the host and partner brands (Park et al., 1996; Simonin & Ruth, 1998). Park et al. (1991) further define brand fit as conceptual consistency reflecting the similarity in image, abstract meanings, and benefits between the host and partner brands. Because brand fit focuses on complementarity at the abstract level, functional compatibility is less important for brand fit than for product fit. Previous research finds that image can be transferred from one brand to another when the brands associate well with each other (Gwinner & Eaton, 1999; Roth & Romeo, 1992; Smith & Park, 1992).

When two brands combine from different countries, as they do in a cross-border SBA, the COO fit should also influence the outcome of the alliance (Bluemelhuber et al., 2007). COO refers to consumers’ perceptions of where the product originates. Researchers study COO under different terms such as country-of-manufacture (COM), country-of-design (COD), and country-of-manufacture (COA), which help explain the growing complexity of COO (Ahmed, Johnson, & Boon, 2004; Saeed, 1994). Roger, Kaminski, Schoenbachler, and Gordon (1994) classify COO into separate categories of manufacturing in and assembling in, but find no distinct difference in the perception of the two. Within the context of consumer product evaluation, researchers generally define COO as country-of-manufacture (Lauffer, Gillespie, & Silvera, 2009). The image of the COO can strongly impact consumers’ perceptions of products and brands (Nagashima, 1970; Schooler, 1971), including evaluations of quality (Hong & Wyer, 1989; Roth & Romeo, 1992). For example, Japanese brands of automobiles such as Honda and Mazda lose their attractiveness when manufactured in countries such as Mexico and the Philippines compared to being made in Japan (Johansson & Nebenzahl, 1986). In contrast, Haier, a Chinese manufacturer of major appliances and electronics, improved its brand image by manufacturing products in the U.S. market (Interbrand, 2005).

In the case of cross-border SBA, consumers evaluate their perceptions of both countries’ ability to make quality products. Bluemelhuber et al. (2007) describe COO fit as “the consumer’s perception of the overall compatibility on images of the two countries of origin involved in the brand alliance” (p. 433). Thus, consumers likely form favorable attitudes toward both the host and partner brands when both countries’ images are compatible with each other. On the other hand, if consumers perceive that the two countries are incompatible, unfavorable consumer attitudes may follow. Ill-conceived cross-border SBA can weaken a host brand’s identity, core values and primary associations (James, 2005) when consumers attribute a potentially negative perception of the partner brand’s COO to the host brand.

### 2.3. How does cross-border strategic brand alliance work?

To understand the role of COO fit in cross-border brand alliance, one must review the process of consumer product evaluation in brand alliance. In essence, SBA creates a distinct product offering and serves as a quality assurance device by transferring the equity of the host brand to the partner brand (Keller, 1993; Levin, Davis, & Levin, 1996; Park et al., 1996; Rao & Ruekert, 1994; Simonin & Ruth, 1998; Uggla, 2004). Brand equity is “a set of brand assets and liabilities linked to a brand, its name and symbol that adds to or subtracts from the value provided by a product to a firm and/or that firm’s customers” (Aaker, 1991, p. 15). By linking a partner brand to a host brand, SBA helps the partner brand leverage off the equity of the host brand (Uggla, 2004, 2006).

A successful brand alliance allows the less familiar partner brand to share the established equity of a familiar and/or popular host brand by transferring primary associations of the host brand such as brand- and product-related attributes, benefits, and attitudes (Park, Lawson, & Milberg, 1989; Rodrigue & Biswas, 2004). As the category driver, the host brand (sometimes called the leader or modified brand) is familiar to consumers. The host brand also tends to have more control over marketing, distribution systems, and larger associations than the partner brand (e.g., ECCO shoes/GORE-TEX, Ford Explorer Eddie Bauer Edition). Consumers are usually less familiar with the partner brand. Typically, one cannot buy the partner brand independently outside of the host brand offering (“e.g., GORE-TEX fabrics and Intel processor”) (Uggla, 2004). Familiar brands tend to have high salience and accessibility in consumer memory. Meyers-Levy and Malaviya (1999) suggest that consumer judgments are largely affected by information that is relatively salient, easily accessible, and comes readily to mind at the time of judgment formation.

In addition to brand familiarity, studies show country image needs to be considered in cross-border SBA since two or more brands from different countries are combined. Specifically, consumers should evoke the positive country image of the host brand and associate it with a partner brand in cross-border SBA (Hadjicharalambous, 2006; Jevons, Gabott, & Chernatony, 2005; Park et al., 1996; Rodrigue &
Biswas, 2004; Ruth & Simonin, 2003; Simonin & Ruth, 1998). The effectiveness of cross-border SBA depends on where the host and partner brands reside. An inferior COO of a partner brand can tarnish the image of a host brand and erode the overall effectiveness of the cross-border SBA (Thakor & Katsanis, 1997).

The associative network memory model (Anderson, 1983; Wyer & Srull, 1986) helps explain how the transference of country image occurs in terms of brand equity. The model regards semantic memory or knowledge as consisting of a set of nodes or stored information connected by links that vary in strength. A spreading activation process from node to node decides the degree of retrieval in consumers’ memory. Given this, the associated equities of the host brand may lead consumers to perceive the partner brand as possessing similar values in terms of attribute functions and product quality (Janiszewski & Osselaer, 2000).

The elaboration likelihood model (ELM) explains how consumers process SBA information at both primary and secondary association levels (Gammoh et al., 2006; Petty & Cacioppo, 1981). The ELM suggests two types of information processing modes: central and peripheral processing modes. The systematic or central processing mode entails extensive cognitive efforts to process product or brand-related information. In contrast, the peripheral processing mode refers to low-effort processing where consumers do not have either the cognitive capability or the motivation to process attribute-based product and brand information. Both processing modes are distinct from each other and represent two ends of the continuum of information processing.

Researchers believe consumers base the primary associations of the host brand on internal cues such as brand- and product-related attributes and benefits since these cues directly affect product performance. These primary associations process via the central or item-specific route where consumer attitudes are consistent and stable overtime. However, consumers also create brand associations based on inferences from other information in the memory not directly related to the product or service (Keller, 1993; Pappu, Quester, & Cooksey, 2006; Votolato & Unnava, 2006). Consumers form secondary associations by linking the brand to external cues not directly related to the product or service such as distribution channels, a spokesperson or endorser of the product, an event or cause, and the COO (Keller, 1993, 2003). The peripheral or relational route processes the secondary associations since information processing is not based on product elaboration. COO information, as an extrinsic cue, tends to be processed via the peripheral route. In cross-border SBA, consumers may rely on COO fit cues, allowing them to simplify their brand evaluation, especially in the absence of primary brand associations (Aaker & Keller, 1990). Cross-border SBA is a secondary association when consumers form their attitudes largely based on images of countries that take part in the partnership.

Country images of the host and partner brands exist somewhere along the continuum between negative and positive. Various scenarios of COO fit in cross-border SBA can be proposed by matching relative perception of COO images of two countries along the continuum. To achieve the most positive synergistic effects, both the host and partner brands should enjoy a positive COO image in the cross-border SBA. On the other hand, many partner brands with a less positive COO wish to enter global markets (Bluemelhuber et al., 2007; Li & Cheng, 2009). If so, they should align with a host brand enjoying a positive country image. These two scenarios reflect the typical practice of cross-border SBA (Pappu et al., 2006). In addition, these two scenarios would be ideal cases to start examining the role of COO fit in cross-border SBA.

3. Research hypotheses

3.1. High fit: Positive COO of host and partner brands

The effect of COO fit on attitudes toward the host and partner brands in cross-border SBA will likely differ depending on the relative impressions of country images. When both host and partner brands have favorable country images, attitudes toward both brands should become more positive than before the alliance. Since country image is a valuable asset, combining two brands with positive country images should create a highly beneficial synergistic effect (He & Balmer, 2006; Rao & Ruekert, 1994; Rodrigue & Biswas, 2004). Hypotheses H1 and H2 are based on this argument:

**H1.** When both the host and partner brands have favorable country images, post cross-border SBA attitudes toward the host brand will be more positive than pre cross-border SBA attitudes toward the host brand.

**H2.** When both the host and partner brands have favorable country images, post cross-border SBA attitudes toward the partner brand will be more positive than pre cross-border SBA attitudes toward the partner brand.

3.2. Low fit: Positive COO of host brand with negative COO of partner brand

When the host brand has a more positive country image than the partner brand, the partner brand should benefit from the favorable country image of the host brand. In this case, cross-border SBA can increase positive attitudes toward the partner brand since the favorable country image of the host brand is likely transferred to the partner brand. Consumers’ attitudes toward the host brand, however, may stay constant if the host brand enjoys an established positive COO image. Established brands tend to enjoy high levels of brand awareness, associations, perceived quality, and brand loyalty (Aaker, 1991; Keller, 1993). Thus, host brands are less likely affected by the partner brand when the host brand has a more positive country image. Furthermore, consumers may believe that companies that allow their brands to ally with lesser partner brands have good reasons to do so, such as financial, operational, and managerial benefits. Therefore, consumers may maintain their favorable attitudes toward the host brand by attributing the cross-border SBA to other justifiable reasons. Based on these arguments:

**H3.** When the host brand has a more positive country image than the partner brand, post cross-border SBA attitudes toward the host brand will not change from pre cross-border SBA attitudes toward the host brand.

**H4.** When the host brand has a more positive country image than the partner brand, post cross-border SBA attitudes toward the partner brand will be more positive than pre cross-border SBA attitudes toward the partner brand.

4. Methodology

An online experimental study using a two (Low vs. High COO fit) by two (Pre- vs. Post-attitude) mixed factorial design was used to test the proposed hypotheses. Since the focus of this study was on COO fit, COO was manipulated, while product fit and brand fit were controlled. Two different stimulus ads were devised to manipulate COO fit. Following the protocols of past studies, cars were used as the product category for the host brand because car brands present extensive primary and secondary associations with various countries capable of manufacturing vehicle products (Bluemelhuber et al., 2007; Simonin & Ruth, 1998). Car stereos were used as the partner brand since stereos are a component of cars.

4.1. Pretests 1 and 2

The goal of pretest 1 was to select a product category that shows high fit with cars. A total of 33 college students listed product or
service categories that are similar or relevant to cars. The product fit scale from Ahn and Sung (2009) was used for this pretest. Car stereo ($X = 6.7$) was found to show the highest mean score. Also, car and car stereo reflect the typical characteristics of ingredient branding since the car stereo is assembled into a car. Therefore, car stereo was selected for the partner product category.

The goal of pretest 2 was two-fold: to select a country with an existing host brand and to select two countries for the fictitious partner brand. Following the definition of COO as the country that conducts manufacturing (Ahmed et al., 2004), a second group of student subjects ($n = 46$) listed five countries which they think make the highest quality cars. After the country list was completed, they prioritized the list by rating each country of origin and providing a corresponding car brand name. Among them, a top-ranked country and its car brand name were used for the host country and the host brand. BMW ($X = 6.3$) was the top-ranked car brand to consumers. Accordingly, BMW from Germany was used as the host brand and the corresponding country.

For the selection of countries for the fictitious car stereo, subjects listed five countries that make the highest and lowest qualities of car stereos respectively. Japan ($X = 6.3$) was selected as a country likely to make a high quality car stereo, whereas Mexico ($X = 3.3$) was selected as a country least likely to make a high quality car stereo ($t(42) = 11.5, p < .01$). Based on the results of pretests 1 and 2, the combination of BMW from Germany and car stereo from Japan sets up a high COO fit condition, whereas the combination of BMW from Germany and car stereo from Mexico sets up a low COO fit condition.

4.2. Stimulus development

Based on the two pretests, stimuli ads were created (see Appendix A). The format of the stimuli ads was standardized except for the manipulable variable, COO fit. Each ad featured BMW 135i for the host brand and a fictitious J&K car stereo for the partner brand at the center of the page with their respective COO information. COO fit was manipulated by using designed and manufactured labels for both the Japan and Mexico conditions. BMW 135i model was selected since it is a coupe that is more attractive to the subject population than other models. Also, a fictitious brand, J&K car stereo was used to control brand familiarity for the partner brand. J&K is a neutral brand name that is neither associated with Japan nor Mexico. In doing so, J&K car stereo brand can be used in both Japan and Mexico conditions, which eliminates the concern of brand familiarity.

4.3. Independent and dependent variables

COO fit is the independent variable in this study. Bluemelhuber et al. (2007) conceptually defined COO fit as the consumer’s perception of the overall compatibility of the host and partner brands in cross-border SBA. This compatibility refers to the overall perception of the country’s ability to make quality products. In this study, the COO fit was manipulated by showing two different stimuli ads that depict BMW 135i and J&K car stereo based on the results of pretests 1 and 2.

The main dependent variable of this study is brand attitude. Mitchell and Olson (1981) defined attitude toward the brand as an individual’s internal evaluation of the brand. Brand attitude was measured with three items, such as ‘Bad/Good’, ‘Unfavorable/Favorable’, and ‘Negative/Positive’ (Muehling & Laczniak, 1988). These items were measured on a seven-point semantic differential scale. Cronbach’s alphas for pre-attitudes ($\alpha = .93$) and post-attitudes ($\alpha = .94$) toward BMW 135i and pre-attitudes ($\alpha = .94$) and post-attitudes ($\alpha = .95$) toward J&K car stereo were all high. Also, attitudes toward cross-border SBA were measured with the same three items for brand attitude and they were found to be reliable ($\alpha = .96$).

4.4. The main study

A total of 294 subjects in a southwestern university participated in an online experiment. Among them, 28 responses were eliminated because significant portions of their responses were unanswered or had inconsistent patterns across the items for the same construct. Thus, 266 total cases were analyzed in the main study. The average age of subjects was 21.2 and about 50% of them were 20 and 21 years old. In terms of gender, 172 (66.7%) were female and 86 (33.3%) were male. In terms of ethnicity, 161 subjects (67%) were Caucasian. Twenty-seven subjects (11.3%) were Hispanic American followed by African American (6.7%), Asian American (6.7%), and others (8.3%).

The website began with an informed consent notice. Subjects who participated in the study received extra course credits for their input. At first, subjects were asked to answer questions regarding their pre-attitudes toward the host brand, BMW 135i. Next, a brief description of the J&K car stereo was provided to anchor the baseline pre-attitudes toward the fictitious J&K car stereo for both COO fit conditions since it is a fictitious brand (see Appendix B). Afterwards, subjects’ pre-attitudes toward the J&K car stereo were measured. After a set of unrelated filler questions, subjects were directed to one of the stimuli ads that showed the cross-border SBA. Subjects were shown the stimuli ads and then asked to respond to questions pertaining to their post-attitudes toward the host and partner brands. Upon completing post-attitude items, the perceived COO fit between low and high fit conditions was measured for manipulation check. While each COO fit condition was validated in pretest 2, the goal of measuring COO fit in the main study is to ensure that subjects in the main study correctly perceived each condition as intended. For the same reason, subjects’ perceptions of product fit were also measured for manipulation check. Finally, subjects answered demographic questions before being dismissed from the study.

5. Results

5.1. Manipulation check

Independent samples $t$-tests successfully show manipulation of the COO fit in Japan and Mexico. This study adopts the Aaker and Keller (1990) fit scale plus three additional items regarding compatibility between countries. Using the seven-point Likert scale ($1 = strongly disagree and 7 = strongly agree$), five items measure the COO fit: “the images of the countries are consistent with/complementary/compatible/similar/relevant to each other.” These five items show a high degree of reliability ($\alpha = .92$). Responses to all five items were averaged to create a composite index for manipulation check. The results show COO fit is significantly different between the Japan and Mexico conditions. COO fit for Japan ($X = 4.2$) is significantly higher than that for Mexico ($X = 3.2$, $t(262) = -6.64, p < .00$).

5.2. High COO fit and attitude change

Before hypothesis testing, subjects divided into low COO fit condition ($N = 131$) and high COO fit condition ($N = 135$). Each hypothesis tests for attitude change. H1 and H2 predict that attitudes toward both the host and partner brands will be more positive after the alliance due to the synergistic effect when both brands have favorable country of origin perception. H1 and H2 testing examines attitude changes for the BMW 135i and the J&K car stereo between different COO fit conditions. Researchers conducted a series of paired samples $t$-tests to examine the difference between pre- and post-attitudes toward the two brands. Findings show that post-attitudes toward both the BMW 135i ($X = 6.0$) and the J&K car stereo ($X = 5.8$) are greater than pre-attitudes toward both the BMW 135i ($X = 5.7$) and the J&K car stereo ($X = 5.7$) respectively ($t(134) = -3.22, p < .00$, $t(132) = -2.02, p < .05$; see Fig. 1).
5.3. Low COO fit and attitude change

H3 predicts that when there is a low COO fit, specifically where the host brand has more positive country of origin perception than the partner brand, post cross-border SBA attitudes toward the host brand will not change from pre- to cross-border SBA attitudes toward the host brand. To examine the difference between pre- and post-attitudes toward the host brand with a low COO fit, a paired samples t-test shows post attitudes toward BMW 135i significantly increase when it is in an SBA with the J&K car stereo from Mexico. The post-attitudes toward BMW 135i ($X = 5.7$) are greater than pre-attitudes ($X = 5.5$, $t (130) = -2.53$, $p < .05$; see Table 2 and Fig. 2). Therefore, H3 is not confirmed.

H4 predicts that when the host brand has more positive country image than the partner brand, post cross-border SBA attitudes toward the partner brand will be more positive than pre cross-border SBA attitudes toward the partner brand. To examine the difference between pre- and post-attitudes toward the partner brand with a low COO fit, a paired samples t-test shows post attitudes toward the J&K car stereo ($X = 5.6$) are greater than the pre-attitudes ($X = 5.4$, $t (129) = -2.04$, $p < .05$; see Table 2 and Fig. 2). This illustrates that cross-border SBA tends to increase attitude positively toward the partner brand because the favorable country of origin perception of the host brand transfers to the partner brand. Therefore, H4 is supported.

To explain how cross-border SBA affects these constructs, one must further investigate the mediating role of cross-border SBA. Further analyses show that in the high COO fit condition, attitude changes between pre-attitudes ($X = 5.7$) and post-attitudes ($X = 6.0$) toward the BMW 135i are greater than those between pre-attitudes ($X = 5.5$) and post-attitudes ($X = 5.7$) in the low COO fit condition ($t (134) = -3.22$, $p < .01$, $t (130) = -2.53$, $p < .05$). Furthermore, post-attitudes toward the BMW 135i in the high COO fit condition ($X = 6.0$) are significantly higher than post-attitudes in the low COO fit condition ($X = 5.7$, $t (264) = -2.05$, $p < .05$), while no significant pre-attitude difference ($t (264) = -1.12$, $p = .26$) exists. These results suggest that even though the host brand may be able to harvest the synergistic positive effects from cross-border SBA in the low COO fit condition, the magnitude of positive changes between pre- and post-attitudes toward the host brand is smaller than in the high COO fit condition. These results imply that subjects may have doubts why the BMW 135i associates itself with the J&K car stereo from Mexico. However, the cross-border SBA of the BMW 135i with the J&K car stereo from Japan is perceived positively. Thus, low COO fit may affect the host brand less positively than in high COO fit condition.

5.4. Mediation effects

A series of regression analyses validates the mediating effects of cross-border SBA between pre- and post-attitudes. Fig. 3 and Table 3 summarize the mediation effects of cross-border SBA. Four relationships must hold to demonstrate mediation (Baron & Kenny, 1986). First, pre-attitudes toward the host brand BMW 135i must have a significant positive effect on post-attitudes toward it. Pre-attitudes toward the BMW 135i indeed have a significant positive effect on post-attitudes ($β = .66$, $p < .00$). Next, pre-attitudes toward the BMW 135i must have a significant effect on attitudes toward cross-border SBA. Again, a significant effect of attitudes toward the alliance ($β = .35$, $p < .00$) exists. Third, attitudes toward the partnership must significantly affect post-attitudes toward the BMW 135i. The estimated regression model shows a significant effect of attitudes toward SBA on post-attitudes toward the BMW 135i ($β = .66$, $p < .00$). Finally, when pre-attitudes toward the BMW 135i and attitudes toward the alliance are considered simultaneously, the formerly significant effect of pre-attitudes toward the BMW 135i becomes insignificant or reduced. The effect of pre-attitudes toward the BMW 135i attenuates or lessens

### Table 1

Results of paired samples t-test on H1 and H2.

<table>
<thead>
<tr>
<th>Paired samples t-test</th>
<th>Mean difference</th>
<th>SD</th>
<th>df</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMW 135i attitude change</td>
<td>-0.28</td>
<td>1.02</td>
<td>134</td>
<td>-3.22**</td>
</tr>
<tr>
<td>J&amp;K car stereo attitude change</td>
<td>-0.14</td>
<td>0.77</td>
<td>132</td>
<td>-2.02*</td>
</tr>
</tbody>
</table>

Note: SD: standard deviation.

** $p < .01$.

* $p < .05$. 

Note: DM: standard deviation.
(β = .47, p < .00), while the effect of attitudes toward the partnership on post-attitudes toward the BMW 135i remains significant (β = .49, p < .00). This result illustrates that attitudes toward cross-border SBA partially mediate the relationship between pre-attitudes and the post-attitudes toward the BMW 135i.

For the partner brand J&K car stereo, the same analyses find similar results. Fig. 4 illustrates the mediation effect of attitudes toward the cross-border SBA on post-attitudes toward the J&K car stereo. Attitudes toward the cross-border SBA exert a mediation effect on post attitudes toward the J&K car stereo. The mediation effect for the J&K car stereo is greater than that for the BMW 135i. In other words, the magnitude change of pre-attitudes toward the J&K car stereo (β = .30) is greater than that of pre-attitudes toward the BMW 135i (β = .19). Furthermore, the single effect of attitudes toward the SBA is greater for post-attitudes toward the J&K car stereo (β = .77) than for post-attitudes toward the BMW 135i (β = .66).

When the COO fit decomposes into low and high fit conditions, the mediation effect of cross-border SBA is even greater for the J&K car stereo than for the BMW 135i. The direct effect changes between pre- and post-attitudes toward the BMW 135i are −.19 and −.16 in high and low COO fit conditions respectively. To the contrary, the direct effect changes between pre- and post-attitudes toward the J&K car stereo are −.28 and −.30 in high and low COO fit conditions. These results suggest that partner brands may be more susceptible to the effects of cross-border SBA than host brands.

6. Discussion

The results of this study generally support the existing evidence of the COO phenomenon and its effects (Cordell, 1992; Johansson & Nebenzahl, 1986; Klein, 2002; Nagashima, 1970; Roth & Romeo, 1992). Furthermore, this study finds that the COO fit of two brands may influence consumers’ perceptions and brand evaluations (Hong & Wyer, 1989) because consumers use COO fit cues as a cognitive shortcut to form their attitudes toward brands.

As H1 and H2 confirm, when the perceptions of the two countries in cross-border SBA are positive, consumer attitudes toward the host and partner brands increase significantly after the alliance. These findings illustrate that cross-border SBA may work as a quality indicator by transferring the equity of the host brand to the partner brand (Keller, 1993; Levin et al., 1996; Park et al., 1996; Rao & Ruekert, 1994; Simonin & Ruth, 1998). In this case, the BMW 135i transfers its established brand equity to the fictitious J&K car stereo. Therefore, subjects are more likely to evaluate the J&K car stereo favorably.

At the same time, the favorable country image of Japan as a reliable manufacturer of consumer electronics affects consumer attitudes toward the BMW 135i in a positive manner. Furthermore, these results support past findings that cross-border SBA helps host and partner brands by leveraging brand equity of each other (Simonin & Ruth, 1998; Uggla, 2004, 2006). This study finds that attitudes toward cross-border SBA favorably affect pre- and post-attitudes toward the BMW 135i and the J&K car stereo. In particular, findings from this study suggest that the partner brand J&K car stereo is more likely to be affected by cross-border SBA than the host brand BMW 135i.

Additionally, a SBA perceived positively appears to help transfer primary associations of the host brand such as brand- and product-related attributes, benefits, and attitude to the partner brand. Therefore, SBA positively affects consumers’ attitudes toward the partner brand (Rodrique & Biswas, 2004). As seen in H4, when the COO fit is low, post-attitudes toward the J&K car stereo increase significantly. This suggests that the J&K car stereo manufactured in Mexico will benefit from the positive country image of the German-manufactured BMW. The results of this study are consistent with past findings and highlight that good images of the host brand’s country-of-origin benefit the partner brand (Yasin, Noor, & Mohamad, 2007).

However, this study also observes interesting results in H3. The partner brand from a country with a negative image positively affects the post-attitudes toward the host brand BMW 135i. The results suggest that post-attitudes toward the BMW 135i increase significantly, even when associated with the J&K car stereo manufactured in Mexico. However, the amount of positive change between pre- and post-attitudes toward the BMW 135i in the low COO fit condition is smaller than those in the high COO fit condition.

One reason why H3 is not supported may be due to the initial high pre-attitudes toward the BMW 135i. In this study, pre- and post-attitudes toward the BMW 135i were 5.6 and 5.8 respectively, out of the seven-point scale. In other words, subjects display favorable initial attitudes toward the BMW brand derived from pre-existing knowledge in their memory structure. Another reason may be that the SBA stimulus ads present a visual of the BMW, but not a visual of the J&K car stereo since the stereo is part of the car. As such, the BMW car visual may create a strong impression among consumers and overpower their impression of the J&K car stereo. Past research...
finds that visual elements of an ad can affect brand attitudes differently, even for consumers who have the same product attribute beliefs and attitude toward the ad (Mitchell, 1986; Mitchell & Olson, 1981). According to the dual component model, consumers can form their brand attitudes differently depending on the positive or negative valuation of the visual element. In this study, the post-attitudes toward the BMW 135i and the J&K car stereo might be strengthened after seeing a visual representation of the BMW 135i even when the COO fit is low.

One further reason for the somewhat surprising result for H3 could be that, for the J&K car stereo manufactured in Mexico, pre-attitudes ($X = 5.4$) and post-attitudes ($X = 5.6$) toward the J&K car stereo are both positive. Different information processing patterns that individuals exercise with respect to their levels of product knowledge may contribute to this. The J&K car stereo has major features such as a 7 in. motorized flip-out wide touch screen monitor, an anti-theft removable control panel, and Bluetooth capability. Even though the COO fit is low, most subjects may evaluate the J&K car stereo in a favorable way because of those important features. Thus, product attribute information of the J&K car stereo may favorably affect attitudes toward itself and the BMW 135i.

This study provides important implications to the theoretical development and the practice of cross-border SBA in several ways. Past research deals with consumer reactions to various brand alliances. For example, Levin et al. (1996) describes the assimilation effect, the psychological process in which affect was transferred from one brand to another. Rao and Ruekert (1994) also explore the mechanism for the transference of affect between brands. Consumers' preference of a host brand is transferable to other brands (Liu, Hu, & Grimm, 2010). Considering this transference, most brands tend to associate only with other established brands to avoid tarnishing their brand images. Particularly, if a partner brand with less than favorable country image is partnered with an established host brand, affect transference will enable the partner brand to enjoy the positive country image of the host brand. Therefore, in order to be successful in the global market, it is critical for a partner brand to collaborate with a host brand having favorable country image.

For a host brand coming from a country having favorable country image, cross-border SBA is helpful in strengthening their global foundation. The results suggest that low COO fit may not be necessarily detrimental for the host brand with strong brand equity. This is an important issue to explore. However, one could speculate that the effect may be much more positive for the host brand if it partners with a brand having favorable country image. Therefore, allying with a partner brand from a country having favorable image will be a win–win strategy for host brands in the competitive global market.

7. Limitations and suggestions for future research

As with all research, this study has several limitations. Although experimental manipulations were successful in this study, they were achieved at the expense of external validity. In this study, two pretests were conducted in order to select a country perceived to make quality cars. Following the same procedure, countries were selected to represent the most and least likely to make quality car stereos. As a result, subjects selected Germany as a top manufacturer for cars and Japan and Mexico were selected as most and least likely to make quality car stereos respectively. However, the hypothetical alliance between Germany and Mexico might not be considered realistic. Thus, future research should consider creating scenarios with high external validity in mind.

Second, although this study adopts the notion that COO is an encompassing construct including all types of country origin for products, this simplification is a likely limitation. Given the current business practice where the hybridization of design, materials, assembly, and manufacture country location is common, consumers may develop sophisticated knowledge to process such complex combinations. This study conceptualizes and manipulates COO by using designed and manufactured labels for both the Japan and Mexico conditions. However, results may differ depending on the definition and operationalization of COO as design, materials, assembly, or brand country-of-origin. A global brand in today's market is no longer exclusively associated with only the country in which its company originated, since companies take advantage of lower costs by relocating their manufacturing or assembly locations to other developing countries (Hamzaoui & Merunka, 2007). For example, Tata-owned Jaguar Land Rover is planning to start assembling its vehicles in China (Madslien, 2010). Therefore, one needs to consider, individually or in combination, country-of-manufacture, country-of-assembly, country-of-brand, and country-of-design in cross-border brand alliance in future research (Chung, Pysarchik, & Hwang, 2009; Hui & Zhou, 2003).

Third, several types of combinations in SBA exist. Since this study examines cross-border SBA in terms of ingredient branding, the results may differ if other types of SBA such as vertical or horizontal alliance, operational, and promotional alliance are considered. For example, the depth and levels of integration will vary along different types of SBA (Ugglia, 2004). In this study, the J&K car stereo was asymmetrically incorporated into the BMW 135i as ingredients like Aunt Jemima cookies with Sun-Maid raisins. This ingredient branding tends to improve a single attribute of the host brand through the presence of a partner brand. However, alliances such as Porsche Design and Poggenpohl Kitchen are more symmetrical since neither is assembled into the other brand. Therefore, researchers would benefit from investigating other types of SBAs in the future.

Fourth, future studies should be careful in selecting a host brand that has moderate level of consumer product knowledge or familiarity. Consumers with high product knowledge about cars tend to be loyal to the BMW brand. Thus, they might evaluate BMW 135i favorably without considering COO fit. Although a certain level of product knowledge is necessary to examine the transference effect of brand equity, unconditional preference of a brand should be controlled. The BMW brand has an established effects of cross-border SBA on the post-attitudes toward J&K car stereo.
brand reputation as a luxury car. Therefore, consumers are very likely to be aware of BMW. As noted in H3, post-attitudes toward the BMW 135i were significantly higher than pre-attitudes even in the low COO fit condition.

Fifth, the manipulation of this study for each COO fit condition might not be strong enough, although it is statistically significant. One of the underlying reasons behind the results on H3 could be that measured pre-attitudes toward the J&K car stereo are based on textual description, while measured post-attitudes are based on visual images of the BMW car in the stimulus ads. According to the dual component model, predominant visual elements of an ad could override existing brand attitudes even for consumers who have the same product attributes beliefs and attitude toward the ad (Mitchell, 1986; Mitchell & Olson, 1981). Therefore, future researchers should consider the different roles of information mode in consumer decision-making processes.

Understanding the role of cross-border SBA is important for scholars and practitioners alike since COO affects product evaluation and purchase intention. Companies design and manufacture global brands in many countries around the world and constantly ask consumers to evaluate them. Thus the fit between the countries is an important element that contributes to the success of the alliance. Marketers and brand managers should formulate an effective alliance strategy to deal with the potential negative country images. In doing so, they will be able to develop more effective marketing campaigns to alleviate the negative impact of COO. This study provides some theoretical and practical explanations of how cross-border SBA works and factors that future work in this area should consider.

Appendix A. Stimulus advertisement examples


