ORIGINAL EMPIRICAL RESEARCH

# Non-local or local brands? A multi-level investigation into confidence in brand origin identification and its strategic implications

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Abstract This article addresses a growing dilemma surrounding the strategic value of perceived brand foreignness (PBF) among consumers in emerging economies. Building on recent research evidence from the brand origin literature, we introduce the concept of confidence in brand origin identification (CBO) and theorize its moderating impact on the value of PBF in explaining and predicting brand evaluation. Using a multi-level modeling technique, this study provides evidence showing that CBO moderates the effect of PBF on consumer evaluations of brand value. Moreover, the moderating influence of CBO is found to be more profound for local than for foreign brands. Managerial implications for building both global and local brands in emerging markets are discussed.

**Keywords** Perceived brand foreignness · Confidence in brand origin identification · Brand value · Emerging market

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## Introduction

One central construct that has emerged recently from the country-of-origin literature is that of "perceived brand nonlocalness or foreignness" (Batra et al. 2000). According to Batra et al. (2000), perceived brand foreignness (PBF) refers to a consumer's perception that a brand is of foreign or non-local origin. As the authors clearly stated, PBF is different from the traditional country-of-origin construct documented in the literature because the latter is associated with one specific country, as is often reflected by the made-in label. Instead, PBF represents more generalized perceptions of a brand as of foreign images or appeals (as opposed to the traditional made-in affiliations). Ample evidence has shown that foreign brands, especially those from Western or other developed countries, benefit from consumer perceptions of non-local brand image associations (e.g., Ger et al. 1993; Sklair 1994). It has been explained that foreign image appeals are generally associated with a glamour that local brands cannot compete with, especially among consumers in developing countries (Alden et al. 1999; Batra et al. 2000).

However, foreign image associations are not a privilege that only foreign brands have; they may also be attached to local brands. For example, most Chinese consumers may perceive Lenovo (a Chinese brand that acquired the personal computer division of IBM in December 2004) to be high in brand foreignness due to its prominent appearance in the global market. Similarly, Eckhardt (2005) revealed that a local pizza brand in India was strongly associated with "something foreign" due to local consumers' impressions of pizza as a foreign product category. In fact, an increasing number of firms in developing markets have attempted to take advantage of the equity of foreign (mostly Western) country images, and to build and enhance the appeal of their products by using foreign-sounding brand names, employing foreign symbols in advertising, or using foreign languages on product labels.

Today, more and more firms from emerging economies are using foreign image association strategies as important components of their branding and marketing communication strategies. These firms believe that foreign appeals bring about a higher quality perception and increase social status for their brands (e.g., Eckhardt 2005; Ger and Belk 1996; Zhou and Belk 2004; Sklair 1994). In China, for instance, a study of printed advertisements for local brands in 130 nationally distributed consumer magazines has shown that over 12% of the advertising models portraved were judged to be non-Chinese (Zhou and Meng 1998). Another study reported that 36% of newly registered brands were said to have a foreign-sounding name (Zhou and Belk 2004). C'estbon is a noticeable example. C'estbon is a Chinese brand of bottled water that uses non-Chinese characters and pronunciation to convey connotations of something foreign. This phenomenon has been described as "imagined cosmopolitanism" (Schein 2001).

As a reflection of this phenomenon, recent research indicates that foreign brands have experienced mixed fortunes in some of the fast-developing markets. Although foreign brands may still be associated with an inherent glamour that makes local brands envious, there is a growing skepticism about this automatic cachet because consumers have started to wonder which brand is of local or non-local origin (Balabanis and Diamantopoulos 2008; Samiee et al. 2005). As a result, there seems to be a growing backlash against foreign brands in the world's fastest-growing emerging markets such as China (Ewing et al. 2002; Crocker and Tay 2004). Global branding or localization strategies pursued by international players seem to further deepen consumer confusion regarding the authenticity of foreign image appeals (Neff 1999; Zhang and Schmitt 2001). To make things worse, the proliferation of foreignlooking local rivals and their associated lower-thanexpected quality performance may have further attenuated consumers' trust in perceived brand foreignness (PBF), thereby reducing brand value. According to a recent report by The Boston Consulting Group (2008), some consumers find foreign brand images no longer distinguishable or diagnostic in both product evaluations and subsequent purchase decisions. This is a potentially neglected outcome of local versus non-local brand confusion, an issue recently raised in the fast-changing marketplace of emerging economies.

Thus far, there has been a lack of research addressing the mixed picture of PBF. To fill this gap, we have designed this study to address the following questions: (1) To what extent is perceived foreignness of a brand relevant and diagnostic to consumer evaluations of the brand? (2) Would foreign or local brands benefit more from perceived brand foreignness? (3)

How could we enhance the value of the perceived foreignness of a brand? To address these questions, we introduce a construct referred to as confidence in brand origin identification (CBO) and conceptualize it as a moderator that affects the effects of PBF on consumer evaluation of brand value. Reflecting consumers' limited knowledge of actual brand origin (Balabanis and Diamantopoulos 2008; Samiee et al. 2005), CBO is defined as a consumer's belief in his/her judgment or attribution of a brand's country of origin. In a marketplace filled with uncertainty about actual brand origins due to the imitation strategies of local rivals and/or the localization movement of international players, consumers' subjective attribution of brand origin is expected to enhance the value of PBF on brand evaluation. This could explain how consumers interpret things related to perceived country association when the rise of global branding and various misleading signifiers of brand origin information are prevalent in the global marketplace (Aaker and Joachimsthaler 1999; Heslop and Papadopoulos 1993; Thakor and Kohli 1996).

Specifically, drawing upon the brands as signals literature (Erdem and Swait 1998) and the accessibilitydiagnosticity theory (Feldman and Lynch 1988), the present study proposes that the signaling function of PBF increases its diagnostic value for brand evaluations when consumers are more confident in their attributions of a brand's origin. In other words, we anticipate CBO to be a distinct construct that is likely to enhance the effects of PBF on brand value in a marketplace that is increasingly confused with various foreign image appeals. To our knowledge, the research presented here represents the first effort to advance our understanding of the boundary conditions of the effects of PBF on brand evaluation.

Beyond this, we also intend to contribute to the literature methodologically by employing a multi-level modeling technique to test the proposed effects of PBF and CBO. Previous research in this area has largely neglected the nested structure of the brand evaluation data. A common practice used in most prior studies is having each respondent assess multiple brands and then researchers determine the brands' country-of-origin effects using aggregated measures of brand evaluations, attitudes, and/ or purchase intentions across all participants. One of the problems with aggregation is that all individual-level information is lost and the statistical analysis loses power (Judge et al. 2006). According to Rust et al. (2004b), the value of a brand is highly individualized. Assigning an aggregated value across consumers obscures the fact that brand value or equity is idiosyncratically perceived by the customer; thus, it is hardly a useful marketing management tool (Rust et al. 2004a). In the present study, we overcome this problem by separating the effects of consumer responses that are caused by individual differences from those that are caused by brand characteristics.

The paper is organized as follows. Drawing upon the brands as signals literature and accessibility-diagnosticity theory, we develop a research framework that includes the effects of PBF and CBO on brand value at the individual level (level 1), and the effects of brand category (foreign vs. local brands) at the brand level (level 2). Then a two-stage analysis of empirical tests is reported. At the first stage, a pre-test was performed to test the core of our research framework: the moderating role of CBO in the impact of PBF on brand evaluation. At the second stage, we conducted a main study to test our hypotheses using a multi-level modeling technique. Finally, the implications of the findings are discussed.

#### Conceptual foundation and hypotheses

#### Individual-level effects

Perceived Brand Foreignness (PBF) Alden et al. (1999) pointed out that foreign culture brand positioning is a viable marketing communication strategy to enhance brand value across different countries of cultures. From a theoretical standpoint, PBF is a key antecedent to the value of brand equity, which involves a set of functional and imagery associations with non-local appeals of the product (Keller 2003; Maheswaran 1994; Papadopoulos 1993). Marketers and advertisers have put tremendous effort into associating their brands with desirable international images, such as using a foreign or global brand positioning strategy through advertising (Alden et al. 1999). According to Alden et al., associating brands with foreign images is one of the general dimensions that are relevant to brand positioning strategies in international markets. Unlike that which was previously manipulated in the vast majority of the country-of-origin literature (such as the made-in label), PBF is not confined to any particular country stereotypes; rather, it represents more generalized perceptions of a brand being "of foreign origin", "made somewhere in Europe", or "not from here" (Batra et al. 2000; Samiee et al. 2005). In the study by Leclerc et al. (1994), PBF was conveyed through foreignsounding brand names, whereas in Batra et al.'s work (2000), PBF was considered inherent to brand communication strategies featuring a brand's foreign appeals. The research evidence from the existing literature indicates that PBF has a positive impact on brand beliefs and attitudes (Batra et al. 2000; Eckhardt 2005; Leclerc et al. 1994). Thus, it should add to brand value as perceived by consumers (Shocker et al. 1994; Pappu et al. 2007). In particular, this image-enhancing effect on consumer perceptions of brand superiority is considered more pervasive in developing or emerging countries (Batra et al. 2000).

In line with the general predictions of previous studies, we expect that a brand can benefit from its foreign appeals among consumers in emerging economies. Thus, the following hypothesis is proposed:

H1 A higher level of perceived brand foreignness (PBF) leads to a higher level of consumer brand value perception.

Confidence in Brand Origin Identification (CBO) In addition to PBF, we also anticipate that confidence in brand origin identification is positively related to brand evaluations. In the country-of-origin research, brand origin is widely assumed to be a relatively transparent information cue that is potentially important in determining a brand's country association. Especially in the age of global production and outsourcing, brand origin has been put forward as the only stable information about a product's country association since products/brands have been increasingly produced by or sourced from multiple country locations (Pharr 2005; Jin et al. 2006). These products are known as "hybrids" (e.g., Chao 1993; Han and Terpstra 1988). Given the rise of global branding and corporations' use of multiple countries for components and manufacturing and/or assembling products, the actual geographical origin of a brand serves as a "protected designation of origin" that is integral to a brand's identity and can be used to ensure a product's authenticity (Pharr 2005). In line with this reasoning, brand origin is defined as "the country in which the headquarters of the brand's parent firm are located, regardless of where the brand is manufactured (e.g., Nike is a U.S. brand, though none of its products are actually produced in the United States)" (Balabanis and Diamantopoulos 2008, p. 41). In fact, previous researchers have long pointed out the importance of using the headquarters of the brand's parent firm as an indicator of brand origin, rather than the made-in locations (e.g., Samiee 1994; Thakor and Kohli 1996; Liefeld 2004; Samiee et al. 2005).

In reality, however, the origin information for most brands may not be readily accessible either because global marketers have the desire to mask the origins of their brands or the globalization of firms and the cross-border acquisition of brands complicate the nature of brand origin (see Aaker and Joachimsthaler 1999; Shimp et al. 2001). As a result, brand-origin knowledge tends to be vicariously acquired information (Samiee et al. 2005) which is largely derived by consumers themselves as a consequence of marketplace experiences and word-of-mouth flows (Maheswaran 1994; Lee and Ganesh 1999; Paswan and Sharma 2004). Consumers often have to be "amateur detectives" to identify the brand origin information of many products or must frequently use the brand name to infer the real origin of the product (Liefeld 2004; Balabanis and Diamantopoulos 2008).

Given that many consumers are unable to identify brand origins correctly, researchers have pointed out that the true importance of brand origin information could be unreasonably overestimated in the vast majority of prior country-of-origin studies (Samiee et al. 2005). For this reason, we believe that consumer confidence in a brand's origin identification (CBO), as opposed to the brand's actual origin, plays an important role in their brand evaluations. Since brand origin may be merely perceived, either correctly or incorrectly (Balabanis and Diamantopoulos 2008; Samiee et al. 2005), brand-originrelated beliefs, such as CBO, held by consumers may have real influence in brand evaluations.

*Main effect of CBO* As part of the consumer knowledge structure, CBO is relevant to brand evaluation because confidence in brand origin self-identification is likely to diminish evaluation difficulty, and therefore reduce perceived risk (Erdem and Swait 2004; Urbany et al. 1989). This is especially true in a marketplace where brand origin confusion is prevalent. Balabanis and Diamantopoulos (2008) shed light on the possibility of such influence by reporting that consumers tend to have more positive views of a brand when they are able to associate the brand with a specific country of origin (as compared with those that are in the "don't know" category of brand origin identification). Thus, CBO is likely to be useful or diagnostic in brand evaluations (Feldman and Lynch 1988).

The diagnostic role of CBO may also be explained by brand credibility theory (Erdem and Swait 1998); i.e., CBO can be seen as a signal of brand credibility. Researchers have long regarded brand credibility as an important signaling factor related to consumer evaluations of brands (Erdem and Swait 1998). It has been shown that the clarity and credibility of brands (as signals of product positions) increase perceived quality, decrease consumer perceived risks, and increase consumer views and commitment to the brands (Erdem and Swait 1998, 2004). Such a signaling theory of brand effects suggests that the believability of product positioning information contained in a brand is related to consumer perceptions of brand value. By saving the cost of searching for additional brand information and reducing the uncertainty of the perceived risks involved (Erdem and Swait 2004; Urbany et al. 1989), CBO is expected to enhance positive associations (or expected benefits) with the brand, thereby leading to increased brand evaluations. This signaling effect is likely to be more salient in emerging markets because of the higher levels of uncertainty and risk involved in most product positions. Consequently, we hypothesize that:

H2 A higher level of confidence in brand origin identification (CBO) leads to a higher level of consumer brand value perception.

Interaction between PBF and CBO Besides its main effect, the diagnostic value of CBO is expected to moderate the

PBF effects such that the PBF effects would be stronger as CBO increases. Consumer confidence is related to the strength of brand knowledge embedded in a consumer's belief structure (Keller 2003; Ostlund 1973). The more confident consumers feel in their judgment of the target brand, the more impact the judgment will have on their purchase of that brand (Ostlund 1973; Bennett and Harrell 1975; Laroche et al. 1996). This phenomenon can be explained by the accessibility-diagnosticity framework proposed by Feldman and Lynch (1988). That is, if a belief is associated with a higher level of conviction, that belief is likely to be more accessible and diagnostic for consumer judgments. In line with this reasoning, prior research has shown that a knowledge base with strong attitude certainty is highly accessible and diagnostic for brand evaluations (Berger 1992), and can enhance the effect of a specific attitude regarding brand equity (Aaker 1991; Keller 1993).

Further, evidence suggests that although foreign appeals may still be associated with inherent glamour in most developing countries, there is a growing skepticism about this automatic cachet partly due to the imitation strategy pursued by local brands (Zhan and Murray 2001; Zhou and Hui 2003). Additionally, the localization strategy used by multinationals seems to have further deepened consumer uncertainty or lack of clarity about a brand's foreign culture positioning (Keller and Moorthi 2003; Quelch 1999; Zhang and Schmitt 2001; The Boston Consulting Group 2008). As a result, some consumers may associate foreign images of a brand with less credible product quality. Seen as the believability of the product position information contained in a brand, CBO may be able to reinforce consumers' perceptions of firms' willingness and/or perceived ability to deliver brand promises, and therefore enhance the relevance of PBF to brand evaluations. Also, consistent with Feldman and Lynch's (1988) accessibility-diagnosticity theory, product beliefs or knowledge held with certainty (e.g., CBO) can drive consumers to perceive the diagnosticity of other brandrelated information (e.g., PBF) as relatively high. We therefore hypothesize that:

H3 The effects of perceived brand foreignness (PBF) on consumer perceptions of brand value are greater when consumer confidence in brand origin identification (CBO) is high than low.

#### Brand-level effects

*Main effect* As discussed earlier, the variance in brand evaluation can also be attributed to brand-specific characteristics, such as whether the brand is actually a foreign brand or a local one. We would expect that in most developing countries, foreign brands are generally in an

advantageous position when competing with local brands for the creation of more positive brand perceptions. The rationale underlying this expectation is that consumer perceptions of brand superiority can be driven by the distinction between global brands (or those internationally recognized brand names) and local brands (or those largely recognized by domestic consumers) (Steenkamp et al. 2003). The many roles that global brand names play in consumer perceptions of brand value are found to materialize through multiple mechanisms, such as perceived product quality, brand prestige, cultural capital, social responsibility, and a sense of belongingness to the global consumer segment (Özsomer and Altaras 2008; Steenkamp et al. 2003). Although it has not been directly examined by previous researchers, we believe it reasonable to assume that in the major emerging market of China, consumer perceptions of brand value tend to favor foreign or global brands more than local ones. This is in line with brand signaling theory ("brands as signals") and its applications in global markets (Erdem et al. 2006).

The competitive advantage of foreign brands lies in not only country image associations, but also other brand-related beliefs (e.g., product performance and attributes). With a strong global brand, multinational corporations can penetrate many different countries and build on their superior brand images in the minds of local consumers (Holt et al. 2004). The distinctive images created by multinational corporations make foreign brands generally more desirable in developing countries (Ger and Belk 1996; Wang et al. 2004). Based on this discussion, we hypothesize that:

H4 Foreign brands are generally perceived as having a higher level of brand value than local brands.

Cross-level Effect Apart from the main effect, we also predict a cross-level interaction that involves the differential impact of PBF and CBO on brand evaluations (the individual-level effects) across foreign and local brand categories (a brand-level variable). Specifically, we expect that the enhancing function of CBO on the PBF effect is less profound for foreign brands than for local ones. As stated earlier, product beliefs or knowledge held with certainty (e.g., CBO) can make consumers perceive the diagnosticity of other brand-related information (e.g., PBF) as relatively high (Feldman and Lynch 1988). For foreign brands, however, the enhancing function of CBO is less likely to be effective because there is a congruency between perceived brand image ("foreignness") and country image ("non-local"). In this case, CBO does not provide much additional diagnostic power to the effect of PBF. Notably, this argument is in line with Leclerc et al.'s (1994) finding that brand-country image congruence is often regarded as redundant, thus resulting in less significant enhancement in consumer perceptions of brand value. Conversely, for local brands, CBO is likely to augment the effect of PBF as the inconsistency between brand and country images makes brand evaluation harder and more uncertain. CBO, in this case, adds credibility to those local brands that "dress themselves as foreign" while maintaining a strong footprint with local identity. The rationale is analogous to the role of attribute strength in enhancing consumer responses to country-of-origin stereotypes documented by Maheswaran (1994). We therefore hypothesize that:

H5 The enhancing function of CBO in the effects of PBF on consumer perceptions of brand value will be less profound for foreign than for local brands.

Hypotheses H1 through H5 are summarized by a two-level framework shown in Fig. 1. The empirical tests consisted of two stages. In the first stage, we conducted a pre-test to obtain baseline evidence about the core of our framework— the boundary condition of CBO on the effect of PBF with regard to brand evaluations. Building on the initial evidence from the pre-test, we then performed the second stage of analysis—a main study to test hypotheses H1 through H5 using a multi-level modeling approach.

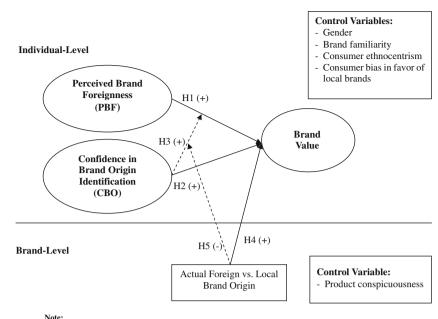
## **Pre-test**

#### Empirical context: China

China was selected as an appropriate place for the purpose of our investigation because in recent years there have been growing concerns about a potential backlash against foreign brands in the country (Ewing et al. 2002; Crocker and Tay 2004). Undergraduate students from a major university in China were recruited to participate in the pretest. The targeting of young people for their brand perceptions and evaluations has become both important and challenging for many international firms around the world (O'Cass and Lim 2002). China is no exception, where young people have been described as part of China's millions of "newly rich, fashion-savvy, and globally-minded" consuming generation (as opposed to the "saving generation" of their parents) (Smith and Wylie 2004; Hung et al. 2007). From a theoretical standpoint, the relatively homogeneous nature of the respondents enabled us to control for the influence of other individual differences that are beyond our investigation.

# Selection of product categories and brands

To begin with, we conducted two separate sessions of focus group interviews with 10 respondents in each session. The task of the first session was to explore the product Figure 1 A multi-level model of brand value.



Dashed lines represent moderating effects.

categories and brands that were relevant and familiar to the undergraduate student population. To increase the validity of the research on product-country image effects, the categories needed to vary across the nondurable-durable continuum (Batra et al. 2000). Each category also needed to consist of viable local (Chinese) and non-local competing brands. A list of brands was created through the first focus group interview; this was followed by field observations in two nationally distributed supermarket stores to verify the availability of these brands. The second focus group interview was used to validate and finalize the brands to be included in the pretest. As a result of our focus group discussions and field observations, a total of 67 brands (45 foreign and 22 domestic) across seven product categories (toothpaste, shampoo, bottled water, beer, casual clothes, athletic shoes, and cell phones) were selected. Among the selected brands, there were internationally recognized names such as Nike, Nokia, and Motorola, as well as the popular domestic brands including Li Ning (athletic shoes), Wahaha (bottled water), and Tsingtao beer.

# Data collection

Following the results of our focus group study, we developed and administered a questionnaire survey to a convenience sample of 400 undergraduate students at the same university. The survey was in Chinese. The back translation method, in which the survey was first translated from English to Chinese and then back again to English, was applied to ensure the idiomatic equivalence of the Chinese and English versions.

The respondents were approached by our two research assistants during early evening hours in their hostels on

campus. They were given a gift incentive for completing the questionnaire in which the 67 brands were listed and the respondents were asked to evaluate each brand using a series of single-item measures on brand quality, brand prestige, purchasing value, and product workmanship. For instance, a respondent would be asked: "On a scale of 1 to 7, where 1 = very low and 7 = very high, how would yourate the quality of \_\_\_\_\_ (brand name) cell phone?" Then, a composite score was created by averaging the ratings on these evaluative attributes to form the dependent variable, brand value. In addition, respondents were asked to indicate their perceptions of each brand's PBF by responding to the question, "What do you think is the culture association of this brand?" where 1 = domestic (Chinese) brand; 2 = international joint-venture brand; and 3 =foreign (non-local) brand. According to Lim and O'Cass (2001), this question captures consumers' generalized perceptions of a brand as something foreign or with domestic (Chinese) culture connections. Following that, respondents were asked to identify the brand's country of origin and indicate the degree to which they were confident in their judgments using a 5-point scale (from 1 = not*certain at all'* to 5 = 'absolutely certain'). This measure was used as an indicator of CBO.

#### Analysis and results

The data were analyzed in two ways using the OLS regression method. Following prior researchers (e.g., Batra et al. 2000), the first approach we used was to analyze the data at the aggregated level (the brand level in this case). We first developed brand-level scores by aggregating the

responses of the 400 survey participants for each brand. Perceived brand foreignness was derived using the percentage of respondents who considered a brand to be non-local (as opposed to local). Likewise, confidence in brand origin identification, brand familiarity (used as a control variable), and brand value were derived for each of the 67 brands using responses from the 400 participants. According to Batra et al. (2000), this approach minimizes any extraneous effect that might have been caused by variations in the responses of individual respondents. After the aggregated measures were derived (n=67), we regressed brand value on PBF, CBO, and the interaction term PBF \* CBO. Results showed that the effect of PBF on brand value is in the hypothesized direction, but does not reach statistical significance (b=.152, t=.936, p>.10). As expected, CBO was found to be positively related to brand value (b=.594, t=3.11, p<.01), as was the interaction term of PBF \* CBO (b=.720, t=5.22, p < .001). These variables jointly explain 57.9% of the variance in brand value.

The second approach we used was to analyze the data at the disaggregated level (the individual level in this case). In this approach, the data contains 26,800 ( $67 \times 400$ ) observations, 67 observations per study participant. Results of the regression analysis indicate that brand value is positively related to PBF (b=.184, t=10.16, p<.001), CBO (b=.138, t=12.32, p<.001), and the interaction term PBF \* CBO (b=.051, t=5.27, p<.001). These variables jointly explained 22.3% of the variance in brand value, after the effect of brand familiarity was controlled. Taken together, the results of our pretest are largely consistent with our research framework, which indicates that PBF and CBO play important roles in predicting consumer evaluations of brand value and that the effect of PBF is moderated by CBO.

While the findings of the pre-test provided a rationale for applying our theoretical framework and testing the proposed hypotheses, several methodological issues were brought to our attention. First, the key constructs, such as PBF and CBO, were assessed by single-item measures which did not allow us to test their reliability and validity. Second, there might be substantial response bias due to respondent fatigue (it was a lengthy questionnaire with a set of 67 brands). Third, out of the 67 brands included in the questionnaire, 45 brands (approximately 67%) were foreign and most of them were well-known internationally. The dominance of foreign brands may influence the results due to the unbalanced design of the brand stimuli. Fourth, additional control variables would be needed for a more robust test of the research hypotheses. Finally, the difference in the results of the two separate levels of analysis (brand-level vs. individual-level) indicated the importance of using a multi-level analysis to disentangle the brand-level variance from the individual-level variance and to introduce explanatory variables in each level. These issues were addressed in the main study described below.

## Main study

Selection of product categories and brands

Two new focus group interviews (12 undergraduate participants in each group; one group for the selection of brand stimuli and the other group for verification purposes) were conducted to ensure that our selection of the product categories and brands met the following five criteria: 1) the products are relevant to the target student population, 2) the products vary across the nondurable-durable continuum, 3) the products represent different levels of the conspicuous consumption experience, 4) the brands in each product category (both foreign and local) have a varying degree of familiarity and prestige, and 5) all brands were available in the Chinese market at the time the research was conducted. Each focus group session lasted about 2 h.

As a result of these focus group interviews, six product categories were used in the main survey, including cell phones, athletic shoes, USB flash drives, toothpaste, bottled water, and microwave ovens. Our focus group discussions indicated that conspicuous symbols of consumption were associated with cell phones, athletic shoes, and bottled water, whereas inconspicuous consumption was associated with the toothpaste, USB flash drives, and microwave ovens. Each category consisted of six brands, with three foreign and three local (Chinese) brands (see Table 1 for details).

# Data collection

Our main study surveyed the views of a sample of undergraduate students at a major university located in one of the most developed regions of China. Geographically, the survey location is among the first-tier markets for international brands within the country. We made an additional effort to make sure the translation of the established measurement items was free of linguistic confounds. Specifically, two judges who were not aware of the purpose of this research were recruited to compare the original English and back-translated English versions. The judges agreed that 94% of items conveyed the same meaning in the two versions. Based on suggestions from the two judges, we made minor modifications on the Chinese version in the main study.

We used a balanced design that included 18 foreign brands and 18 local brands across six product categories; each category consisted of three foreign and three local brands. Following the data collection approach used by previous researchers (Batra et al. 2000; Steenkamp et al. 2003), each respondent answered questions concerning a subset of brands, with three brands (two foreign and one local or vice versa) from each of the six product categories.

 Table 1
 Product categories and brands in the main study

Product Category	Brands				
	Foreign	Domestic			
USB Flash Drives	Kingston; SanDisk; HP	Netac; Aigo; Newsmy			
Cell Phones	Nokia; Samsung; Sony-Ericsson	Bird; Dopod; Amoi			
Athletic Shoes	Nike; Adidas; Converse	Li-Ning; Anta; XTEP			
Toothpaste	Colgate; Crest; Darlie	Zhonghua; Tianqi; LSL			
Bottled Water	Danone; Evian; Nestle	Peasant's Springs; Robust; C'estbon			
Microwave Ovens	Panasonic; Sanyo; LG	Galanz; Midea; Gree			

Thus, the total number of brands evaluated by each respondent was 18, nine foreign and nine local. In this way, respondent fatigue was largely reduced without sacrificing the amount of data needed for our investigation. Two versions of the questionnaire were developed: two foreign brands plus one local brand were used in version A, and one foreign brand plus two local brands were used in version B. In each version, the three brands of each product category were rotated. To test whether the two versions of survey would create variances in brand value, we treated survey type (version A vs. B) as a control variable in the level-1 model. Its main effect, as well as its interactions with PBF or CBO, was not found to affect brand value (all ps>.10). Therefore, this variable was dropped from the model and the data from both versions were pooled together in the further analysis.

The survey was conducted during regular class hours with the permission of the university administrator and the individual instructors. A total of 210 respondents completed the surveys, with 99 people using version A and 111 using version B. The results of the basic demographic information suggested that the sample was representative of the university student population in terms of gender (54.1% females), and age (an average age of 21.8, ranging from 19 to 31 years old). Because in testing the level-1 model we were interested in the disaggregated responses to each brand, these responses became the unit of analysis and the sample size in level 1 was then 3,780 ( $18 \times 210$ ) observations. In testing the level-2 model, brands became the unit of analysis; therefore, the sample size in level 2 was 36 brands.

#### Measures

Dependent variable The dependent variable, brand value, was assessed through three dimensions, namely brand quality, brand leadership, and brand social signaling value. Multiple items were used to measure each of the three dimensions with a 7-point Likert scale (from 1 = `strongly disagree' to 7 = `strongly agree'). The measures of brand quality and social signaling value were drawn from Sweeney and Soutar (2001), and the brand leadership measures were

taken from Cheng et al. (2007), who used a modified version of the original scale developed by Aaker (1996). As evident in Table 2, the measures had adequate reliabilities and all Cronbach's alphas were above the 0.70 threshold.

Independent variables PBF and CBO were the two individual-level independent variables. PBF was measured through five items on a 7-point semantic differential scale. These items were adapted from Batra et al. (2000) and Steenkamp et al. (2003). The original scales tap into consumer perceptions of a brand's non-local or global image associations. We adapted these items to measure the international outlook, foreign appeals, and cultural meanings associated with the target brand, not the brand's country-of-origin, per se. CBO was assessed through two items on a 7-point semantic differential scale: 1) I'm not certain at all about my identification of this brand's country of origin /I'm very certain about my identification of this brand's country of origin, and 2) I am of low level of confidence in my identification of this brand's country of origin/I am of high level of confidence in my identification of this brand's country of origin, following the question, "What country do you think this brand originated from?" These items were developed based on similar measures used for attitude strength (Krosnick et al. 1993). In addition to these independent variables at the individual level, brand category (foreign vs. local) was used as a brand-level independent variable. A dummy variable was used to capture brand category (0 = `local brands' and 1 = `foreign brands').

*Control variables* To provide a more rigorous test of our hypotheses, several control variables were incorporated into our model. At the individual level, we included consumer ethnocentrism, consumer bias in favor of local brands, brand familiarity, and gender. Consumer ethnocentrism was controlled for because of its prominence in the extant country-of-origin literature and its continued relevance to the global market environment (Balabanis and Diamantopoulos 2004; Batra et al. 2000; Klein 2002; Samiee et al. 2005). According to Shimp and Sharma (1987), consumer ethnocentrism refers to the consumer belief that it is inappropriate, or even immoral, to purchase foreign products because of the

# Table 2 Measures of key constructs in the main study

Constructs	Items	Sources		
Dependent Variables				
Brand quality	<ol> <li>This is a very well-made brand.</li> <li>This brand shows a very high level of overall quality</li> </ol>	Drawn from Sweeney and Soutar (2001)		
	3. This brand has poor workmanship*. (reverse)			
	4. This brand has consistent quality.			
Brand leadership	<ol> <li>This is the most innovative brand in the market.</li> <li>This is the leading brand in the market.</li> </ol>	Drawn from Aaker (1996) and Cheng et al. (2007)		
	3. This brand is growing in popularity			
	4. This is the most popular brand in the market. (new item)			
Brand social signaling value	<ol> <li>This brand would improve the way I am perceived.</li> <li>This brand would make a good impression on other people.</li> </ol>	Drawn from Sweeney and Soutar (2001)		
	3. This brand would help me feel trendy/up-to-date. (new item)			
	<ol> <li>I think it is particularly appropriate to use this brand in social contexts. (new item)</li> </ol>			
Independent Variables				
Perceived brand foreignness (PBF)	<ol> <li>I don't think consumers in other countries buy this brand/I do think consumers in other countries buy this brand.</li> <li>To me, this brand represents something foreign/To me, this brand represents something Chinese* (reverse scale)</li> </ol>	Adapted from Batra et al. (2000) and Steenkamp et al. (2003)		
	3. I associate this brand with things that are Chinese/I do not associate this brand with things that are Chinese.			
	<ol> <li>The appeal of this brand is a very good symbol of foreign culture/The appeal of this brand is not a very good symbol of foreign culture* (reverse scale)</li> </ol>			
Confidence in brand origin identification (CBO)	<ol> <li>I am of low level of confidence in my identification of this brand's country of origin/I am of high level of confidence in my identification of this brand's country of origin.</li> <li>I'm not certain at all about my identification of this brand's country of origin /I'm very certain about my identification of this brand's country of origin.</li> </ol>	New scale, developed from Krosnick et al. (1993).		
Control Variables				
Brand familiarity	1. This brand is very unfamiliar to me/This brand is very familiar to me.	Drawn from Steenkamp et al. (2003)		
	<ol> <li>I'm not at all knowledgeable about this brand/I'm very knowledgeable about this brand.</li> </ol>			
	3. I have never seen advertisements about this brand in Chinese magazines and mass media such as TV/ I have seen many advertisements about this brand in Chinese magazines and mass media such as TV.			
Consumer ethnocentrism	<ol> <li>Purchasing foreign-made products is un-Chinese.</li> <li>A real Chinese should always buy domestic products.</li> </ol>	Adapted items from Batra et al. (2000), which were selected from the original CETSCALE		
	3. Chinese should not purchase imported goods, because we need to support our own economy.	scale Shimp and Sharma (1987).		
	<ol> <li>Chinese should try not to buy foreign brands whenever possible.</li> </ol>			
Bias in favor of local brands	Domestic brands are in general 1. Poor in overall quality/excellent in overall quality	Drawn from Steenkamp et al. (2003)		
	2. Poor in design and styling/excellent in design and styling			
	<ol> <li>Low degree of technological advancement/high degree of technological advancement.</li> </ol>			
	4. Low level of quality and price ratio/high level of quality and price ratio.			
	<ol> <li>Less connected to the minds and hearts of local consumers/More connected to the minds and hearts of local consumers. (new item)</li> </ol>			
Product conspicuousness	<ol> <li>This product category is associated with social status symbols.</li> <li>Products in this category are often publically consumed goods.</li> </ol>	New scale, developed from Piron (2000)		

need to protect the domestic economy and jobs, and feel proud to be patriotic to one's own country. The effect of consumer ethnocentrism has been widely documented in the extant country-of-origin literature. The 4-item scale used in this study was adapted from Batra et al. (2000), who selected it from the original CETSCALE scale (Shimp and Sharma 1987). This measure was reliable ( $\alpha$ =.97) and the mean score of consumer ethnocentrism was derived for each respondent.

A second control variable at the individual level was consumer bias in favor of local brands. Prior researchers (e.g., Ger 1999; Verlegh 2007) have suggested that there are localized cultural variants that are more in line with local quality needs. Thus, consumer bias in favor of local brands may influence the PBF effects. While we controlled for consumer ethnocentrism specifically regarding ethnocentric views held by the target consumers towards products sourced from foreign countries (Netemeyer et al. 1991; Shimp and Sharma 1987), consumer bias in favor of local brands focuses on the interest of the target consumers in the uniqueness of the brands from their own country (Ger 1999; Steenkamp et al. 2003). As indicated in Table 2, this construct was measured by Steenkamp et al.'s (2003) 5-item scale; an average score was calculated for each respondent ( $\alpha$ =.82).

Furthermore, brand familiarity and gender were also included as control variables in our analyses. Brand familiarity has long been regarded as an important factor influencing product evaluations and preferences. When testing brand origin effects, it is desirable to control for potential exogenous influences of brand familiarity (Batra et al. 2000). In this study, brand familiarity was assessed by a scale developed by Steenkamp et al. (2003). A composite score was used for each respondent ( $\alpha$ =.91). Gender was included because previous research suggests that relative to their male counterparts, female consumers tend to rate foreign products more favorably (Wall and Heslop 1986), have more positive views about foreign brand names (Thakor and Pacheco 1997), and exhibit higher levels of brand origin recognition accuracy (Samiee et al. 2005).

At the brand level, product conspicuousness was included as a control variable because previous work has documented the variability of product–country image biases across publicly vs. privately consumed products (see Peterson and Jolibert 1995; Pappu et al. 2007). In emerging markets, consumer purchasing motives and product evaluations tend to vary significantly depending on the (in) conspicuous characteristics of a product type (Piron 2000). It has been found that the desire for foreign goods is generally higher for conspicuous (or publicly consumed) products than for inconspicuous (or privately consumed) products among consumers in developing countries (Wang et al. 2004). In our study, product conspicuousness was captured by a dummy variable, with 0 = '*inconspicuous products*' (toothpaste, USB flash drives, and microwave ovens) and 1 = '*conspicuous products*' (cell phones, athletic shoes, and bottled water).

Analytical strategy: multi-level modeling

Our hypotheses were tested through the MPlus software (L.K. Muthén and B.O. Muthén 2007). MPlus is an advanced application of structural equation modeling (SEM) used to analyze data that has a nested structure. An advantage of using MPlus is that latent constructs can be specified in the model; therefore, the potential bias of the results caused by measurement errors are largely reduced (Bollen and Curran 2006). In this study, we attended to variables at two levels of analysis: (1) the level-1 model that captures individual differences in brand evaluations, and (2) the level-2 model that differentiates one brand from another. In level 1, we addressed the question of whether PBF and CBO actually influence brand value for each brand across individual consumers.

The level-1 equation for brand value is:

$$BE_{ij} = \beta_{0j} + \beta_{1j} (PBF_{ij}) + \beta_{2j} (CBO_{ij}) + \beta_{3j} (PBF_{ij}*CBO_{ij}) + \beta_{controls}FControls_{ij} + r_{ij}$$
(1)

where *i* denotes individuals; *j* indicates brands;  $BE_{ij}$  denotes individual *i*'s evaluation of brand *j*;  $PBF_{ij}$  represents individual *i*'s perceived foreignness of brand *j*;  $CBO_{ij}$ reflects individual *i*'s confidence in the origin identification of brand *j*; *FControls* include individual-level controls such as consumer ethnocentrism, consumer bias in favor of local brands, brand familiarity, and gender.  $\beta_{0j}$  is the intercept, which is allowed to vary across *j* brands;  $\beta_{1j}$ ...  $\beta_{3j}$  are the regression slopes for their respective predictor variables, which are also allowed to vary across brands; and finally,  $r_{ij}$ captures the individual-level error term, with a mean of zero and variance  $\sigma^2$ .

To take advantage of the MPlus software, BE, PBF, and CBO are specified as latent factors in the model, whereas the responses of all control variables (except for gender) are averaged to ease the model estimation. Following Raudenbush and Bryk's (2002) suggestion, all continuous measures in the level-1 model (including the indicators of each latent factor) were group-mean centered in order to ensure numerical stability and avoid model misspecification.

The variation in each of the  $\beta$  coefficients ( $\beta_{0j} \dots \beta_{3j}$ ) is predicted by the level-2 models which incorporate brand

category (foreign vs. local brands) as an explanatory variable. Therefore, level-2 models were specified as follows:

$$\beta_{0j} = \gamma_{00} + \gamma_{01} (BC_j) + u_{0j}$$
(2a)

$$\beta_{1j} = \gamma_{10} + \gamma_{11} (BC_j) + u_{1j}$$
 (2b)

$$\beta_{2j} = \gamma_{20} + \gamma_{21} (BC_j) + u_{2j}$$
 (2c)

$$\beta_{3j} = \gamma_{30} + \gamma_{31} (BC_j) + u_{3j} \tag{2d}$$

where  $BC_j$  denotes brand category (0, local brands; 1, foreign brands);  $u_{qj}$  (q = 0,...,3) are errors normally distributed over respondents, each with an expected value of 0, variance  $\tau_{qq}$ , and covariance  $\tau_{qq'}$  (q, q' = 0,...,3).

Substituting Eqs. 2a-2d into Eq. 1 yields the following combined model, which was estimated to test the hypotheses:  $BE_{ij} = \gamma_{00} + \gamma_{01}(BC_j) + \gamma_{10}(PBF_{ij}) + \gamma_{11}(BC_j)$  $(PBF_{ij}) + \gamma_{20}(CBO_{ij}) + \gamma_{21}(BC_j)(CBO_{ij}) + \gamma_{30}(PBF_{ij}*CBO_{ij}) + \gamma_{31}(BC_j)(PBF_{ij}*CBO_{ij}) + \gamma_{controls}FControls_{ij} + error$ 

#### Analysis and results

Assessment of measures The descriptive statistics of the constructs are shown in Table 3. We assessed the reliability of the individual items by inspecting the loadings of the items on their corresponding construct and their internal consistency values (Fornell and Larcker 1981). The internal consistency values for all constructs were good, exceeding the 0.70 guideline.

We used the following four methods to assess the convergent and discriminant validity of the constructs in the level-1 model. First, the square root of the average variance extracted (AVE) of all constructs was much larger than all other cross-correlations. Second, all AVEs were well above 0.50, which suggests that the constructs captured much higher construct-related variance than error variance. Third, the correlations among all constructs were all well below the .90 threshold, which indicates that all constructs were distinct from each other. Fourth, all items loaded highest on their intended constructs with all factor loadings greater than 0.70 (all t-values are significant). These findings suggest that the constructs had adequate convergent and discriminate validity.

It is theoretically sound to treat brand value as a second order factor in the model, as brand quality, brand leadership, and brand social signaling value are highly

Constructs	Mean (STD) Cronbach's $\alpha$	Cronbach's $\alpha$	1	2	3	4	5	9	7	8	6	10	11
1. PBF	4.50 (1.56)	.83	68.										
2. CBO	4.47 (2.12)	.95	05**	.93									
3. Brand Familiarity	3.97 (1.81)	.91	.16***	.39***	<b>06</b>								
4. Bias in Favor of Local Brands	3.53 (1.04)	.82	05**	.08***	.12***	.85							
5. Ethnocentrism	2.46 (1.21)	.97	09***	00	.08***	.37***	.95						
6. Gender	0.51 (0.49)	I	.03	.06*	.02	.12***	01	I					
7. Brand Leadership	4.43 (1.42)	.94	.36***	.21***	.57***	$.10^{***}$	.04*	.04*	.93				
8. Brand Quality	4.59 (1.40)	96.	.37***	.23	.53***	.09***	01	.05**	.83***	96.			
9. Brand Social Signaling Value	4.35 (1.39)	.94	.37***	.19***	.47***	.12***	.12***	.02	.77***	.79***	.92		
10. Product Conspicuousness	0.50(0.50)	I	00	$.10^{***}$	.05**	00.	00.	00.	.00	04*	.02	I	
11. Brand Category	0.50 (0.50)	I	.40***	08***	.09***	.01	.02	01	.02	.19***	.20***	.20***	Ι

**Table 3** Descriptive statistics, correlations, and average variance extracted in the main study

correlated. In our data, the correlations among these three constructs ranged from .77 to .83. To provide a rigorous test of whether a second order factor structure fits with our data, we compared one model in which the three dimensions of brand value were specified as first order factors were specified as reflective measures of a second order factor. The results show that these two measurement models have identical goodness-of-fit indices, with  $\chi^2(51)=64.3$ , p<.05,  $\chi^2/df=1.26$ , CFI=0.98, and RMSEA=.021. Therefore, we used the second order structure of brand value in our further analysis.

The potential threat of common methods bias and multicollinearity among level-1 model factors (PBF, CBO, and three dimensions of brand value) was also evaluated. Harman's one-factor test was performed to assess common methods variance (Podsakoff et al. 2003). The one-factor model of all constructs yielded a  $\chi^2$  of 4837.1, df=135 compared with  $\chi^2=211.7$ , df=128 for the measurement model. Since the one-factor model was significantly worse than the measurement model ( $\Delta\chi^2=4625.4$ ,  $\Delta df=7$ , p<.001), common method bias is not a serious threat to this study. Following the work of Belsley et al. (1980), we assessed potential threats from multicollinearity. The condition number was lower than 15 (CN=7.95), which suggests that multicollinearity is not a threat to the validity of the study's findings.

Partitioning of variance components Before proceeding to test the proposed hypotheses with MPlus, we investigated whether systematic individual- and brand-level variances existed in the criterion variable by estimating a null model. A null model contains no predictors. This model decomposes the total variance of brand value into individual and brand components, and the intercept for the unconditional model represents the average level of brand value across individuals. If no brand-level variance exists in the criterion variable, then a multi-level model is not appropriate because there is only the individuallevel variance to explain (i.e., there is only one level of analysis).

As shown in Table 4, the variance partitioning results indicate that 27.2% [0.326/(0.872 + 0.326)] of the total variance in brand value can be attributed to brand differences, which is statistically significant [ $\tau = 0.326$ , t=5.408, p < .001]. This result suggests two important issues. The first one is that the majority of variance could be observed at the individual level (i.e., one brand evaluated by multiple individuals), rather than at the brand level. The second issue is that multi-level modeling of these data was appropriate and insightful for providing a better understanding of the true sources of the observed variances in the effects of PBF and CBO.

To test hypotheses H1 through H5, we conducted a series of multi-level modeling analyses in which several clusters of predictors were entered in a stepwise manner. This procedure involved testing four models: 1) the individual-level baseline model, which contains only individual-level control variables; 2) the individual-level full model, which includes both individual-level control variables and variables of interest (i.e., PBF, CBO, the interaction term PBF \* CBO); 3) the brand-level baseline model, which consists of all individual-level variables in Model 2, as well as brand-level control variables (i.e., product conspicuousness and its cross-level interaction terms); and 4) the brand-level full model, which comprises all Model 3 variables and brand-level variables of interest (i.e., brand category and its cross-level interaction terms).

Effects of control variables The individual-level baseline model contained only consumer ethnocentrism, consumer bias in favor of local brand, brand familiarity, and gender as control variables but no predictors of interest were added. As shown in Table 4, all the individual-level control variables were found to be significantly associated with consumer evaluations of brand value (consumer bias in favor of local brand: b=.063, t=4.34, p<.001; familiarity: b=.265, t=12.32, p<.001; gender: b=.098, t=3.69, p < .001), except for consumer ethnocentrism (p > .10). These variables jointly explained 23.5% of the total variance in brand value perceptions at the individual level. Interestingly, although consumer ethnocentrism had no direct effect on the responses to brand value, it registered a significant interaction with PBF, which shows that the effect of PBF on brand value perceptions was more positive for individuals with lower levels of ethnocentric tendency (b=-.026, t=-1.99, p<.05). Similarly, there was also a two-way interaction between consumer bias in favor of local brands and PBF (b=-.062, t=-5.92, p<.001), which suggests that the effect of PBF was weaker for individuals who have higher levels of bias in favor of local brands. These findings are consistent with a vast majority of the evidence documented in the literature (e.g., Balabanis and Diamantopoulos 2004; Netemeyer et al. 1991; Sharma et al. 1995).

Testing hypotheses at the individual level After having analyzed the baseline model, a block of individual-level predictors (i.e., PBF, CBO, and the interplay of PBF and CBO) was added to the model to test the proposed hypotheses. Hypothesis 1 predicted that a higher level of PBF would lead to a higher level of brand value perception. The variables entered as the third block (see Table 4) tested this hypothesis. As shown in Table 4, PBF was found to be positively related to brand value (b=.176, t=12.32, p<.001), thus supporting H1. Hypothesis 2 specified that a higher

Table 4 Results of multi-level modeling analysis predicting brand value

Model <sup>a</sup>	Null Individual-le		evel Brand-level			Conclusion
		Baseline	Full	Baseline	Full	
Ethnocentrism		-0.021	-0.013	-0.009	-0.010	
Bias in Favor of Local Brand		0.063***	$0.065^{***}$	0.063***	0.063***	
Brand Familiarity		0.265***	$0.248^{***}$	0.239***	0.238***	
Gender		$0.098^{***}$	$0.078^{**}$	$0.075^{**}$	$0.077^{**}$	
PBF			$0.176^{***}$	$0.176^{***}$	$0.185^{***}$	H1 is supported
СВО			$0.068^{**}$	$0.068^{**}$	0.061**	H2 is supported
PBF * CBO			$0.045^{*}$	$0.045^{*}$	$0.089^{**}$	H3 is supported
Bias in Favor of Local Brand * PBF			$-0.062^{***}$	$-0.056^{***}$	$-0.063^{***}$	
Ethnocentrism * PBF			$-0.026^{*}$	$-0.025^{*}$	$-0.026^{*}$	
Product Conspicuousness				$-0.127^{*}$	$-0.127^{*}$	
Product Conspicuousness * PBF				0.007	-0.003	
Product Conspicuousness * CBO				0.014	0.009	
Product Conspicuousness * PBF * CBO				-0.026	-0.023	
Brand Category					0.219**	H4 is supported
Brand Category * Product Conspicuousness					0.371***	
Brand Category * PBF					-0.037	
Brand Category * CBO					0.039	
Brand Category * PBF * CBO					$-0.111^{*}$	H5 is supported
Individual-level Variance $(\sigma^2)$	.872	.667	.476	.473	.462	
Change in Variance $(\Delta \sigma^2)$		.205	.191			
Proportion of Explained Variance		23.5%	28.6%			
Brand-level Variance $(\tau)$	.326	.325	.320	.291	.182	
Change in Variance $(\Delta \tau)$				.029	.109	
Proportion of Explained Variance				9.1%	37.5%	

<sup>a</sup> PBF = Perceived brand foreignness; CBO = Confidence in brand origin identification

\*\*\*\* *p*<.001; \*\*\* *p*<.01; \**p*<.05

level of CBO would lead to a higher level of brand value perception. Consistent with this expectation, we found that CBO affected brand value positively (b=.068, t=2.43, p<.01). In hypothesis 3, we anticipated that the interplay of PBF and CBO would affect brand value such that the PBF effects would be higher when CBO is high than when it is low. The results showed that the interaction between PBF and CBO was significant and positive (b=.045, t=2.02, p<.05), which indicates that the positive impact of PBF on brand value gets stronger as CBO increases. Therefore, H3 is substantiated by our data.

Testing hypotheses at the brand level Hypothesis 4 predicted that foreign brands are of higher perceived value than local brands. As expected, the main effect of brand category (foreign vs. local) was positive and significant (b=.219, t= 3.07, p<.01), which provides support for H4. Hypothesis 5 predicted that the interplay between PBF and CBO would be weaker for foreign brands than for local ones. As shown in Table 4, the 3-way cross-level interaction term Foreign Brand \* PBF \* CBO was negatively significant (b=-.111, t=-2.39, p<.05). To understand the 3-way interaction effects better, we conducted multi-group analyses by dividing the sample into foreign and local brands. The results indicated that the interaction term PBF \* CBO was positive and significant only for local brands (b=.072, t=2.01, p<.05), but not for foreign brands (p>.10). These results suggest that the moderating influence of CBO on the PBF effects was more profound for local brands than for foreign ones. Therefore, H5 was strongly supported. Consistent with H5, the effect of PBF on brand value was stronger for local brands (b=.173, t=4.95, p<.001) than for foreign brands (b=.128, t=3.08, p<.01).

In addition, it was shown that consumer evaluations of brand value were significantly higher for inconspicuous products than for conspicuous ones (b=-.127, t=-2.24, p<.05). Furthermore, the significant two-way interaction between brand category (local vs. foreign brands) and product conspicuousness (b=.371, t=4.09, p<.001) in our data revealed that for publicly-consumed products (relative

to privately-consumed products), foreign brands are perceived as having a much higher level of brand value than local brands.

# **General discussion**

While multinational companies are strategically positioned to move toward building global brands (i.e., those without any country associations), local firms are increasingly keen on imitating foreign (mostly Western) appeals or symbols for their home-grown brands in emerging markets. These market changes lead to consumer confusion over local vs. non-local brands. Such a market phenomenon reflects a recent concern about the diminishing value of perceived brand foreignness (PBF) documented in the literature (Crocker and Tay 2004; Ewing et al. 2002; Keller and Moorthi 2003; Zhou and Hui 2003). Building on recent brand origin literature, we introduce the concept of confidence in brand origin identification (CBO) and theorize its moderating impact on perceived brand foreignness effects. Our theoretical framework posits that CBO serves as a signal of trust to enhance the positive effects of brand foreignness on consumer perceptions of brand value. Further, our research also reveals that the enhancement function of confidence in origin identification is more profound for local than for foreign brands.

## Theoretical implications

Our study is the first attempt to conceptualize the salience of PBF and CBO as two integral parts of consumer knowledge of brand country associations, which are conceptually different from consumer knowledge of brands' true origins. The findings are deemed relevant to brand foreignness and origin association effects in an increasingly globalized marketplace. Our investigation extends previous work on the generalized preference for foreign appeals in developing countries by suggesting that the unique value perceived in a brand's foreign appeals can be more profound for local (Chinese) brands when consumers perceive the brand as having the credibility to deliver what it promises. The study also adds value to the recent research on brand origin identification (Balabanis and Diamantopoulos 2008; Samiee et al. 2005).

We demonstrate that in fast-changing emerging market environments, brand origin association may be considered an integral part of brand equity because it is likely to build trust in the minds of confused consumers. While the general influence of traditional country-of-origin cues (such as, *made-in* affiliations) may be dissipating in today's global production environment, brands that are associated with a "protected designation of origin" tend to be in a better position to insure a product's credibility and authenticity (Pharr 2005). Taking the extensive country-of-origin literature inside out, Pharr (2005) concluded that little research to date has been done on brand origin associations as integral knowledge of a product's identity and on understanding how such associations may change consumers' product quality evaluations and perceptions of brand value. Our study has advanced the understanding of foreign images and brand origin identification in this growing field of research (Batra et al. 2000; Balabanis and Diamantopoulos 2008; Samiee et al. 2005; Pappu et al. 2007).

From a methodological perspective, our research sheds light on the importance of using a multi-level approach to study brand origin association effects by disentangling the variance of brand value into the individual level (i.e., variability due to heterogeneity among individual consumers) and brand level (i.e., variability due to heterogeneity among brands). Our approach reflects the theoretical position that the value of brands has become increasingly individualized (Rust et al. 2004b). The results demonstrate that the enhancement function of CBO is more profound for local than for foreign brands. As a result, this improved methodology has allowed us to provide useful insights that appear to have been overlooked in prior research.

# Managerial implications

From a managerial standpoint, the results of this study suggest that in an era of global branding and outsourcing, international marketers should try to emphasize not only a foreign culture brand positioning strategy as noted in the literature (Alden et al. 1999), but also consumer associations with brand origin identification. This seems to be particularly true in developing countries, including the fast emerging market of China. Instead of focusing on objective country-of-origin cues, as is prevalent in the vast majority of previous country-of-origin studies, our study suggests that international marketers can take advantage of consumer beliefs in brand origin associations to promote brand value. They may find it more meaningful to create consumer association with the geographic origin where a brand was originally from. In a subtle way, such sources of information as packaging and brand names may be used to foster the consumer's sense of confidence with his/her own belief in a brand's origin association (Schmitt and Pan 1994). When a sense of brand origin association is successfully instilled in the minds of local consumers, brand perceptions are likely to improve as a result of reduced uncertainty and the enhanced effects of perceived brand foreignness.

However, there seem to be no simple solutions for international marketers in developing countries. The stronger moderating role of CBO in the effects of PBF for local brands (vs. foreign brands) suggests that a brand's

foreignness appeal is no longer exclusively possessed by foreign products. Local brands appear to benefit more by "dressing themselves as foreign" while maintaining a strong footprint with local identity. In China, this is actually happening with strong local brands such as Li-Ning sportswear, Tsingtao beer, and Lenovo notebook; all have increasingly adopted foreign or international appeals through the global sourcing of product or package design features, the use of international celebrities, and sponsorship for international events. The "foreignness advantage of local brands" may provide an explanation as to why the unique value of foreign brands is diminishing in some developing countries such as China (Zhou and Hui 2003). While local positioning may remain an effective means of competing with international brands in developing countries (Ger 1999), our results suggest that local brands can also pursue a foreign positioning strategy to compete successfully with foreign rivals in their home markets. For foreign brands, such head-to-head competition seems more challenging than ever.

## Limitations and future research

Several limitations should be noted. First, the results of our study should be interpreted with caution due to the use of student samples. In particular, the findings may not be generalizeable to other consumer segments. Thus, it seems to be desirable to use a more representative sample of the target population to further validate the results reported here. Second, since a larger number of brands are needed for using the multi-level approach, each respondent was asked to rate more than one brand to reduce the difficulty in recruiting a credible number of respondents. As a result, nonindependence in our observations was not fully taken care of by our analytical approach. Future research may recruit more participants to verify our findings or use an experimental approach to test the theoretical insights highlighted in this article. Finally, although we controlled for several variables relating to individual differences and brand characteristics, the potential confounding of other origin-free brand images and brand attitudes cannot be completely ruled out. Still, to a certain extent, our multi-group analyses separating foreign from local brands provide more insightful estimates of the true effects of PBF and CBO.

# Conclusion

An important conclusion of this research is that the unique value perceived in a brand's foreignness can be enhanced by the strength of brand origin associations held in the minds of consumers. Confidence in brand origin identification (CBO) establishes that consumers perceive the brand as having the credibility to deliver what it promised; thus, it necessitates a credible source of leveraging association for the diagnostic value of PBF. As seen in the earlier work by Keller (2003) and the recent conceptualization of branding research (Keller and Lehmann 2006), understanding brand leveraging liability and how it improves brand equity from such associations is a promising direction for future research. We hope that this study offers useful avenues for international branding and brand origin association research.

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