



# Determinants of product quality perceptions and their application to marketing standardisation

## The case of the automobile in Kazakhstan

Determinants of product quality perceptions

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### Abstract

**Purpose** – This paper aims to investigate the concept of the standardisation of products and marketing communications in an emerging market. The paper further aims to introduce a logical connection between product attributes and consumers' perceptions of product quality.

**Design/methodology/approach** – Relationships between the product attributes of characteristic-, benefit-, image- and perceived-product quality are hypothesized. The empirical data, which collected via a consumer survey in Almaty, Kazakhstan, are utilized to test hypotheses using structural equation modeling method.

**Findings** – This study finds that product attributes affect differentially to consumers' evaluation of product quality. For products with higher symbolic meanings such as the automobile in Central Asia, consumers are more sensitive to the benefit attribute of the product rather than the product characteristic attribute.

**Research limitations/implications** – This study uses a single product category and a single segment. Results need to be expanded and confirmed with other product categories in other emergent markets.

**Practical implications** – This study implies that, beyond product standardisation, multinational firms must develop strategic marketing communications by adapting the differences of values, expectations, needs of consumers towards global products, in particular, in emerging markets.

**Originality/value** – Very few studies in global marketing have been carried out in the Commonwealth Independent States region. In particular, to understand the intricacies of product quality judgment by Kazakh consumers towards global products is important to multinational firms that are operating in the region.

**Keywords** International marketing, Standardization, Marketing communications, Product quality, National cultures, Kazakhstan

**Paper type** Research paper

### Introduction

Transition economies commonly refer to the economies that are in the process of changing from one system to another, for example, from a central government planned economy to a market-oriented economy. In this regard, those countries separated from the former Soviet Union in 1990s are mainly representatives of the transition economies. The former Soviet Union included mainly those Eastern Europe countries and the Commonwealth Independent States (CIS). The CIS countries as a geo-political entity are



a confederation consisting of 11 former Soviet republics: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russia, Tajikistan, Ukraine, and Uzbekistan[1]. Among the CIS countries, Kazakhstan situated in the region of Central Asia, became independence from the old Soviet Union in 1991 and, at the same time, started the major path of economic reforms[2].

Kazakhstan has enjoyed rapid economic growth – the compound per capita annual income was well in excess of 9 percent per year during the 2000-2006 period – thanks largely to its booming energy export sector as well as its sound economic reforms and massive foreign investment inflows. Foreign trade grew with all partners, with exports reaching US\$20 billion (a 54 percent growth) and import \$US13 billion or a growth of 55 percent in 2004 (The Ministry of Foreign Affairs of the Republic of Kazakhstan, 2007). In addition to the shifting demand and supply, the purchasing power of Kazakhstani consumers has greatly increased as a result of its rapid economic growth in recent years.

Kazakhstan's economic reforms and natural resource exports have created a large number of new small businesses and sizable groups of middle-classes. Whilst the scale of a middle class varies with the conditions of countries' economic development, it probably is the best to define the middle-class in Kazakhstan as that portion of its population that can further focus on luxury items to make their life more enjoyable. Against this backdrop, in the present days of Almaty, which was the old capital city and is the largest economic base in Kazakhstan, there is a common scene that seven of every ten cars running on main streets are the products of Germany or Japan made. The preference for global products, which refer to the products of worldwide recognition and relatively standardised in brand awareness and product features, reflects how pervasive is the attitude that anything global is modern and trendy in the present Kazakhstani society.

Since the early 2000s, many multinational companies (MNCs) have found Kazakhstani market to be very attractive. After entering the market, many MNCs have observed numerous significant differences in the demographics of Kazakhstani consumers and in their consumption preferences. For example, many of those middle-class Kazakhstani consumers prefer luxury and bigger cars that differ significantly from consumers of Western countries. However, since not all Kazakhstani consumers can afford to buy such expensive global products, it is uncertain as to what are the best marketing strategies for these MNCs to promote their global products in the region.

Increased contacts with Western countries and growing acquaintances with Western ideas, values, and norms through mass media and traveling abroad may be responsible for some important changes in Kazakhstani consumers' culture and their attitudes towards global products. The increasingly challenging tasks for MNCs are aware of the cultural diversity and the divergent composition of consumers' preferences in target markets. Therefore, in order to explain Kazakhstani consumers' purchasing preferences on global products, it is important to understand their perceptions towards global products and then those determinant factors that influence their perceptions.

The purpose of this study is to investigate the concept of the standardisation of global products and marketing communications in an emerging market. In addition, the paper further aims to introduce a logical connection among product category,

product attributes, and consumers' perceptions of product quality. To achieve these objectives, this study first identifies the factors that influence Kazakhstani consumers' evaluations of product quality towards various global brands of the automobile in Kazakhstani market. In so doing, this study examines any possible existence of cultural bias in evaluating product quality and its impact on the consumers' purchasing decisions.

## Literature review and hypotheses formation

### *Globalisation and country-of-origin*

Globalisation from the marketing perspective is the standardisation of products, brand personality, and marketing communications across countries and regions. In contrast, localization is the adjustment of one or more of the above elements specifically to a given market. Fine tuning the balance between the globalisation and the localization is possibly a major challenge for many MNCs due to the differences of demographic, geographic, national culture, economic development and transformation (Minbaeva *et al.*, 2007; Powers and Loyka, 2007). For example, Minbaeva *et al.* (2007) found that human resource management and employee relation practices utilised a hybrid of old-style Soviet and Western-based approaches in foreign-owned subsidiaries in Kazakhstan and were reflective of their countries of origin. Hence, the globalisation of markets in combination with the paradoxical rise of nationalism has created an increased concern about the interaction of global brands with other cues such as the country-of-origin of products.

Pecotich and Ward (2007) found that highly knowledgeable consumers used country-of-origin as a limited summary construct only when such information was consistent with a linked brand name or a particular level of physical quality, whilst novices used country-of-origin as a halo regardless of brand name and physical quality. According to Hamzaoui and Merunka (2006), the concept of fit between country image and product category was an important determinant of product evaluations. For example, consumers from emerging economies are more sensitive to country-of-origin for products with status symbolic meanings such as the automobile than for more private goods such as television sets, and other household goods.

Lee and Tai (2006b) examined how consumer perceptions on the quality of products were influenced by marketing appeals and by the country-of-origin effects. They concluded that the effect of certain country image was moderated by varying socio-demographics and national culture characteristics, whilst the attitudes of consumers towards country-of-origin and corporate image exerted a great deal of influence on their perceptions of product quality and purchasing intentions. A review of literature by Liu and Johnson (2005) suggested that the accuracy of consumers' decisions was influenced by their intentional use of the attribute rule and the country stereotypes that were activated automatically by country-of-origin cues presented from advertisements. They claimed that the country-of-origin effects occurred automatically and contributed to product evaluations without consumers' intention.

### *Culture differences and consumer behaviour*

The knowledge about the different ways of thinking and cultural diversification facilitates the reciprocal understanding between people involved in the development of international business activities. Hofstede (2001, p. 21) said that culture defined as

“the collective programming of the mind which distinguishes the members of one human group from another.” This definition can be combined into the following definition:

Culture is an evolving set of shared beliefs, values, attitudes, and logical processes which provide cognitive maps for people within a given societal group to perceive, think, reason, act, react, and interact. This definition implies that culture is not static; rather it evolves over time (Tung, 1995, p. 491).

This conceptualization of culture seeks a middle ground between those who support cultural divergence and those who insist upon cultural convergence on the other hand.

Those who subscribe to the cultural divergence posit that significant cultural differences will remain across people of different societal groups. Thus, differences in consumer behaviour and consumptions will persist across cultures and nations. For example, Lee and Tai (2006a) showed empirical evidence that generation Y consumers in transition economies had favorable attitudes towards Western goods and services, in particular, they had higher appreciation especially for global brands, and that the ownership of certain global products was ultimate status symbol and represented different meanings in different cultures.

On the contrary, those of the cultural convergence perspective support that globalisation and information technology determines consumer behaviour and consumptions. Levitt (1983, p. 96) claimed that “different cultural preferences, national tastes and standards, and business institutions are vestiges of the past.” The successful introduction of some products and services on the global basis has led Ohmae (1987) to speculate the era of a “borderless world.” The worldwide appeal of some consumer products and services, such as the Sony Play Station 3, Starbucks, Nike, McDonald’s, appears to support this assertion.

Whilst Levitt (1983) and Ohmae (1987) argued for product standardisation around the world, important differences in consumer preferences and tastes across countries still abound. A major argument against cultural convergence is that traditionalism and modernity may be unrelated. Strong traditional values, such as group solidarity, interpersonal harmony, paternalism, and familism, can co-exist with modern values of individual achievement and competition. There are several empirical findings in support of the above argument: Kazakhstani consumers indeed endorsed both traditional and modern values (Lee and Tai, 2006a, b; Lee *et al.*, 2007; Minbaeva *et al.*, 2007). Furthermore, the level of per capita income determines, to a large extent, the types of products and services that consumer can afford. In many of developing nations including Kazakhstan, the demand for luxury goods and the preferences for global products showed in different levels (Lee and Tai, 2006a, b).

#### *Standardisation of marketing communications*

Standardisation of marketing communications in an international context is an important issue faced by MNCs’ managers and has been the subject of debate for several decades (Cutler *et al.*, 2000; Harris, 1994; Hu and Griffith, 1997; Kanso, 1992; Onkvisit and Shaw, 1999; Sirisagul, 2000). Marketing communications (or promotion) standardisation is to determine the degree to which the underlying elements of a firm’s promotional campaign and advertising messages can be standardised. Eger (1987), who was in favor of a standardised marketing approach, theorized that advances in global communications, sourcing, and so on had created different segments of

homogenized global markets. A globally homogenized consumer base that coupled with technological dispersion provides managers with an opportunity to leverage their promotional programs globally, thereby capturing substantial cost savings and increasing global coordination (Levitt, 1983).

On the contrary, it has been proposed that a firm can achieve greater economic rewards through enhanced value delivery that can be achieved by adapting to the wants and needs of local markets (Harvey, 1993). As such, the standardisation debate turns its focus on balancing the conflicting demands of global coordination and economies of scale with local flexibility and value delivery (Baalbaki and Malhotra, 1993, 1995; Levitt, 1983; Özsomer and Prussia, 2000). Although standardisation is often referred to in the aggregate, international marketing managers are confronted with several critical decision points pertaining to the standardisation and adaptation of specific promotional elements, such as advertising messages and product information.

Griffith *et al.* (2003) claimed that the influence of market similarity had different effect on the standardisation of promotion, in particular, to advertising message and packaging. According to Kanso and Nelson (2002), almost two-thirds of US subsidiaries in European countries used the localized approach but there still existed many major obstacles that impeded the standardisation of promotion campaigns. They further claimed that the use of similar appeals, symbols, and even themes to target foreign countries was ill advised. Nelson and Paek (2007) concluded that contemporary marketers were practicing some global advertising strategies, but only to varying degrees across countries. They found that beauty products, such as cosmetics and fashion goods, were more likely than other products such as cars to apply standardised approaches.

Hence, the decision to standardise marketing communications involves not a single but rather a series of decisions related to individual marketing communications elements. Although a significant amount of research has been conducted in the area of standardisation, to date, only few studies have examined the intricacies of this issue in transition economies (Lee and Tai, 2006a, b; Schuh, 2000; Tai, 1997). Consequently, there is little guidance for academics and practitioners. From the international marketing perspective, understanding the factors that influence marketing communications elements is of great concern to international marketers for its potential strategy implications.

#### *Consumers' perceptions on product quality*

Since many empirical studies have provided evidence that quality was positively associated with the degree of product success (Allenby and Rossi, 1991; Chang and Wildt, 1994; Dawar and Parker, 1994), marketing managers must be able to successfully implement marketing strategies and activities in order to promote consumers' perceptions of higher product quality. Dawar and Parker (1994) claimed that consumers used brand name, price, retailer reputation, and physical appearance of products as signals of product quality. Lefkoff-Hagius and Mason (1993) suggested the three attributes – characteristic, beneficial, and image– that influence consumer behaviour with respect to their preferences and similarity in judgment. “Characteristic” refers to descriptive features that characterize a product or service. “Benefit” is a kind of perceived information that is self-relevant, and corresponds to the notion that product image perception is a largely subjective and perceptual phenomenon formed

through a consumer's own interpretation. In marketing literature, the term "image" is defined as an abstract concept incorporating the influences of marketing promotion, reputation and peer evaluation of alternatives. In this study, the typology mentioned by Lefkoff-Hagius and Mason (1993) was applied to classify a set of attributes of the automobile into the three types of product attributes: characteristic-, benefit-, and image-attributes.

There were several past studies on consumers' perceptions and their automobile purchasing behaviour (Haubl, 1996; Havlena and Holbrook, 1986). These studies claimed that the buyers of automobiles strived mainly for product characteristic attributes, such as functional, tangible, visible characteristics, or utilitarian needs. However, their studies mainly focused on the lower priced car segment rather than the luxury segment. Consequently, these study results neglected the automobile owners' individual differences, especially benefit- and image-attitudes, which provide different perceptions and analogy towards the automobile.

Bauer and Herrmann (1995) indicated that it was not the objective features themselves, but rather the subjective perceptions that determined consumers' purchasing choices. For example, if consumers consider that basic features (product characteristic attributes) of the automobile are important for their needs, then such product characteristic attributes as maximum speed, horsepower, and gas consumption of a car become very important. Hence, it is assumed that product characteristic attributes, either functional or technical, are associated with consumers' evaluation of product quality. Accordingly, the following hypothesis is proposed:

*H1.* Product characteristic attributes have effects on consumers' evaluation of product quality.

Consumer choice of quality attributes theory by Lancaster provides a foundation for the cost-benefit analysis of the situations where product quality changes. The quantified values of quality changes may be estimated from actual consumption data or from experimental data. In either case, the benefit-cost analysis of quality attributes by Stahl (1983) proved that these estimates would be unbiased even when the true quality variables were unknown, as long as the hypothesized quality variables contained the true quality in some linearly independent combinations. Hence, when marketers offer benefits of a product, they should consider consumers' perceptions towards the benefits of the product.

However, consumers may differ in their perceptions of benefits towards a product or a brand. The differences in consumers' perceptions towards certain product or brand will affect their preferences and choices of a specific brand, if their perceptions of benefits among brands are wide enough. Hence, it is assumed that product beneficial attributes are associated with consumers' evaluation of product quality. Thus, the following hypothesis is proposed:

*H2.* The beneficial attributes have effects on consumers' evaluation of product quality.

Many studies (Aaker, 1996; Park and Srinivasan, 1994) accepted the idea of brand image as a key theme in marketing communications, because it plays an integral role in building profitable brand equity. Brand image can be defined as a set of perceptions about a particular brand, which is reflected on the brand associations, held by

consumers' memory. Brand associations are classified according to attribute, benefit, and overall attitude towards a particular brand. A successful brand image enables consumers to identify the needs that a brand satisfies and to differentiate a particular brand from its competitors. Consequently, it increases the likelihood of purchasing certain brand by consumers. Moreover, consumers' judgments are often mixed or followed by emotional reactions. This phenomenon implies that product-related attributes alone, such as product characteristic attribute, can only partially explain the sophistication of consumers' buying behaviour.

"Manufacturer image" refers to the perceptions and attitudes of consumers towards a manufacturer and its brands. It can be further classified into functional and emotional dimensions. Functional ones include the tangible aspects of manufacturers such as brands, service, price, and size. Emotional dimension includes the subjective feelings of consumers towards a manufacturer. Hsieh *et al.* (2004) provided empirical evidence that MNCs who enjoyed a favorable manufacturer image generally had their new products or services more readily accepted than those MNCs of less favorable image. Recently, many MNCs frequently apply advertising, exhibits, and sponsorship for community events to enhance their corporate images (CI), since favorable CI can add value or create a halo effect for all products made by the company (Han, 1989). In summary, the concepts of country-of-origin and manufacturer's image provided a meaningful impact on consumers' evaluation towards a product (Han, 1989; Hong and Wyer, 1989; Hsieh *et al.*, 2004; Lee and Tai, 2006b). Hence, it is assumed that the images of retailer, manufacturer, and country-of-origin are associated with consumers' evaluation of product quality, and consumers' benefit. Thus, the following hypotheses are proposed:

- H3. The image of manufacturer has effects on consumers' evaluation of product quality.
- H4. The image of manufacturer has effects on consumers' perceptions of product benefit.

## Methodology

### *Sample characteristics*

There is a discrepancy between reputable sources as to the population and demographics of Kazakhstan. The US Government sources – including *The CIA's World Fact Book* and the US Census Bureau International Data Base – list the current population as 16,763,795 in 2003, whilst the UN sources such as the World Bank give an estimate of 14,794,830 in 2002, and the Kazakhstan Statistics Agency has an estimate of 15,219,300 population in 2006. This rather large discrepancy is presumably due to difficulties in measurement caused by the large migratory population of Kazakhstan, emigration, and the low-population density – only about 5.5 persons per kilometre square in the territory, the same size of Western Europe. The population growth rate is estimated at 0.26 percent in 2006. The age structure of the population in 2006 was estimated as: 0-14 years: 24.2 percent (3,680,600), 15-64 years: 68 percent (10,344,700), 65 years and over: 7.8 percent (1,194,000).

Kazakhstan's performance, as measured by social indicators, reveals a mixed picture. Income per capita in 2006 reached US\$5,292, but with substantial income inequalities. Preliminary calculations based on the government's subsistence minimum

level, population that living on less than US\$2 per day still stood at 19 percent, access to improved sanitation at 72 percent, and life expectancy stood at 64 years in 2004 (World Resources Institute, 2007). Against this backdrop, it probably is the best to define the middle-class in Kazakhstan that about 15 percent of the population with per capita income above US\$12,000 per person, or more than US\$24,000 per family in 2006 by the authors' estimation based on a survey.

A survey was conducted at the downtown of Almaty city during the period between September and November 2005. In total, 459 completed questionnaires were collected, of which 390 were considered as useable. Of the 390 respondents, 59.7 percent were female and the mean age of the sample was 28.7-years old: under 20-years old (13 percent), 21-30 years old (59 percent), over 30-years old (28 percent). About 85 percent of these respondents have worked more than one year long as a part-time or full-time employee in industries such as management consulting firms, banks, financial institutes, oil and gas companies, foreign invested companies, automobile dealer shops, or self-employed. The average income per capita for these respondents is US\$14,000 per year, which was relatively higher than the average income per capita of US\$9,296 in 2005 for the region (Table I). Though the age and income level of the sample are not quite well representative of the broader population, it was a representative for a middle-class segment of urban regions in the country.

A survey questionnaire was developed to measure consumers' perceptions towards automobile attribute variables. The perceptions of consumers towards automobile attributes are measured by a seven-point interval scale, in which respondents are asked

Region	Income	GDP	Consumption	Population	Import	%
Kazakhstan	1,720	8,068	8,068	15,074,767	12,781,249	100
Akmola	1,350	4,296	8,256	747,185	184,991	1.4
Aktobe	1,718	10,292	9,447	678,607	919,164	7.2
Almaty	1,073	3,228	7,438	1,589,751	544,196	4.3
Atyrau	3,984	32,649	7,948	463,466	1,155,273	9.0
East Kazakhstan	1,503	5,244	8,841	1,442,097	663,935	5.2
Zhambyl	930	2,742	6,151	992,089	103,003	0.8
West Kazakhstan	1,765	13,388	8,326	606,534	439,060	3.4
Karagandy	1,857	7,729	9,087	1,331,702	919,948	7.2
Kostanai	1,320	5,916	7,279	907,396	406,230	3.2
Kyzylorda	1,283	6,900	5,700	612,048	187,100	1.5
Manghistau	4,065	20,715	9,528	361,754	800,274	6.3
Pavlodar	1,707	8,121	8,511	743,826	349,199	2.7
North Kazakhstan	1,397	4,382	7,903	665,936	439,210	3.4
South Kazakhstan	884	2,598	5,484	2,193,556	307,087	2.4
Astana City	3,557	19,417	15,895	529,335	1,137,845	8.9
Almaty City	9,296	16,629	11,728	1,209,485	4,224,727	33.1

**Notes:** Income – average income per capita (yearly) by region, in 2005, US\$; GDP – GDP (GRP) per capita by region, in 2005, US\$ at PPP; consumption – per capita income spent on consumption by region, in 2005, US\$ at PPP; population – population by region, in 2005; import – the amount of imported goods by region, in 2004, US\$1,000; percentage – percent of the amount of import by region, in 2004

**Source:** Calculated by the authors using data from Agency on Statistics of the Republic of Kazakhstan (2006)

**Table I.**  
Demographic data of  
Kazakhstan by region



to indicate their degrees of agreement on a symmetric scale for each of a series of statements relating to the importance of each attribute (for example, 1 – not important, 7 – very important) and their perceptions towards each brand. (1 – not agree, 7 – strongly agree).

*Factor analysis and reliability test*

Factor analysis with a varimax rotation procedure was employed to identify underlying dimensions of product quality. Then, the reliability test was used to test the internal consistency for extracted constructs. An exploratory factor analysis for product quality yielded three factors based on an eigenvalue cut-off of 1. The sums of squared loadings from the three-component have the cumulative value of 63.021 percent in explaining the total variance in the data. The three components of the product quality are named as “product characteristic attribute,” “benefit attribute,” and “image attribute,” respectively. To test the appropriateness of factor analysis, two measures were used. The Kaiser-Meyer-Olkin overall measure of sampling adequacy was 0.672, which falls within the moderate level. In addition, the Bartlett’s test of sphericity was 1,530.756<sub>df= 105</sub>, significant at  $p = 0.000$  which showed a significant correlation among the variables (Hair *et al.*, 1998).

Further scale refinement was done by examining item-to-total correlation to improve the reliability. This led to the retention of eight items, which represented the three factors; “image” factor (three items,  $\alpha = 0.829$ ); “benefit” factor (two items,  $\alpha = 0.658$ ); and “product characteristic” factor (three items,  $\alpha = 0.537$ ), respectively, (Table II).

*Measurement and structural model*

The analysis of moment structures (Arbuckle, 1994) was used for an empirical testing of the model, and the maximum likelihood estimation was applied to estimate numerical values for the components in the model. To diagnose the presence of distribution problems in the data and to gauge their effects on the parameter estimates, bootstrapping (Efron, 1987; Stine, 1989) method was used and 300 bootstrap replications were obtained. Confirmatory factor analysis was employed to test the validity of the scales in measuring specific constructs of the measurement model and Fornell and Larker’s (1981) guidelines were applied.

Items	Factor loadings	Eigenvalue	Extracted variance	Factor name	$\alpha$
Manufacturer	0.875	2.635	28.892	Image	0.829
Local dealer	0.811				
Country-of-origin	0.801				
Delivery lead time	0.855	1.820	17.159	Benefit	0.658
Financial service	0.578	1.699	16.970	Product characteristic	0.537
Gear type	0.771				
Horse power	0.708				
Gas consumption	0.612				
Total variance			63.021 percent		

**Notes:** Extraction method: principal component analysis; rotation method: varimax with Kaiser normalization

**Table II.** Results of factor analysis and reliability test for the product quality scale

To diagnose possible identification problems, the degree of freedom with large standard error variances (Bollen and Joreskog, 1985) was used and an identification problem was remedied according to Hayduk's (1987) study. To evaluate the overall goodness-of-fit of the proposed model, the criteria suggested by Bollen (1989, p. 275) were used and measures were selectively assessed as of the following:  $\chi^2$  statistic (CMIN), degrees of freedom (DF), CMIN divided by DF (CMIN/DF), goodness of fit index (GFI), adjusted goodness of fit index (AGFI), root mean square residual (RMR), normed fit index (NFI), parsimony ratio (PRATIO), and root mean square of approximation (RMSEA).

### Results of the data analysis and hypotheses test

The results of the data analysis generally achieved moderate GFI measures, in particular, the indices of GFI (0.906), AGFI (0.838), and NFI (0.775). The GFI of 0.906 describes that the GFI of the model indicates about 90 percent fit. The NFI of 0.775 describes that the fit of the proposed model is about 77 percent closer to the fit of the saturated model (the perfectly fitting model). Note that values of the GFI and AGFI can vary from 0 to 1, with values above 0.90 considered as good and values from 0.80 to 0.90 considered as moderate (Bentler and Bonett, 1980). For NFI, the closer its values to 1, the better are the fitness of the hypothesized model over the null model.

Many fit measures represent an attempt to balance between parsimonious and well fitting model, that is, two conflicting objectives – simplicity and GFI. Steiger (1990, p. 179) stated that:

[...] in the final analysis, it may be impossible to define one best way to combine measures of complexity and measures of badness-of-fit in a single numerical index, because the precise nature of the best numerical trade-off between complexity and fit is a matter of personal taste. The choice of a model is a classic problem in the two dimensional analysis of preference.

This study seeks the grounds for preferring a simple, parsimonious model instead of complex ones. At the same time, a well fitting model is preferable to poorly fitting ones.

#### *Results of the hypotheses test*

Null hypothesis 1, "*Product characteristic factor has no relationship with consumers' evaluation of product quality*", was empirically tested. The results show that the null hypothesis cannot be rejected statistically at the 5 percent significant level ( $t$ -value = 0.732 with the  $p$ -value = 0.464) (Table III). That is, the perceived product characteristic attribute has no effect or insignificant effect on consumers' evaluation of product quality.

Null hypothesis 2, "*The benefit factor has no relationship with consumers' evaluation of product quality*", was empirically tested. The results show that the relationship between the "benefit" factor and consumers' perception of product quality is statistically significant ( $p < 0.05$ ), as shown in Table III. In other word, the perceived "benefit" factor has significant positive effect on consumers' appraisal of product quality. That is, the higher perceived "benefit" of product, the higher contributing to the degree of consumers' appraisal with the product quality. Consequently, the results suggest that the "benefit" attributes of a product or a brand should be promoted on communicating to consumers.

	Proposed model Standardized estimate (standard error)	Bootstrapping <sup>a</sup> Standardized estimate mean
<i>Path diagram</i>		
H1. Product characteristic → product quality	0.218 (0.299)	-0.016
H2. Benefit attribute → product quality	0.321 (0.114) *	0.294
H3. Image attribute → product quality	-0.044 (0.059)	-0.075
H4. Image attribute → perceived benefit	0.316 (0.048) **	0.551
<i>Standardized total effects</i>		
Image attribute → product quality	0.539	

**Notes:** \* $p < 0.05$ , \*\* $p < 0.001$  Statistically significant at  $\alpha = 0.05$  with 95 percent confidence interval. <sup>a</sup>300 Usable bootstrap resamples were obtained and analysed. Fitness measures: discrepancy/df = 7.133, RMR = 0.163, RMSEA = 0.126, PRATIO = 0.711, GFI = 0.906; adjusted GFI = 0.838, NFI = 0.775

**Table III.**  
Outputs of structural equation model estimates

Null hypothesis 3, “The image factor has no relationship with consumers’ perceptions of product quality”, was empirically tested. The results show that the null hypothesis cannot be rejected statistically at the 5 percent significant level. That is, the perceived image attribute has no effect or insignificant effect on consumers’ appraisal of product quality.

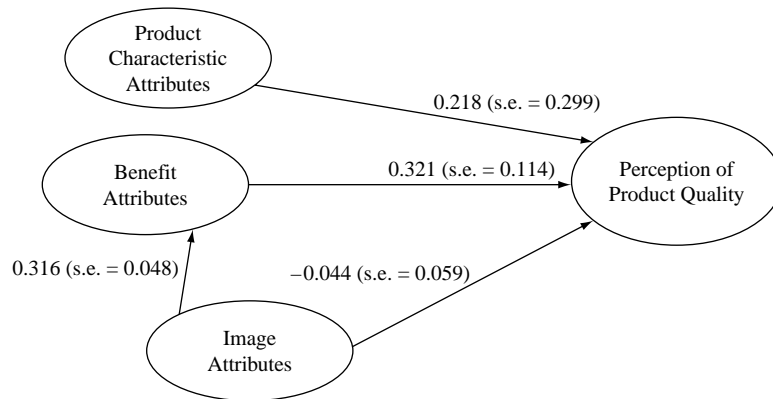
Null hypothesis 4, “The image factor has no relationship with consumers’ perceptions of product benefit”, was empirically tested. The results show that the relationship between the “image” factor and the “benefit” factor is statistically significant ( $p < 0.001$ ), as shown in Table III. In other word, the perceived image attribute has significant positive effect on consumers’ appraisal of product benefit. That is, the higher perceived “image” of brand, the higher contributing to the degree of consumers’ appraisal with the product benefit. Consequently, the results suggest that the “image” attributes of a brand should be promoted on communicating to consumers.

In summary, the results of the hypotheses test show that the “benefit” attribute has a direct positive effect on consumers’ evaluation of product quality, whilst the “image” attribute has an indirect positive effect on consumers’ evaluation of product quality, in which only through the “benefit” factor (Figure 1). A possible explanation of this result is that the “image” and “benefit” attributes are relatively more important in assessing the quality of the global product, whilst the “product characteristic” attribute is relatively more similar in consumers’ judgment towards the automobile in Kazakhstan.

#### Demographic factor towards the perceptions of product quality

To identify determinant benefits, this study further conducted an analysis of variance (ANOVA) between automobile brands. “Determinant benefits” are those benefits that have highly importance to consumers and, at the same time, have high-differentiation effects between brands. The results of ANOVA show that there are significant differences in the mean values of the benefit attributes among the automobile brands ( $F$ -value = 4.218,  $p$ -value = 0.000). The analyses of the empirical data show that consumers’ gender has high-differential effects on their preferences of brands and types of cars. For example, a larger group of the female respondents (75.8 percent)

**Figure 1.**  
A structural model  
between the product  
attribute constructs and  
consumers' perceptions  
of product quality



highly appreciate Toyota brands' benefit attributes, such as financial support service, delivery lead-time, and economic utility, whilst a larger group of the male respondents highly appreciates Mercedes-Benz (59.2 percent) and BMW (30.8 percent) in their perceptions of the benefit attributes, such as the financial support service and the brand image.

### Managerial implications and discussion

Many past studies had focus on the relationship between international marketing and culture, and they found that, whilst the knowledge of cultural differences alone was not a sufficient factor to success, the lack of cultural understanding was a contributing factor to failure (Leung *et al.*, 2005; Tung, 1995; Zukin and Maguire, 2004). Cultural differences can affect the success or failure of MNCs in a number of important ways. Therefore, marketers may not promote the same products and services demanded by domestic consumers in foreign countries because of the differences in consumers' preferences and tastes. Even when there is a demand, some adaptations in products or promotion have to be made.

Those consumers are lack of frequent opportunities to gain functional and experiential benefits on evaluating product quality, in such conditions, they can gain these benefits indirectly from their perceptions of product attributes. The result of the *H1* shows that the product characteristic attribute of global products, such as the automobile, has relatively more similarity in the consumers' judgment. In this case, the results attest the concept of product standardisation. For example, the basic features (product characteristic attributes, either functional or technical) of a product can be standardised universally even in emerging markets under transition economies.

The literature reviews in the previous section revealed a split with regard to the effectiveness of the standardised approach to international marketing communications. Proponents of the standardised approach argue that people all over the world share the same or similar basic needs and motivations, therefore, promotion campaigns can be constructed around these needs and motivations with a universal approach. On the other hand, advocates of the localized approach attest that the standardisation of promotion campaigns is not possible because several striking differences—including cultural

characteristics and consumer behaviours – exist between nations. The controversy continues over the use of the standardised versus localized marketing communications approaches. In such situations, international marketers are often faced with the issue of whether, and to what extent, they should change their marketing communications messages from one country to another.

In view of the above discussion, MNCs may decide to use the “benefit-consumer need” model or the “needs based market segmentation” approach. Benefit-consumer need model is frequently used to assess the benefits of products and the needs of potential consumers, including the circumstance in which these products are likely to be used in a given market. From the results of this study, MNCs’ marketing managers are able to understand that, whilst extending product standardisation, adjusting marketing communications to the local tastes and practices is a better marketing strategy. To the same extent, it is equally important for MNCs to leverage its image (for example, manufacturer’s and country-of-origin information, and its brand personality) recognition and global product reputations through strategic marketing communications.

MNCs may want to maintain the same image everywhere, in so doing, they should ensure that they are achieving a competitive edge in various markets. In fact, the empirical data in this study disagree with the assumption that MNCs offer fertile ground for market homogenization and the standardisation of marketing communications. In other word, marketing communications and promotion campaigns targeted at certain consumer segments must appeal to their values, needs, tastes and preferences of the target markets.

The result of the *HI* further demonstrates that the essential features (functional and technical attributes) of a product become less important because consumers perceive the product characteristic features to a similar degree. For example, for those consumers with limited experience of the automobile, such brand values of BMW as “quality, technology, exclusivity, and performance” were not considered as important identities of the brand. In other word, consumers in the segment are likely to perceive the product functional characteristics (such as reliability, durability, safety, and comfort) of BMW, Mercedes-Benz, Lexus, and Toyota’s products as equivalent. This phenomenon further suggests that product characteristic attribute alone can only partially explain the sophistication of consumers’ judgment of product quality.

Alternatively, these consumers are more likely to pursue the attainment of user imagery and to gain symbolic benefit instead of the product characteristic benefit. The consumers in the segment tend to emphasize and look for the expressions of prestige and status by owning the product through its brand association. Indeed, the surveyed consumers, in particular the male respondents, looked for more symbolic meanings from the automobile. They showed that BMW and Mercedes are the favored brand choice set for men in Kazakhstan. They would be regarded as successful persons living a luxury life in the society if they possess such cars in the region. To enhance this value, Mercedes’ advertisements may communicate “Mercedes as a symbol of achievement, luxury, and prestige” rather than “Mercedes for reliability and durability” in the region. Consumers’ imagery is then linked to a cognitive elaboration mechanism, which may increase the general level of interest in the brand under consideration.

Consumers also develop preferences for or biases against brands based on product origin information in the marketplace. The manufacturer image that is often

interchangeable with manufacturer identity works as the summary or reference information in consumers' decision-making process. Umbrella brand, as a part of manufacturer's image that can be attached to product image perceptions, has been described as a part of branding strategies at a manufacturer level. The reason behind is that manufacturer's image and country's image (country-of-origin) can provide consumers with meaningful associations to create a desirable image in order to affect consumers' perceptions. In this way, manufacturer information, if accepted by consumers, can influence consumers' judgment by creating new beliefs, in which subsequently affects their preferences and product evaluations. For example, the surveyed consumers in this study demonstrated that, when Toyota positions itself as a manufacturer most concerned with quality, the consumers tend to associate Toyota's quality manufacturing image with their knowledge of Toyota products. In other word, a positive impression towards a manufacturer can lead to a positive attitude towards a particular brand made by the same manufacturer, and can create a positive change in consumers' subsequent judgment on product quality.

In addition, Hsieh *et al.* (2004) empirically demonstrated that there was a strong link between a product brand and an umbrella brand, that is, the presence of product brand might evoke manufacturer and country images. For example, consumers are more easily to associate the Toyota and the Honda brands with Japan origin, even though the location does not appear explicitly in the brand names. At the same time, a brand is associated with a particular product and is identifiable with a manufacturer name, such as Toyota, Mercedes-Benz, or BMW. Given this backdrop, consumers' evaluation of product quality was not purely influenced by the product characteristic attribute alone; and it must be contributed by both perceived benefit- and image-attributes.

Available empirical evidence from Cox and Dittmar (1995) further indicated that social psychological functions of valued items for consumer consumptions were gender specific. For example, the results of this study show that status-oriented Kazakhstani men take more self-oriented approaches to evaluate the automobile by stressing their use as an expressive symbol of their achievements and their perceived benefits, whilst big family care-oriented Kazakhstani women take more conservative approaches to the automobile by stressing their use as a symbol of their social and personal interrelations. In particular, for Kazakhstani women, their needs for cars depend more on their financial and economic constraints. Hence, international marketers must consider not only the importance of product attributes but also the differentiation of the benefits that brands offer.

The findings should be of considerable interest to practitioners who have entered or plan to enter emerging markets. As such, the results of this study offer greater insight into the intricacies of marketing communications standardisation and the factors that influence the perceptions of product quality. However, marketers have to bear in mind that consumers may change their behaviour even though their initial perceptions still remain. Companies must monitor potential shifts in the consumers' perceived hierarchy of the evaluations of product attributes and adjust to changing priorities. By better understanding the manner in which these factors influence the degree of the standardisation of marketing communications, many firms can develop more effective promotion campaigns. In so doing, a strategic product positioning through better marketing communications helps build a long-run customer values towards such products having the characteristics of global brands.

This study is limited by its central focus on a single product category of MNCs that operate in Kazakhstan. Although the study provides insights into the factors that influence standardisation of marketing promotional elements of MNCs in Kazakhstan, the findings may have limited its generalization since Kazakhstan does not share many of the characteristics of other emerging markets. Moreover, a limitation arises from using the developed countries' MNCs exclusively in the study. For example, would the perceived hierarchy of the product attributes be the same for Russian or Chinese MNCs operating in Kazakhstan? Greater market diversity in respondents, extended product categories, and different segments would strengthen the findings. For example, a cross-cultural comparison of the findings would substantially enhance understanding in this area. Thus, a continued research effort is needed to develop academic and practitioners' understanding in this field.

### Notes

1. Turkmenistan was also a member but withdrew its membership in 2005, and remains as an associate member since then.
2. Updated information about Kazakhstan's recent economic development and reforms are available at the official web sites of *The CIA's World Fact Book* (2007), The National Bank of Kazakhstan (2007) and The World Bank (2007).

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