

V DOCTORAL CONSORTIUM
October 28 – 29, 2007

Measuring the Impact of Corporate Social Responsibility on
Consumer Behavior: The Case of Peruvian Consumers

By

Percy Marquina

PhD Candidate

Centrum/ Maastricht School of Management

Perú

CHAPTER 1: INTRODUCTION

Despite the importance of CSR in the marketplace, no researchers have conducted or documented empirical research in Peru. The dependent variable of this study will be *consumer social responsibility* (CnSR), and the independent variables will be *corporate ability* (CA) and CSR.

The aim of this study will be to assess the influence of CSR product features on consumers' behavior in Peru. The study will involve investigating Peruvian consumers' preferences, using stated preferences elicited in response to hypothetical choices under controlled experimental conditions. Thus, the research methodology will include *stated preference discrete choice modeling* (SPDCM) (Lancsar, 2002; Louviere, Hensher, & Swait, 2000/2004; Train, 2003). In this experimental study, based on Auger et al. (2006), creation of different kinds of products with different levels of functional attributes and social attributes will force consumers to make trade-offs (see Appendix A), allowing measurement of the trade-offs they make.

Significance of the Problem

The proposed research may contribute to the literature in three ways. First, the results of this research may be relevant to decision makers nationwide, giving them criteria for the management of their corporate social initiatives and characteristics for the launching of products with social attributes to the segment under study. Second, this study may contribute to the understanding and development of CSR in Peru. Third, the study could help business schools in their attempts to develop managers who act responsibly (EFMD, 2005).

Research Questions

The following research questions will guide the study in testing for significant relationships between CSR and CnSR behavior among Peruvian consumers. The major research question will be the following:

Does CSR influence consumer purchasing behavior in Peru?

The following minor research questions will also be addressed in the proposed study:

1. Will Peruvian consumers intend to purchase CSR product features and, if so, to what extent?
2. Are Peruvian consumers willing to sacrifice functionality for CSR desirability?
3. Does the influence of CSR vary depending on the type of product?
4. Are Peruvian consumers willing to pay a premium price for CSR acceptable products and, if so, to what extent?
5. Does the influence of CSR vary depending on the type of social issues?

Hypotheses

The previous research questions constitute the basis for establishing the following hypotheses for this quantitative study to measure the effect of CSR on the CnSR behavior of consumers in Lima, Peru:

1. A positive relationship exists between CSR and the willingness to purchase attitude.
2. A positive relationship exists between CSR and the willingness to pay a premium price attitude.
3. A positive relationship exists between CA and the willingness to purchase attitude.
4. A positive relationship exists between CA and the willingness to pay a premium price attitude.

Theoretical Framework

The dependent variable for the study will be CnSR, and the independent variables will be CSR and CA.

The model adapted from Gupta (2002) (see Figure 1) represents the hypotheses that CSR and CA influence CnSR, and CnSR is a predictor for behavioral response. This affects the positive willingness to purchase and willingness to pay a premium price attitudes.

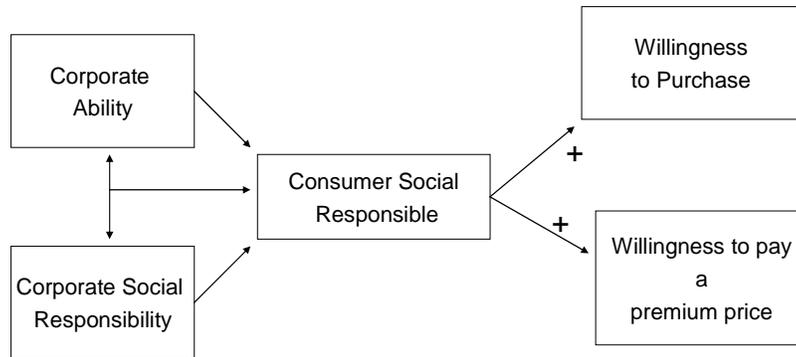


Figure 1. Impact of corporate social responsibility and corporate ability on consumer social responsibility.

Note. Adapted from “Strategic Dimensions of Corporate Image: Corporate Ability and Corporate Social Responsibility as Sources of Competitive Advantage via Differentiation,” by S. Gupta, 2000, *Dissertation Abstracts*, 94. (UMI No. 30570736). Copyright 2002 by [Proquest Information and Learning Company..

Definition of Terms

The following terms are the most important ones used in this study:

Corporate ability is “the expertise in producing and delivering product and/or service offerings” (Brown & Dacin, 1997, p. 70).

Corporate associations is “the generic label for all the information about a company that a person holds” (Brown & Dacin, 1997, p. 69).

Consumer social responsibility (CnSR) is “the conscious and deliberate choice to make certain consumption choices based on personal and moral beliefs” (Devinney, Auger, et al., 2006, p. 32).

Corporate social initiatives are the “activities undertaken by a corporation to support social causes and to fulfill commitments to corporate social responsibility” (Kotler & Lee, 2005, p. 3).

Corporate social responsibility is the “organization’s obligation to maximize its positive impact and minimize its negative effects in being a contributing member to society, with concern for society’s long-term needs and wants” (Lantos, 2001, p. 600).

Stated preference discrete choice method is a stated preference technique used for eliciting consumer's preferences through a choice experiment (Merino-Castelló, 2003).

Assumptions

An assumption of this study will be that respondents will be aware of CSR and could apply personal experience in the experiment; therefore, they will be able to answer meaningfully, understand the task, and express their purchasing behavior attitude by answering the questionnaire honestly. Because respondents represent consumers who are aware of CSR information, response rates will be high and missing data low. Respondents will adopt a full linear compensatory decision rule according to the precepts of random utility maximization (Araña & León, 2005a; Louviere et al., 2000/2004); *independence of irrelevant alternatives* (IIA), that is that the probability is independent of introduction or omission of other alternatives (Mazzanti, 2003); and *independent and identically distributed* (IID) utilities of the components of the different alternatives (Vandresse, 2003). IIA implies that "the variances associated with the components of a random utility expression describing each alternative (capturing all of the unobserved influences on choice) are identical, and that these unobserved effects are not correlated between all pairs of alternatives" (Louviere et al., 2000/2004, p. 44).

Limitations

This study will be limited to Peruvian consumers who agree to participate voluntarily and to the reliability and validity of the instruments used.

CHAPTER 2: LITERATURE REVIEW

The objective of reviewing germinal works on CSR, CA, and CnSR is to obtain a deep and broad understanding of the concepts and their relationships. The following sections include a literature review related to the independent variables and then the dependent variable.

Independent Variable: Corporate Social Responsibility

In its evolution, the concept of CSR passed through several stages. Starting with the chronological classification developed by Schwalb and García (2003) and integrating new concepts from the literature, it is possible to identify the following stages: germinal, emergent, development, and generalization and audit.

Germinal stage. The germinal stage started during the last decades of the 19th century, and an entrepreneurial spirit and the laissez-faire philosophy characterized this stage. During this stage, the terms *corporate philanthropy* and *welfare capitalism* emerged. This last concept became the name of the system in which companies provided extensive community facilities and company programs for their workers (Jacoby, 1997). Little direct regulation of business occurred during this period.

Emergent stage. The second stage began with the Great Depression and a focus on managerial values and principles. This was a normative and ethical-philosophical period. The emergence of the formal concept of corporate social responsibility (CSR1) characterized this stage. Bowen (1953) defined CSR as comprising "the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society" (as cited in Wolff & Barth, 2005, p. 6). Bowen clearly emphasized the ethical considerations over the economic ones.

Development stage. This stage started in the 1960s. The attention shifted away from theorizing about what was good for society to analyzing which demands on business society put forward. The focus was the processes that ensure the capacity of

a firm to respond to its environment. This stage had an action-oriented managerial inclination. Social activism and the rise of consumerism; increasing public awareness of environmental and ethical issues; and increasing pressure from environmentalists, consumer advocates, feminists, young people, and civil rights movements characterized this period.

During this stage and in the late 1970s, Carroll (1979), working on the founding concept of Bowen (1953), developed a more structured analysis and formulated a four-part definition of CSR, suggesting that companies have four responsibilities: economic, legal, ethical, and philanthropic (or altruistic or humanitarian). Between 1970 and 1990 and parallel to the development of CSR, other concepts began to appear, often tied to environmental subjects such as sustainable development and sustainability. The emergence and evolution of the principles of sustainable development have had an important impact on the concept of CSR, resulting in two significant contributions to the construct: incorporating the environmental variable as one of the main social expectations to be covered and considering sustainability. Essentially, organizations must satisfy not only the expectations of current society but also those of future generations. Moreover, the environmental concern caused CSR to shift away from the theoretical and philosophical level, to a more concrete and practical dimension, the urgent necessity for the firm to respond to its environment.

5. *Generalization and audit stage.* Between the 1980s and 1990s, the stakeholder theory contributed significantly to the development of CSR. This theory proposes that a firm is a nexus of contracts between stakeholders and that the responsibility of a business is not to society at large but to legitimate stakeholders: shareholders, employees, customers, suppliers, and local communities (Van der Putten, 2005). The impact of the environmental and sustainability discourse initiated in the previous stage and the proposal of concepts, such as the triple bottom line (Elkington, 1999), developed the CSR concept to include the three dimensions of sustainability: social, ecological, and economic bottom line.

Despite its long history, the evolution of the concept, and the increasing importance of CSR worldwide, a universally accepted definition of CSR does not exist. Different terms in the literature describe the phenomena related to corporate responsibility in society: corporate social responsibility, corporate citizenship, corporate philanthropy, corporate giving, corporate community involvement, community relations, community affairs, community development, global citizenship, corporate societal marketing, society and business, social issues management, public policy and business, stakeholder management, corporate accountability, and corporate sustainability (Garriga & Melé, 2004; Kotler & Lee, 2005). The criteria of CSR may change between generations and cultures and will be different in Europe (welfare society) and the United States than in developing countries. Previous research indicates that these differences exist because of differences in culture, economic development, legal and political environment, organizational ethical climate, and gender (Juholin, 2004; Lines, 2003; Papasolomou-Doukakis et al., 2005; Singhapakdi & Karande, 2001).

The following comprehensive definition for use in the proposed research borrows and integrates elements from these different areas and approaches: CSR involves running a business with an action-oriented managerial strategy under a comprehensive set of policies, practices, and programs integrated throughout the business operations. Decision making includes a voluntary commitment to contribute

to sustainable development by making decisions that fairly balance the claims of all key stakeholders, shareholders, employees, customers, suppliers, and local communities. These decisions should maximize the positive impact and minimize the negative effects of the business, while maintaining concern for society's long-term needs in ways that address or exceed the ethical, legal, environmental, commercial, and other wants or expectations of society, with consumers trying to be accountable to society for performance by explaining, justifying, or reporting on their actions.

Independent Variable: Corporate Ability

A number of researchers have investigated the degree to which consumers' associations regarding a company influence them (Berens, 2004; Berens et al., 2005; Brown & Dacin, 1997; Dacin & Brown, 2002; Sen & Bhattacharya, 2001). In their germinal work, Brown and Dacin (1997) defined corporate associations as "a generic label for all the information about a company that a person holds" (p. 69). Corporate associations include the following:

Perceptions, inferences, and beliefs about a company: a person's knowledge of his or her behaviors with respect to the company; information about the company's prior actions; moods and emotions experienced by the person with respect to the company; and overall and specific evaluations of the company and its perceived attributes. (p. 69)

Furthermore, Berens (2004) defined corporate associations as "a heterogeneous set of perceptions, which may relate to a wide variety of aspects of a company" (p. 17). Berens et al. (2005) remarked that perceptions of individual people, rather than groups of people, define corporate associations. In addition, corporate associations are regarded as a set of perceptions, which may or may not be related to one another, rather than as a holistic picture, and as Brown (1998) pointed out, corporate associations are a heterogeneous set of perceptions, which may be related to a wide variety of aspects of a company. Berens and Van Riel (2004), after developing an overview of the studies on corporate associations of the last five decades, established three main typologies of corporate associations. They include "(1) the different social expectations that people have regarding a company, (2) the different personality traits that people attribute to a company, and (3) the different reasons they have to trust or not to trust a company" (p. 174). Berens (2004) stated that in terms of the social role typology, two specific types of corporate associations exist: corporate ability (CA) and CSR associations.

In their germinal work, Brown and Dacin (1997) introduced and studied these two types of corporate associations as a way to explain the inconsistent results observed in previous studies under the rubric of corporate image. They demonstrated that "what consumers know about a company can influence their evaluations of products introduced by the company" (p. 68) and that "different types of corporate associations (i.e. CA and CSR) can have important" (p. 68) but different influences on company and product evaluations. The authors provided participants either with extensive attribute information about new products or information about corporate associations and measured the associations. They found that CA "may have a greater impact on both specific product attribute perceptions and the overall corporate evaluation than a reputation for social responsibility" (p. 80). However, they also observed that CSR has a positive influence on consumer response to new products.

Researchers have begun investigating the conditions under which CA association and CSR association may influence consumers' preferences, and in some cases, their results are contradictory. Sen and Bhattacharya (2001) found that the CSR issues addressed by the company, "the quality of its products," "the consumers'

personal support for the CSR issues,” “their general beliefs about CSR,” and “the consumers’ perceptions of congruence between their own characters and that of the company in their reactions to its CSR initiatives” (p. 225) moderated the effect of CSR on product preferences. Moreover, they found that consumers are more sensitive to negative CSR than positive CSR and that the consumers’ perceptions of the trade-offs between CSR and CA efforts play a significant role in their final response. Berens (2004) found that the effect of CA association and CSR association on product evaluations and purchase intentions is different depending on the accessibility of the associations, their diagnostic value, and the corporate brand strategy that a company uses.

The experimental results of Mohr and Webb (2005) indicated that CSR had an important and positive influence on company evaluation and purchase intent. Their results showed that American consumers “reacted more strongly to negative than to positive CSR” (p. 139) and that a “low price did not appear to compensate for a low level of social responsibility” (p. 142). According to Berens et al. (2005), academic researchers, on the influence of corporate associations in consumer response, “have found that associations with a company’s corporate ability (CA) and its corporate social responsibility (CSR) both influence product evaluations but that CA associations have a stronger effect than CSR associations” (p. 35).

In contrast, Marin and Ruiz (2007) demonstrated that the contribution of CSR is stronger than CA. The authors suggested that the increasing competition and the decreasing CA-based variation in the marketplace may be responsible for this result. Moreover, they claimed that “CA may have become a base line below which companies face great difficulties to stay in the market, and above which companies benefit from competitive advantage in the form of associations obtained from the undertaken CSR activities” (p. 255).

Dependent Variable: Consumer Social Responsibility

A growing body of academic research supports this new corporate global approach. Researchers claim that the business case of CSR includes improved financial performance, reduced operating costs, long-term sustainability of the company, increased staff commitment and involvement, long-term return on investments, enhanced capacity to innovate, enhanced brand value and reputations, development of closer links with customers, and greater awareness of their needs (Jones, Comfort, Hillier, & Eastwood, 2005).

Researchers have investigated the interface between CSR and the customer broadly, and as the literature shows, this is a truly complex matter. Many surveys developed at an international level suggest that a positive relationship exists between a company’s CSR actions and consumers’ reaction to that company and its product (Bhattacharya & Sen, 2004; Sen & Bhattacharya, 2001).

A growing body of academic research corroborates and attests to the generally positive influence of CSR on consumers’ company evaluations and product purchase intentions (Brown & Dacin, 1997; Carrigan et al., 2004; Creyer & Ross, 1997; Maignan, 2001; Schroeder & McEachern, 2005; Uusitalo & Oksanen, 2004). This kind of consumerism mainly incorporates environmental issues but also extends to animal welfare, human rights, and labor working conditions in the third world (Tallontire et al., 2001). The links to consumers’ positive product and brand valuations, brand choice, and brand recommendations documented the relationship between CSR and consumer attitudes. As a result of the broad literature, Devinney, Auger, et al. (2006) proposed a new concept highlighting the important role that CSR plays in consumer behavior, *consumer social responsibility* (CnSR: “The conscious

and deliberate choice to make certain consumption choices based on personal and moral beliefs” (p. 32). This concept has ethical and consumerism components, which can appear as an “expressed activity in terms of purchasing or no purchasing behavior; and as an expressed opinion in surveys or other forms of market research” (p. 32).

Conversely, recent investigations demonstrate that the relationship between CSR and ethical consumerism is not always direct and evident. The results are in many cases contradictory and establish numerous factors that affect whether a firm’s CSR activities translate into consumer purchase. They include tradeoffs with traditional criteria like price, quality, and convenience and lack of information (Mohr et al., 2001); corporate brand dominance (Berens et al., 2005); and the type of CSR, quality of products, consumers’ personal support for the CSR issues, and their general beliefs about CSR (Sen & Bhattacharya, 2001). There seems to be a contradiction between what the international polls and surveys established in terms of intentions to buy products with CSR features and the real purchasing of them (Devinney, Auger et al., 2006).

Auger et al. (2003) explained that the differences occurred because in the former studies, researchers used surveys to rank the importance of some CSR issues, without any trade-off between traditional features and CSR product features. These types of instrument overstate the relevance of CSR issues because Likert-type scales do not give “incentives to answer questions truthfully” (Auger & Devinney, 2005, p. 2) and because “respondents may want to edit their private judgment before they report it to the researcher, due to reasons of social desirability and self-presentations” (p. 6). Hence, “these surveys may overstate the importance of social features, since there are clearly more socially acceptable answers” (Auger et al., 2006, p. 6).

Conclusions

The proposed research is important because the results may help to close this gap in the literature. In addition, it will be the first study that involves discovering whether CSR influences CnSR behavior among Peruvian consumers. This study will be an attempt to continue research on consumer social responsibility in developing countries. A discrete choice experiment will be used because, as Auger and Devinney (2005) suggested, this methodology forces “consumers to trade-off product attributes (including ethical attributes) against one another, which leads to more reliable estimates of relative valuation (or utility) than would be the case were such constraints on choice not imposed” (p. 2). Chapter 3 will include elaboration on the method suggested to measure the impact of CSR on CnSR of Peruvian consumers.

CHAPTER 3: METHODOLOGY

The proposed study will involve testing four hypotheses to measure the effect of CSR on CnSR of Peruvian consumers. This research will involve an attempt to enhance the understanding of the relationship among these variables and to establish a cause-and-effect relationship through quantitative data. The unit of analysis will be the consumers who are at least 18 years old and live in Lima, Peru. The proposed study is a cross-sectional research in which data gathering occurs only once. This experimental study will include a stratified random sampling design. Therefore, the internal and external validity will be expected to be high.

The study will involve measuring respondents' behavior in terms of their intent to purchase and willingness to pay a premium price.

This experimental investigation will involve surveying at least 638 consumers who live in Lima to measure the impact of CSR on the CnSR behavior of Peruvian consumers. The population of Peruvian consumers will be defined as all consumers of at least 18 years old who live in Peru.

Sampling Frame

When establishing the sample, researchers must consider that discrete-choice responses are categorical; therefore, "several hundred observations are needed to satisfy the asymptotic conditions specified for estimating the model's parameters and obtaining reliable statistical tests" (Verma, Plascka, & Louviere, 2002, p. 19). However, the total number of respondents should not be so many in this study because each participant will receive 32 choice scenarios. Hensher et al. (2005) explained how to determine the minimum acceptable sample size, n , for a simple random sample strategy:

[It] is determined by the desired level of accuracy of the estimated probabilities, \hat{p} . Let p be the true choice proportion of the relevant population, a be the level of allowable deviation as a percentage between \hat{p} and p , and β be the confidence level of the estimations such that $\Pr(|\hat{p} - p| \leq ap) \geq \beta$ for a given n , where $\beta = 1 - \alpha$. The minimum sample size is defined as:

$$n \geq \frac{q}{rpa^2} \left[\theta^{-1} \left(1 - \frac{\alpha}{2} \right) \right]^2$$

Where q is defined as $1 - p$ and $\theta^{-1} \left(1 - \frac{\alpha}{2} \right)$ is the inverse cumulative

distribution function of a standard normal (i.e. $N \sim (0,1)$) taken at $\left(1 - \frac{\alpha}{2} \right)$. (p.

185)

Obtaining the true population proportion in advance of the proposed study will not be possible. Hensher et al. (2005) explained the following:

[The researcher may] have to best guess what the true population proportion is. While this represents a weak point in any choice study, the calculations are similar to those required for studies not associated with choice analysis and therefore represent a weakness in nearly all scientific research requiring the calculation of sample size, and not just for choice analysis. (p. 189)

Assuming 0.07 as the proportion for CSR (p) and tolerating the sampled proportion of decision makers (\hat{p}) being within 0.05 of the true population, the minimum sample size (n) for the proposed research will be 20,407, which indicates “the minimum number of choices that are required to replicate the true population proportions within the acceptable error” (p. 189). Each respondent will be shown 32 choice sets as part of the experiment; thus, the minimum total number of individuals will be 638 (i.e., 20,407 / 32). Louviere et al. (2000/2004), based on their experience with hundreds of stated choice experiments, established that “many experiments have employed at least thirty two profiles successfully” (p. 103).

As discussed in Hensher et al. (2005), a characteristic common to the population, with exception of choice, would be used to create a stratified random sample by forming G mutually exclusive groups representing a proportion of the total population, W_g . Therefore, the stratification of the minimum 638 individuals would be calculated according to the distribution of the socioeconomic levels in Lima (IPSOS Apoyo Opinión y Mercado, 2007):

1. Level A and B: 23.5%,
2. Level C: 35.1%,
3. Level D: 28.7%, and

Instrumentation

The theoretical foundation of the SPDCM is rather complex because it combines several different economic theories. This experimental model will be based on probabilistic choice theory and named random utility theory and is consistent with Lancaster’s (1966) economic theory of value and neoclassical economics. Probabilistic choice theory allows working with different models, which can be divided into two main families depending on the way in which the variable is interpreted: (a) the decision rule is assumed random and the utility deterministic, and (b) the decision rule is assumed deterministic and the utility random.

The first family of models views individuals as intrinsically probabilistic, which implies that individual behavior can change according to internal and external factors. The main strength of these models is that they can incorporate a great deal from psychology literature that could help to explain some of the phenomena observed in experimental economics that not are consistent with standard economic theory. However, McFadden (2001) cautioned, “The feedback from the empirical study of choice behavior to the economic theory of the consumer has begun, through behavioral and experimental economics, but is still in its adolescence” (p. 361). Unfortunately, little effort has been made so far to apply such knowledge to the SPDCM. For this reason, the proposed study will follow the second family of models, which views the decision rule as deterministic, the utility random, and the probability as the inability of the researcher to formulate individual behavior precisely.

The probabilistic discrete choice method originated in “A Law of Comparative Judgment” (Thurstone, 1927) in which the author proposed the modeling of individual choice as the outcome of a process in which the random variable is associated with each alternative, and the alternative with the greatest realization is the one selected (hence belonging to the second family of choice models). Later, Lancaster (1966) established the theory of characteristics of a good, in which a good is a set of attributes, and the value of a good is a function of each attribute of that good. In 1974 McFadden further developed these ideas by exploring the theoretical implication of

choice probabilities for the maximization of utilities that contained random elements, creating the random utility model (RUM). When the perceived stimuli are interpreted as levels of satisfaction, or utility, this can be understood as a model for economic choice in which the individual chooses the option yielding the greatest realization of utility (McFadden, 2001). Kjaer (2005) clearly stated the link between discrete choice method and neoclassical economy:

Neoclassical economic theory supposes that the individual has perfect discriminatory power and unlimited information-processing capacity, allowing the individual to rank the alternatives in a well defined and consistent manner. The individual can thus determine his or her best choice and will repeat this choice under identical circumstances. The link with probabilistic theory arises from the researcher's lack of information about the individual's true utility function. Probabilistic choice theory is thus introduced not to reflect a lack of rationality in the individual, but to reflect a lack of information regarding the characteristics of the alternatives and/or the characteristics of the individual on the part of the researcher. The researcher only observes the part of the utility that makes up the alternative. This implies that the utility function is deterministic from the individual's point of view and hence is in accordance with neoclassical economy. (p. 31)

In that sense, and according to probabilistic choice theory and random utility theory, the discrete choice model takes a causal perspective to understand the behavioral process that leads to the agent's choice. Researchers can observe some of the factors that determine the agent's choice and cannot observe others (ε). Those factors are related to the agent's choice through the function $y = h(x, \varepsilon)$. The function is named the behavioral process and is deterministic in the sense that given x and ε , the choice of the agent is fully determined. However, because researchers cannot observe ε , the agent's choice is not deterministic, and researchers cannot predict it exactly.

Instead, researchers derive the probability of any particular outcome. The unobserved terms are considered random with density $f(\varepsilon)$. Train (2003) elaborated as follows:

The probability that the agent chooses a particular outcome from the set of all possible outcomes is simply the probability that the unobserved factors are such that the behavioral process results in that outcome. The probability is an integral of an indicator for the outcome of the behavioral process over all possible values of the unobserved factors. (p. 3)

In this study, in the stated preference discrete choice experiment, a binary model is proposed, where the respondents would be asked a series of hypothetical choice questions. Each experiment will include a description of a set of alternatives, athletic shoes or batteries, with different functional (CA) and social (CSR) attributes (see Appendix A), and the respondents will state whether they would buy the products. This choice experiment can thus be used to examine the responses of individuals to changes in the scenario attributes. This discrete choice experiment, rather than promoting examination of the entire scenario as a package, allows analysis of the relevant attributes of the buying situation to determine preferences for different attributes.

The behavioral model will include the following: The respondents will obtain some utility from buying each product (athletic shoes or batteries). Respondents will answer a series of questions, with the attributes of the products varying to determine how a respondent's choice changes when the attributes change. The proposed alternatives in each choice are all different in terms of the goods described to the

respondents. The variations across the alternatives in the choice sets are achieved by assigning different levels of the attributes, according to the experimental design, and the sequence of choices by each respondent will be observed. Panel data is the term for data that represent repeated choices like these.

The utility consists of a part that will be observed ($\beta'x$) and a part that will not be observed (ε), $U = \beta'x + \varepsilon$, where x is a vector of variables and β is a vector of parameters. It will be assumed that the person will buy the products only if the utility is positive. The probability that a person buys the products, given what will be observed, is therefore

$$P = \int I[\beta'x + \varepsilon > 0] f(\varepsilon) d\varepsilon, \text{ where } f \text{ is the density of } \varepsilon.$$

Different discrete choice models arise from different assumptions about the distribution of the unobserved portion of utility. According to the assumption that each choice is independent of the others (ε is independent and identically distributed, and unobserved factors are uncorrelated over alternatives and have the same variance for all alternatives), a logit discrete choice model will be used. According to Train (2003), researchers can use logit to examine panel data in the same way as purely cross-sectional data.

According to Train (2003), any dynamics related to observed factors when the data are processed, “such as state dependence (by which the person’s past choices influence their current choices), or lagged response to changes in attributes, can be accommodated” (p. 55) through the inclusion of lagged dependent variables. The author established that the inclusion of these variables does not induce inconsistency in estimation, because “the situation is analogous to linear regression models, where a lagged dependent variable can be added without inducing bias as long as the errors are independent over time” (p. 56). If this were the case, a probit logit model would be used because such models allow unobserved factors to be correlated over time.

Some problems may arise using panel data because respondents must indicate more than one choice, and the within-individual variation across discrete choices may not be random. Normal binary models cannot handle this situation because the unobserved factors will be correlated. To solve this problem, Kjaer (2005) suggested incorporating a “random parameter that is freely correlated within an individual, but not across individuals” (p. 43):

Consequently the utility is given by $U = \beta'x + \varepsilon + \mu$, where ε the random error term that includes random variation across discrete choices, while μ is the random error term across respondents and is constant for each individual. This means ε is the error due to difference among observations and μ is the error due to difference among respondents—termed person-specific variation. Person specific variation is present when there is some unobserved taste parameter that makes two otherwise identical individuals answer differently to the same choice. The μ thus captures the between-subject variability—also known as heterogeneity among individuals. (p. 43)

The abovementioned reinforces what Louviere et al. (2000/2004) stated: “Satisfaction of the IIA condition, however, should not be a general concern because the independence assumption is a priori, neither desirable nor undesirable, but should be accepted or rejected on empirical grounds depending on the circumstances” (p. 45).

Testing the various decision rules (heuristics) that the Peruvian consumers can use when answering stated preference questions (cognitive, emotional, and CSR or ethical reactions) is possible with the discrete choice method. The objective is to determine to what extent the type of product and the type of CSR product feature can influence Peruvian consumers’ CSR behavior and the value that they place on a

given product. The stated choice method of discrete choice experiments will allow the strength elicitation of Peruvian consumers' preferences of CnSR based on joint valuation within the survey context.

Assuming that respondents choose the option that provides them the highest level of utility, the stated choices will reveal consumers' extra WTP for CSR product features. Louviere et al. (2004) established the following:

In a simple linear model where each attribute in a utility expression is associated with a single taste weight, the ratio of two utility parameters is an estimate of the WTP, holding all other potential influences constant. If one of the attributes is measured in monetary units, then the marginal rates of substitution arising is a financial indicator of WTP. (p. 61)

Therefore, the inclusion of a cost attribute becomes an elicitation procedure for WTP and causes the discrete choice method to be consistent with welfare economics. Results from different studies can be compared and, on the grounds of economic efficiency, used in priority settings. The method is indirect in the sense that respondents are not directly asked their WTP but instead have to trade cost for improvements in the positively valued attribute (Kjaer, 2005).

Following the study of Auger et al. (2003) the CnSR behavior of Peruvian consumers will be examined for two sets of products: AA batteries and athletic shoes (see Appendix A). These products will permit testing environmental issues for batteries and working conditions for athletic shoes and testing the effects of different kinds of products according to the Foote, Cone, and Belding Grid (Vaughn, 1986). The athletic shoes will be classified as a fashion product (high involvement and feeling purchase decision) and the batteries as a household product (low involvement and thinking purchase decision).

To start the experiment, the Peruvian consumers will receive a transcription of one hypothetical article, published in an important Peruvian newspaper, that highlights the features of the particular product category, followed by a set of sociodemographic and lifestyle questions. All respondents will receive an article, but they will be randomly assigned to eight experimental conditions (for detail, see Auger et al., 2003) that systematically vary the presence or absence of the ethical factors mentioned in the articles. These articles, originally developed in English by Auger et al. (2003), were translated to Spanish for use in Spain (Auger et al., 2006). These articles will be pretested to establish whether they are realistic and similar in terms of style and content for the Peruvian consumers.

Before applying the instruments and to be reasonably sure that they measure the required variables accurately (Sekaran, 2003; Zikmund, 2003), the following pretesting tasks will be developed according to Araña and León (2005a): Expert interviews, Focus groups and a Pilot study.

Some tools will be used to ensure the statistical properties of the design after the pretesting tasks and before conducting the experiment. According to Huber and Zwerina (1996), the maximum statistical efficiency in choice design relates to the design matrix in such a way that efficiency is maximized when the size of the covariance matrix of the estimated parameters is minimized (D-efficiency). Four principles need to be considered simultaneously: (a) level balance (the levels of an attribute occur with equal frequency in the design), (b) orthogonality (when the joint occurrence for any two levels of different attributes appears in profiles with frequencies equal to the product of their marginal frequencies. That is, the difference in the level of each attribute varies independently over choice sets), (c)

minimal overlap (when a level does not repeat itself in a choice set), and (d) utility balance (utilities of alternatives within each choice set are approximately equal). The pilot study will generate useful sets of prior estimates. Therefore, based on the researcher's choice restrictions (number of attributes and levels), the SAS software will generate the experimental design that optimizes D-efficiency.

Dr. T. Devinney granted permission for use of the validated questionnaires and the experimental design (personal communication, August 18, 2006). Because the discrete choice experiment's design includes two alternative discrete choices, this gives rise to a binary discrete choice model. The estimation of this method is most often based on the method of maximizing the likelihood function (Louviere et al., 2004). The software package SAS will be used for the estimation of this discrete choice model with linear-in-parameters utility (Train, 2003).

Data Analysis

Data analysis will be developed in two steps: First, the binary discrete choice model will be run, and then the data will be interpreted. Standard t-statistics will be used to test hypotheses about individual parameters. The likelihood ratio test (LR-test) will be used to test whether all the parameters are zero for the null hypotheses. The McFadden R^2 will be used to measure the goodness of fit (Train, 2003). To handle this probability model, the computer program SAS 9 Market Research Application will be employed.

Validity and Reliability

The validity and reliability of the stated discrete choice method and the design of the experiment proposed are based on their application in Hong Kong, Australia, Germany, Spain, Turkey, the United States, India, and Korea. The findings of Auger et al. (2003), Auger and Devinney (2005), and Auger et al. (2006) were confirmed and calibrated.

Validity and reliability are crucial aspects when using the SPDCM. Therefore, it is important to understand clearly the distinction between reliability and validity. According to Sekaran (2003), reliability refers to the degree of reproducibility or variation of outcomes of an experiment carried out in different settings, with different operators, and over different applications (i.e., reliability is a measure of precision), while validity refers to how well an instrument measures the particular concept it is intended to measure. Kjaer (2005) described validity as follows:

The validity of an experiment is the degree to which it measures the theoretical construct under investigation. The economic literature refers predominantly to three types of validity (described by the *American Psychological Association* in 1974): content validity, criterion validity and construct validity. (p. 111)

Content validity refers to all aspects of the experimental design, such as choice of attributes, attribute levels, ordering of attributes, and framing. According to Kjaer (2005), this validity is difficult to assess because it depends on the intuition and experience of the researcher. To improve the content validity of the proposed research, the experimental design and the instruments developed by experts in the consumer choice method and used in different settings across the world will be used. Auger et al. (2003) carefully selected the attributes in previous studies in 2003, 2005, and 2006; these are supported in the reviewed literature. Moreover, the opinions of local experts, the results of focus groups and pilot studies, and the use of representative sample individuals encourage high content validity of the experiment.

Criterion validity, also named external validity, refers to the extent to which the measure of the construct can be compared with another measure which may be

regarded as a criterion. The research conducted in areas such as valuation of environmental goods and services showed that discrete choice experiments do have external validity (Rian, 2004). Researchers usually compare discrete choice experiments with results from the actual market (Kjaer, 2005). Because the proposed experiment will include consumer goods, such as athletic shoes and batteries, the criterion validity would be tested against the Peruvian market prices of these products.

Construct validity refers to the extent to which a particular measure relates to other measures and is consistent with the theoretically-derived hypotheses that relate to the concept under measurement. Consequently, construct validity is concerned with whether the measure is correlated with other measures of the same theoretical constructs, termed convergent validity. Construct validity is also concerned with whether the findings conform to the theoretical foundation of the experiment and to a priori expectations, termed theoretical validity or internal validity (Kjaer, 2005).

In reference to the convergent validity of stated choice methods, Louviere et al. (2004) developed an exhaustive analysis of this issue, finally proposing a relatively simple mechanism to explain preference regularities across multiple preference data conditions (e.g., elicitation methods, cultures, periods, and/or experimental conditions). They suggested that “the existence of preference regularities should be evaluated on the basis of the marginal utility of attributes common to conditions and tested on the basis of whether the marginal utilities are equal up to positive constants of proportionality” (p. 380). The authors demonstrated that “a simple mechanism gives rise to these constants of proportionality that are inversely related to the variance of the stochastic utility component in random utility models” (p. 380). They presented a relatively large number of examples involving tests of preference regularities across multiple elicitation methods (best/worse, choice experiment, yes/no consideration, ratings conjoint), market segments (a priori and latent), space (between cities and countries), and time. These examples supported their main hypothesis that the variance of the stochastic utility component generally accounts for a large proportion of the observed differences in preference parameters from different conditions, elicitation procedures, and so on.

In reference to the internal validity of the SPDCM, Adamowicz et al. (1998) stated, “The repeated question nature of discrete choice experiments allows for internal validity tests and provides a response surface which may yield important information about the consistency of individual responses” (p. 29). Considerable evidence exists that preferences or values inferred from experiments are similar to those inferred from behavior in the real market. According to Louviere (2001), “Previous studies show fairly consistent results that stated and actual preferences seem to correspond closely in many cases” (p. 508). In that sense, discrete choice experiments offer more room for internal validity checks through the repeated choice context and the development of a broader response surface. Significant evidence already exists on the validity of stated choice methods in predicting actual choice responses (Louviere, Hensher & Swait, 2004).

Tests for Validity and Reliability

Consistency test. To test for biases and the validity of the experiment in addition to what is possible from the chosen alternatives, an extra choice set will be included to test for rationality, and then a consistency test will be developed. This test will relate to whether the respondents understand the concept of the proposed stated discrete choice method and, hence, the extent to which they act rationally (according to economic theory) when expressing their preferences. This test will involve the inclusion of a choice set in which one alternative unquestionably dominates the

other(s) on all attributes. According to Kjaer (2005), “Incorrect responses can either be interpreted as a result of irrational respondents, a lack of understanding of the choice task, or a simple mistake on the part of the respondent” (p. 97).

Internal validity test. Cozby (2004) suggested another test to probe the internal validity of the experiment. This will be applied during the pilot study: The same measures will be used in two groups; they would be equivalent to begin with, and if no confounding variables exist, any difference between the groups on the dependent variable must be attributed to the effort of the independent variable. Researchers must develop experiments to minimize or eliminate the effects that can jeopardize internal validity. Researchers should consider history, events in the environment that may occur between measurements; maturation, changes in the participants over time; testing, the pretesting effect; instrumentation, changes in the procedure to measure the dependent variable; selection, differential selection of respondents; and mortality, withdrawal of participants during the experiment (Campbell & Stanley, 1963).

Tests of independence of irrelevant alternatives (IIA). The tests on subsets of alternatives (Hausman & McFadden, 1984 as cited by Train, 2003) and cross-alternative variables (McFadden, 1987 as cited by Train, 2003) will be developed.

Overall goodness-of-fit tests. To determine how well the model fits a given set, researchers compare the predicted dependent (or endogenous) variable with the observed dependent variable relative to some useful criterion. Louviere et al. (2000/2004) provided a test that allows researchers to evaluate predicted probabilities against a vector of observed discrete choices:

It can be used to evaluate the out-of-sample fit of any MNL model by taking repeated samples of the data. The HL test is a test of process equivalence in that it takes an estimated model and associated variance-covariance matrix of estimated parameters and uses the model to forecast the expected probabilities. The forecast probabilities are then regressed against the 1.0 observed choice using a modified regression based on the variance-covariance matrix, which takes the sampling and estimation errors into account. The null is that the predicted probabilities are proportional to the observed 1.0 choice data. This test loses no power from aggregation and can be used to compare models across full data sets and holdout samples (and a second data source). (p. 53)

Likelihood ratio test. A statistical method called the likelihood ratio index is often used with discrete choice models to measure how well the models fit the data. This ratio index is defined as the following:

$$\rho = 1 - LL(\beta) / LL(0)$$

LL(β) is the value of the log-likelihood function at the estimated parameters, and LL(0) is its value when all the parameters are set equal to zero (Train, 2003). According to Louviere et al. (2000/2004), “This criterion is useful when the maximum likelihood estimation method is used to estimate the utility parameters of the MNL model” (p. 53).

Predictive strength test. According to Louviere et al. (2000/2004), “the best test of predictive strength is a before-and-after (i.e., external validity) assessment procedure” (p. 55). The prediction success index suggested by McFadden 1979 (as cited in Louviere et al., 2000/2004), which is an appropriate goodness-of-fit measure to account for the fact that the proportion successfully predicted for an alternative varies with the aggregate share of that alternative, will be developed. The index is written as follows:

$$\sigma = \sum (N_i/N..) \sigma_i.$$

In this equation, $(N_i/N..)$ is the proportion who would be predicted successfully if the choice probabilities for each sampled individual were assumed to equal the predicted aggregate share, and then it can be normalized (σ) to have a maximum value of one. The higher the value, the greater the predictive capability of the model (Louviere et al., 2000/2004).

Reliability test. To ensure reliability, a test-retest method will be applied during the pilot study. This test involves using the same survey with the same respondents at different moments in time. The closer the results, the greater the test-retest reliability of the survey instrument. The correlation coefficient between two sets of responses is often used as a quantitative measure of the test-retest reliability. Normally, values of the correlation between 0.7 and 0.8 are considered satisfactory or good.

Dominance preference test. A dominance preference test will be used to evaluate a situation in which a respondent persistently chooses the alternative containing the best level of a particular attribute. Kjaer (2005) suggested the following:

[A] pseudo t-test in which a particular attribute parameter estimated in a standard model (including all variables) is compared with the same attribute parameter estimated in a model including only this variable. If the t-test is acceptable ($H: B = B$) it is an indication of dominance. (p. 115)

The observation of dominance may reflect strong preferences and a belief that a specific attribute is the important one; in this case, respondents may not have been prepared to make trade-offs. This implies a lexicographic ordering and could indicate a right-based view of choice and an ethical belief that individuals should be provided with a specific characteristic. In these cases, no consensus in the literature exists of “how to interpret and handle these responses” (Kjaer, 2005, p. 116).

Hypothesis testing. According to Train (2003), “As with regressions, standard T-statistics would be used to test hypotheses about individual reliability of the parameters in discrete choice models, such as whether the parameter is zero” (p. 74). Therefore, the null hypothesis would be that the coefficient of several explanatory variables is zero. To test this hypothesis, the model will be estimated twice: first with all the explanatory variables included and second without them (because excluding the variables forces their coefficients to be zero). Then the maximum value of the log-likelihood function for each calculation will be observed; two times the difference in these maximum values is the value of the test statistic. Finally, the test statistic will be compared with the critical value of chi-squared with degrees of freedom equal to the number of explanatory variables excluded from the second estimation (Train, 2003).

REFERENCES

- Adamowicz, W., Louviere, J., & Swait, J. (1998). Introduction to attribute-based stated choice methods. Retrieved March 3, 2007, from <http://www.darrp.noaa.gov/library/pdf/pubscm.pdf>.
- Aqueveque, C. (2005). Marketing and market development signaling corporate values: Consumers' suspicious minds. *Corporate Governance*, 5(3), 70-81.
- Araña, J., & León, C. (2005a). *Consumers' valuation of corporate social responsibility: A stated preference approach*. Unpublished manuscript, University of Las Palmas de Gran Canaria, Canarias, Spain.

- Araña, J., & León, C. (2005b). Flexible mixture distribution modelling of dichotomous choice contingent validation with heterogeneity. *Journal of Environmental Economics and Management*, 50, 178-188.
- Arellano, R., & Burgos, D. (2004). *Ciudad de los Reyes, de los Chávez, los Quispe* [Reyes, Chavez and Quispe City]. Lima, Peru: EPENSA.
- Auger, A., Devinney, T., & Louviere, J. (2007). Using best-worst scaling methodology to investigate consumer ethical beliefs across countries. *Journal of Business Ethics*, 70(1), 299-326.
- Auger, P., Burke, P., Devinney, T., & Louviere, J. (2003). What will consumers pay for social product features? *Journal of Business Ethics*, 42(3), 281-304.
- Auger, P., & Devinney, T. (2005). *Do what consumers say matter? The misalignment of the preferences with unconstrained ethical intentions*. Retrieved March 8, 2007, from <http://www.ssrn.com/abstract=901861>
- Auger, P., Devinney, T., & Louviere, J. (2006). *Global segments of socially conscious consumers: Do they exist?* Retrieved March 8, 2007, from the Australian Graduate School of Management, Sydney, NSW Web site: <http://www2.agsm.edu>
- Babbie, E. (2004). *The practice of social research*. Belmont, CA: Wadsworth/Thomson Learning.
- Barone, M., Miyazaki, A., & Taylor, K. (2000). The influence of cause-related marketing on consumer choice: Does one good turn deserve another? *Journal of Academy Science*, 28(2), 248-262.
- Becchetti, L., & Rosati, F. (2007). *Global social preferences and the demand for socially responsible products: Empirical evidence from a pilot study on fair trade consumers*. Working paper, CEIS Tor Vergata Centre for International Studies on Economic Growth, Rome, Italy. Retrieved March 8, 2007, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=962488
- Belk, R., Devinney, T., & Louviere, J. (2005). Consumer ethics across cultures. *Consumption, Markets and Culture*, 8(3), 275-289.
- Berens, G. (2004). *Corporate branding: The development of corporate associations and their influence on stakeholder reaction*. Unpublished master's thesis, Erasmus University Rotterdam, Rotterdam, Netherlands. Retrieved March 12, 2007, from <http://www.ep.eur.nl/handle/1765/292>
- Berens, G., & Van Riel, C. (2004). Corporate associations in the academic literature: Three main streams of thought in the reputation measurement literature. *Corporate Reputation Review*, 7(2), 161-178.
- Berens, G., Van Riel, C., & Van Bruggen, G. (2005). Corporate associations and consumer product responses: The moderating role of corporate brand dominance. *Journal of Marketing*, 69(3), 35-48.
- Bhattacharya, C., & Sen, S. (2003). Consumer-company identification: A framework for understanding consumers' relationships with companies. *Journal of Marketing*, 67(2), 76-88.
- Bhattacharya, C., & Sen, S. (2004). Doing better at doing good: When, why and how consumers respond to corporate social initiatives. *California Management Review*, 47(1), 9-24.
- Blumenthal, D., & Bergstrom, A. (2003). Brand councils that care: Towards the convergence of branding and corporate social responsibility. *Journal of Brand Management*, 10(4/5), 327-341.
- Boston College. (2004). *Corporate giving standard survey results*. Retrieved March 3, 2006, from <http://www.bcccc.net/index.cfm>

Con formato: Inglés (Estados Unidos)

- Bowen, H. R. (1953). *Social responsibilities of the businessman*. New York: Harper.
- Brown, T. (1998). Corporate associations in marketing: Antecedents and consequences. *Corporate Reputation Review*, 1(3), 215-233.
- Brown, T., & Dacin, P. (1997). The company and the product: Corporate associations and consumer product responses. *Journal of Marketing*, 61(1), 68-84.
- Brown, T., Dacin, P., Pratt, M., & Whetten, D. (2006). Identity, intended image, construed image and reputation: An interdisciplinary framework and suggested terminology. *Journal of the Academy of Marketing Science*, 34(2), 99-106.
- Business and Sustainable Development. (2007). Business and sustainable development: A global guide. Retrieved February 27, 2007, from www.bsdglobal.com/tools/system_sa.asp
- Calder, B., Phillips, L., & Tybout, A. (1981). Designing research for application. *Journal of Consumer Research*, 8(2), 197-207.
- Calder, B., Phillips, L., & Tybout, A. (1982). The concept of external validity. *Journal of Consumer Research*, 9(3), 240-244.
- Campbell, D., & Stanley, J. (1963). *Experimental and quasi-experimental designs for research*. Boston: Houghton Mifflin.
- Carrigan, M., & Atalla, A. (2001). The myth of the ethical consumer—Do ethics matter in purchase behavior? *Journal of Consumer Marketing*, 18(7), 560-577.
- Carrigan, M., Szmigin, I., & Wright, J. (2004). Shopping for a better world? An interpretative study of the potential for ethical consumption within the older market. *Journal of Consumer Marketing*, 21(6), 401-417.
- Carroll, A. B. (1979). A three dimensional conceptual model of corporate performance. *The Academy of Management Review*, 4(4), 497-505.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39-48.
- Colombo, S., Hanley, N., & Calatrava-Requena, J. (2005). Policy for reducing the off-farm effects of soil erosions using choice experiments. *Journal of Agricultural Economics*, 56(1), 81-95.
- Cone. (2004, December). The 2004 Cone corporate citizenship study. Retrieved March 4, 2007, from <http://www.coneinc.com/Pages/research.html>
- Cozby, P. (2004). *Methods in behavioral research* (8th ed.). New York: McGraw Hill.
- Crane, A., & Matten, D. (2004). *Business ethics: A European perspective: Managing corporate citizenship and sustainability in the age of globalization*. Oxford, England: Oxford University Press.
- Creswell, J. (2003). *Research design: Qualitative, quantitative and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Creyer, E., & Ross, W. (1997). The influence of firm behaviour on purchase intention: Do consumers really care about business ethics? *Journal of Consumer Marketing*, 14(6), 421-433.
- Dacin, P., & Brown, T. (2002). Corporate identity and corporate associations: A framework for future research. *Corporate Reputation Review*, 2/3(5), 254-263.
- Dawkins, D. (2004, February). *The public's views of corporate responsibility 2003*. Retrieved March 3, 2007, from <http://www.ipsos-mori.com/csr/database.shtml>
- Dellaert, B., Brazeil, J., & Louviere, J. (1999). The effect of attribute variation on consumer choice consistency. *Marketing Letters*, 10(2), 139-147.
- Devinney, T., Auger, P., Eckhardt, G., & Birtchnell, T. (2006). The other CSR. *Stanford Social Innovation Review*, 4(3), 30-37.

- Devinney, T., Eckhardt, G., & Belk, R. (2006). *Why don't consumers behave ethically? The social construction of consumption*. Retrieved March 8, 2007, from Australian Graduate School of Management Web site: <http://www2.agsm.edu.au/agsm/web.nsf/content/faculty-FacultDirectory-TimothyDevinney-papers>
- Elkington, J. (1999). Triple bottom-line reporting: Looking for balance. *Australian CPA*, 69(2), 18-21.
- Ellen, P., Mohr, L., & Webb, D. (2000). Charitable programs and the retailers: Do they mix? *Journal of Retailing*, 76(3), 393-406.
- Ellen, P., Webb, D., & Mohr, L. (2006). Building corporate associations: Consumer attributions for corporate socially responsible programs. *Academy of Marketing Science*, 34(2), 147-157.
- Elrod, T., Louviere, J., & Krishnakumar, D. (1992). An empirical comparison of ratings-based and choice-based conjoint models. *Journal of Marketing Research*, 29(3), 368-377.
- Endacott, R. (2004). Consumers and CRM: A national and global perspective. *Journal of Consumer Marketing*, 21(3), 183-189.
- Envionics International. (1999). *Millennium poll on corporate social responsibility*. Retrieved March 4, 2006, from <http://www.mori.com/polls/1999/millpoll.shtml>
- European Foundation for Management Development. (2005). *The globally responsible initiative* [Brochure]. Retrieved March 10, 2007, from <http://www.efmd.org>
- Fan, Y. (2005). Ethical branding and corporate reputation. *Corporate Communications: An International Journal*, 10(4), 341-350.
- Fernandez, R. (2005). *Administración de la responsabilidad social corporativa* [Corporate Social Responsibility Management]. Madrid, Spain: Internacional Thomson Editores.
- Gardetti, M. A. (2005). Desarrollo sustentable, sustentabilidad y sustentabilidad corporativa [Sustainable development, sustainability and corporate sustainability]. In M. Gardetti (Ed.), *Textos en sustentabilidad empresarial* (p. 173). Buenos Aires, Argentina: La-Bell.
- Garriga, E., & Melé, D. (2004). Corporate social responsibility theories: Mapping the territory. *Journal of Business Ethics*, 53, 51-71.
- Gupta, S. (2002). Strategic dimensions of corporate image: Corporate ability and corporate social responsibility as sources of competitive advantage via differentiation. *ProQuest Digital Dissertations*. (UMI No. 30570736)
- Hensher, D., Rose, J., & Greene, W. (2005). *Applied choice analysis: A primer*. New York: Cambridge University Press.
- Huber, J., & Zwerina, K. (1996). The importance of utility balance in efficient choice designs. *Journal of Marketing Research*, 33(3), 307-317.
- Instituto Nacional de Estadística e Información [National Institute of Statistic and Information]. (2006). *Census 2005*. Retrieved March 14, 2007, from <http://www.inei.gob.pe>
- IPSOS Apoyo Opinión y Mercado. (2007). Sectores socioeconómicos A, B y C crecieron en Lima los últimos 4 años [A, B, C socio-economic levels in Lima grew during the last four years]. *El Comercio*, 25(7), a2. Retrieved July 27, 2007, from <http://www.elcomercio Peru.com.pe/ediciononline/html>
- Jacoby, S. M. (1997). *Modern manors: Welfare capitalism since the New Deal*. Princeton, NJ: Princeton University Press.

- Jones, P., Comfort, D., Hillier, D., & Eastwood, I. (2005). Corporate social responsibility: A case study of the UK's leading food retailers. *British Food Journal*, 107(6), 423-435.
- Juholin, E. (2004). For business or the good of all? A Finnish approach to corporate social responsibility. *Corporate Governance*, 4(3), 20-31.
- Kaciak, E., & Louviere, J. (1990). Multiple correspondence analysis of multiple choice experiment data. *Journal of Marketing Research*, 27(4), 455-465.
- Kjaer, T. (2005). A review of the discrete choice experiment—With emphasis on its application in health care. Retrieved March 17, 2007, from the Institute of Public Health—Health Economics Web site: <http://www.sam.sdu.dk/healtheco/publications/20051pdf.pdf>
- Klamey, R., Bennett, J., Louviere, J., Morrison, M., & Rolfe, J. (2002). Attribute causality in environmental choice modelling. *Environmental and Resource Economics*, 23(2), 167-186.
- Klein, J., & Dawar, N. (2004). Corporate social responsibility and consumers' attributions and brand evaluations in a product-harm crisis. *International Journal of Research in Marketing*, 21(3), 203-217.
- Kotler, P., & Lee, N. (2004, Spring). Best of breed: When it comes to gaining a market edge while supporting a social cause, 'corporate social marketing' leads the pack. *Stanford Social Innovation Review*, 14-23. Retrieved March 3, 2007, from www.sirereview.com
- Kotler, P., & Lee, N. (2005). *Corporate social responsibility—Doing the most good for your company and your cause*. New York, NJ: John Wiley & Sons.
- Krauss, S. (1995). Attitudes and the prediction of behavior: A meta-analysis of the empirical literature. *Personality and Social Psychology Bulletin*, 21(3), 58-75.
- Lancaster, K. (1966). A new approach to consumer theory. *Journal of Political Economy*, 74(2), 132-157.
- Lancsar, E. (2002). *Deriving welfare measures from stated preference discrete choice modelling experiments*. Retrieved March 3, 2007, from the University of Technology Sydney, Centre for Health Economics Research and Evaluation Web site: http://datasearch.uts.edu.au/chere/research/research_reports.cfm
- Lantos, G. P. (2001). The boundaries of strategic corporate social responsibility. *Journal of Consumer Marketing*, 18(7), 595-630.
- Lines, V. L. (2003). Corporate reputation in Asia: Looking beyond bottom-line performance. *Journal in Communication Management*, 8(3), 233-245.
- Louviere, J. (1983). Integrating conjoint and functional measurement with discrete choice theory: An experimental approach. *Advances in Consumer Research*, 10, 151-156.
- Louviere, J. (1988). Conjoint analysis modelling of stated preferences: A review of theory, methods, recent developments, and external validity. *Journal of Transport Economics and Policy*, 22, 93-119.
- Louviere, J. (2001). What if consumer experiments impact variances as well as means? Response variability as a behavioral phenomenon. *Journal of Consumer Research*, 28(3), 506-511.
- Louviere, J., & Hensher, D. (1983). Using discrete choice models with experimental design data to forecast consumer demand for a unique cultural event. *Journal of Consumer Research*, 10(3), 348-361.
- Louviere, J., Hensher, D., & Swait, J. (2004). *Stated choice methods*. Cambridge, England: Cambridge University Press. (Original work published 2000)

- Louviere, J., & Woodworth, G. (1983). Design and analysis of simulated consumer choice or allocation experiments: An approach based on aggregated data. *Journal of Marketing Research*, 20(000004), 350-367.
- Lynch, J. (1982). On the external validity of experiments in consumer research. *Journal of Consumer Research*, 9(3), 225-239.
- Maignan, I. (2001). Consumers' perceptions of corporate social responsibilities: A cross cultural comparison. *Journal of Business Ethics*, 30(1), 57-72.
- Maignan, I., & Ferrell, O. (2001a). Antecedents and benefits of corporate citizenship: An investigation of French businesses. *Journal of Business Research*, 51(1), 37-51.
- Maignan, I., & Ferrell, O. (2001b). Corporate citizenship as a marketing instrument: Concepts, evidence and research directions. *European Journal of Marketing*, 35(3/4), 457-484.
- Maignan, I., & Ferrell, O. (2004). Corporate social responsibility and marketing: An integrative framework. *Journal of the Academy of Marketing Science*, 32(1), 3-19.
- Marin, L., & Ruiz, S. (2007). "I need you too!" Corporate identity attractiveness for consumers and role of social responsibility. *Journal of Business Ethics*, 71(1), 245-260.
- Mazzanti, M. (2003). Discrete choice models and valuation experiments. *Journal of Economic Studies*, 30(5/6), 584-601.
- McFadden, D. (2001). Economic choices. *American Economic Review*, 91(3), 351-378.
- McKinsey. (2006, January). The McKinsey global survey of business executives: Business and society. *The McKinsey Quarterly*, 1-5. Retrieved June 1, 2006, from <http://www.mckinseyquarterly.com>
- Merino-Castelló, A. (2003). *Eliciting consumers' preferences using stated preference discrete choice models: Contingent ranking versus choice experiment*. Working Paper 705, Department d'Economia i Empresa Universitat Pompeu Fabra, Barcelona, Spain. Retrieved March 8, 2007, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=562982
- Miles, M., & Covin, J. (2000). Environmental marketing: A source of reputational, competitive and financial advantage. *Journal of Business Ethics*, 23(3), 299-311.
- Miles, M., & Munilla, L. (2004). The potential impact of social accountability certification on marketing: A short note. *Journal of Business Ethics*, 50(1), 1-11.
- Mohr, L., & Webb, D. (2005). The effects of corporate social responsibility and price on consumer responses. *The Journal of Consumer Affairs*, 39(1), 121-147.
- Mohr, L., Webb, D., & Harris, K. (2001). Do consumers expect companies to be socially responsible? The impact of corporate social responsibility on buying behavior. *The Journal of Consumer Affairs*, 35(1), 45-67.
- Morrós, J., & Vidal, I. (n.d.). *Responsabilidad social corporativa* [Corporate Social Responsibility]. Madrid, Spain: Fundación Confemetal.
- Neuman, W. (2003). *Social research methods. Qualitative and quantitative approaches*. Boston: Allyn & Bacon.
- Oppwal, H., Louviere, J., & Timmermans, H. (1994). Modeling hierarchical conjoint processes with integrated choice experiments. *Journal of Marketing Research*, 31(1), 92-105.

- Ostas, D. T. (2004). *Cooperate, comply, or evade? A corporate executive's social responsibilities with regard to law*. Retrieved March 29, 2006, from <http://www.allbusiness.com/periodicals/article/461803-1.html>
- Papasolomou-Dukakis, I., Krambia-Kapardis, M., & Katsiolouides, M. (2005). Corporate social responsibility: The way forward? Maybe not! *European Business Review*, 17(3), 263-279.
- Peterson, R. (2001). On the use of college students in social science research: Insights from a second order meta-analysis. *Journal of Consumer Research*, 28(13), 450-462.
- Rian, M. (2004). Discrete choice experiments in health care. *BMJ Journals Online*, 328, 360-361. Retrieved July 25, 2007, from <http://bmj.com/cgi/reprint/328/7436/360.pdf>
- Schroeder, M., & McEachern, M. (2005). Fast foods and ethical consumer value: A focus on McDonald's and KFC. *British Food Journal*, 17(4), 212-224.
- Schwalb, M. M., & García, E. (2003). *Evolución del compromiso social de las empresas: Historia y enfoques* [Evolution of the corporate social commitment: History and Approaches]. Lima, Peru: Universidad del Pacífico.
- Schwalb, M. M., & Malca, O. (2005). *Responsabilidad social: Fundamentos para la competitividad empresarial y el desarrollo sostenible* [Foundations for corporate competitiveness and sustainable development]. Lima, Peru: Universidad del Pacífico.
- Schwarz, N. (1999). Self-reports: How the questions shape the answers. *American Psychologist*, 54(2), 93-105.
- Schwarz, N. (2003). Self-reports in consumer research: The challenge of comparing cohorts and cultures. *Journal of Consumer Research*, 29(4), 588-594.
- Schwarz, N., Grayson, C., & Knauper, B. (1998). Formal features of rating scales and the interpretation of question meaning. *International Journal of Public Opinion Research*, 10(2), 177-183.
- Schwarz, N., & Oyserman, D. (2001). Asking questions about behavior: Cognition, communication, and questionnaire construction. *American Journal of Evaluation*, 22(2), 127-160.
- Sekaran, U. (2003). *Research methods for business: A skill building approach* (4th ed.). New York: John Wiley & Sons.
- Sen, S., & Bhattacharya, C. (2001). Does doing good always lead to doing better? Consumer reactions to corporate social responsibility. *Journal of Marketing Research*, 38(2), 225-243.
- Shadish, W., Cook, T., & Campbell, D. (2002). *Experimental and quasiexperimental designs for generalized causal inference*. Boston: Houghton-Mifflin.
- Sherman, R., Buddie, A., Dragan, K., End, C., & Finney, L. (1999). Twenty years of PSPB: Trends in content, design and analysis. *Personality and Social Psychology Bulletin*, 25(2), 177-187.
- Singhapakdi, A., & Karande, K. (2001). How important are ethics and social responsibility? *European Journal of Marketing*, 35(1/2), 133-152.
- Smith, N. C. (2003). Corporate social responsibility: Whether or how? *California Management Review*, 45(4), 52-76.
- Swait, J., & Louviere, J. (1993). The role of the scale parameter in the estimation and comparison of multinomial logit models. *Journal of Marketing Research*, 30(3), 305-314.
- Tallontire, A., Rentsendorj, E., & Blowfield, M. (2001). *Ethical consumers and ethical trade: A review of current literature*. Retrieved March 8, 2007, from

- the University of Greenwich, Natural Resources Institute Web site:
<http://www.nri.org/publications/policyseries/PolicySeriesNo12.pdf>
- Thurstone, L. (1927). A law of comparative judgment. *Psychological Review*, 34, 273-286.
- Train, K. (2003). *Discrete choice methods with simulation*. New York: Cambridge University Press.
- United Nations. (2003). *Global environment outlook*. Retrieved March 12, 2007, from <http://www.unep.org/geo/yearbook>
- United Nations. (2005). *Global environment outlook*. Retrieved March 12, 2007, from <http://www.unep.org/geo/yearbook>
- Uusitalo, O., & Oksanen, R. (2004). Ethical consumerism: A view from Finland. *Journal of Consumer Studies*, 28(3), 214-221.
- Van der Putten, F. P. (2005). *A research agenda for international corporate social responsibility*. Retrieved March 12, 2007 from Nyenrode Research Group web page <http://www.nyenrode.nl/download/NRG/workingpapers/NRG05-09.pdf>
- Vandresse, M. (2003). *Discrete choice models and stated preferences*. Unpublished manuscript, Université catholique de Louvain, Louvain, Belgium.
- Vaughn, R. (1986). How advertising works: A planning model revisited. *Journal of Advertising Research*, 26(1), 57-66.
- Verma, R., Plascka, G., & Louviere, J. (2002). Understanding customer choices: A key to successful management of hospitality services. *Cornel Hotel and Restaurant Administration Quarterly*, 43(6), 15-24.
- Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption: Exploring the consumer attitude-behaviour gap. *Journal of Agricultural and Environmental Ethics*, 9(2), 169-194.
- Wartick, S. L., & Cochran, P. L. (1985). The evolution of the corporate social performance model. *The Academy of Management Review*, 10(4), 758-769.
- Webster, F. (1975). Determining the characteristics of the socially conscious consumer. *Journal of Consumer Research*, 2(3), 188-196.
- Wilson, M. (2003). Corporate sustainability: What is it and where does it come from? Retrieved March 29, 2006, from www.iverybusinessjournal.com
- Wolff, F., & Barth, R. (2005). *Corporate social responsibility: Integrating a business and societal governance perspective. The RARE project's approach*. Retrieved March 29, 2006, from www.rare-eu.net/fileadmin/user_upload/documents/RARE_Background_Paper.pdf
- Wood, D. (1991). Corporate social performance revisited. *Academy of Management*, 16(4), 621-718.
- World Bank. (2004). *Responsible growth for the new millennium*. Retrieved March 12, 2007, from <http://www.worldbank.org>
- World Bank. (2006). CSR main concepts—Supplemental material to CSR course. Retrieved March 29, 2006, from <http://info.worldbank.org/etools/docs/library/57527/csr%5Fmainconcepts.pdf>
- Zikmund, W. (2003). *Business research methods* (7th ed.). Mason, OH: Thomson Learning—South Western.

APPENDIX A: FUNCTIONAL AND SOCIAL ATTRIBUTES FOR ATHLETIC SHOES AND BATTERIES

Auger et al. (2006) provided the following functional and social attributes for athletic shoes and batteries:

Functional Attributes (levels of attribute) of Athletic Shoes:

Shock absorption/cushioning (Low or High)

Weight (Lighter or Heavier)

Ankle Support (Low Cut or High Cut)

Sole durability (Short or Long)

Breathability/ventilation (Low or High)

Fabrication materials (Synthetic or Leather)

Reflectivity at night (No or Yes,)

Comfort/fit (Low or High)

Country of origin (Poland, China, Vietnam, domestic)

Brand of shoe (Nike, Adidas, Reebok, Others)

Price (\$40, \$70, \$100, \$130)

Social Attributes (levels of attribute) of Athletic Shoes:

Is child labor used in making the product? (Yes or No)

Are workers paid above minimum wage? (Yes or No)

Are workers' working conditions dangerous? (Yes or No)

Are workers' living conditions at the factory acceptable? (Yes or No)

Are workers allowed to unionize? (Yes or No)

Functional Attributes (levels of attribute) of AA Batteries:

Useful life (15 Hours or 30 Hours)

Storage life (3 Years or 5 Years)

Is the expected spoilage date on the battery? (No or Yes)

On-battery or on-package tester? (No or Yes)

Money-back guarantee (No or Yes)

Rechargeable (No or Yes)

Country of origin (Poland, China, Japan, domestic)

Brand of battery (Energizer, Duracell, Others)

Price (\$1.30, \$3.30, \$5.30, \$7.30)

Social Attributes (levels of attribute) of AA Batteries:

Is the battery Mercury/Cadmium free? (Yes or No)

Is the battery made from recyclable materials? (Yes or No)

Is the package made from recyclable materials? (Yes or No)

Was hazardous waste created from the production process? (Yes or No)

Is safe battery disposal information contained on the package? (Yes or No)

Each respondent received a series of 8 experimental tasks for each product.

Overall there were 32 possible versions of product types that the individual could have seen. (p. 22)