MEASURING COUNTRY IMAGES TO EXPLAIN PRODUCT ATTITUDES

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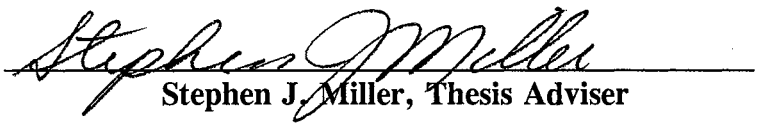

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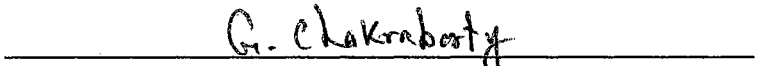

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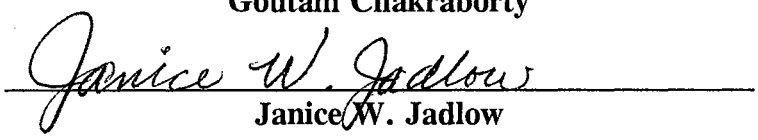

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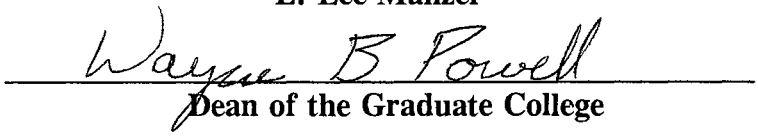

Dean of the Graduate College

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CHAPTER I

INTRODUCTION

Over the past few decades increased accessibility to information, transportation, and technology coupled with competitive pressure to decrease costs and increase quality has created a global marketplace with new opportunities and challenges for marketing researchers and practitioners. As markets become more global, country of origin information (the country in which the product is designed or assembled, or from which the component parts are sourced) becomes increasingly important for public policy makers, marketing managers, and consumers.

Papadopoulos (1993) indicated three noteworthy developments which justify the current relevance of additional country of origin research:

1. governments are becoming more proactive and systematic in promoting their image abroad,
2. origins and their images have come under intense scrutiny in the context of trade blocs attempting to determine such issues as how much value-added activity makes a product "Made-in," and
3. the "globalization" of business has brought on intense debate about the merits and continuing relevance, or lack of same, of national origin identifiers.

In light of the globalization of products, the Federal Trade Commission now requires the automotive and clothing industries to include country of assembly and country of components information on their "Made-in" labels, and they are investigating the possibility of label changes for all global products. With these business practice and policy changes in mind, and in order to increase our understanding of public policy makers', businesses', and consumers' reactions to

these changes, continued country of origin research appears to be necessary and important.

Country of Origin and Country Image

Historically, country of origin has been interpreted to mean the country in which a product is manufactured, often referred to as "Made-in." However, country of origin has come to represent more than a place where products are manufactured. It now refers, for many products, to multiple origin activities, including assembled-in, designed-in, components-from, and country of corporate headquarters (Ozsomer and Cavusgil 1991).

Schooler's (1965) seminal work on country of origin effects has influenced a steady stream of research. Well over 300 articles have been published on the subject. The research on country of origin effects has found that country of origin influences consumers' evaluations of product quality, value, perceived risk, and willingness to purchase (see Bilkey and Nes 1982; Liefeld 1993; Ozsomer and Cavusgil 1991, for review).

Country of origin researchers have found, for example, that consumers prefer products (e.g., televisions) made in developed countries such as Japan over those from developing countries like Mexico (Damanpour 1986, 1993; Schooler 1971; Wang 1978; Wang and Lamb 1983). Country of origin researchers have also found that consumers within developed country frequently prefer products from their home country, a home country bias, all else being equal (Baumgartner and Jolibert 1977; Darling and Kraft 1977; Dickerson 1986; Hooley, Shipley, and Krieger 1988; Wall, Liefeld, and Heslop 1991). In sum, the researchers found that country of origin does influence product preference. But, it fails to explicate *why* this occurs.

Based on country of origin research, the current research attempts to explain *why* country of origin influences product preference. Country image refers to the total of all descriptive, inferential and informational beliefs one has about a particular country (Martin and Eroglu 1993).

The literature on country image effects indicated that consumers and industrial buyers develop stereotypical images of countries and/or their products. These images in turn affect their purchase decisions (Baughn and Yaprak 1993; Heslop and Papadopoulos 1993; Saghafi and Rosa 1997). Han (1989) identified two specific ways consumers use country image (i.e., as halo or summary). Han found that when consumers are unfamiliar with a product, they use country image to infer quality when true quality is unknown (halo). This halo influences consumers' attitudes toward the brand indirectly through inferential beliefs. As consumers become more familiar with a country's products, country image is used to summarize their beliefs about the product attributes and directly affects their attitude toward the brand (summary).

These country of origin and country image findings have important managerial and theoretical implications. Managers must understand the implications of country images and their effects relative to their products and those of their competitors because country of origin effects can create intangible barriers to new market entry in the form of negative consumer bias toward products of foreign origin (Wang and Lamb 1983). Supporting the above, Schooler, Wildt, and Jones (1987) found that negative country images associated with developing countries can create significant barriers to market entry.

An extreme example of this type of country of origin effect is reflected in the images consumers have of South Africa and China, relative to human rights and other issues. The negative country image of these countries has created serious entry barriers and has significantly reduced U.S. sales of products connected to those countries.

Other country image studies have found that multi-national companies with foreign manufacturing in countries with a negative image risk losing brand image (Johansson and Nebenzahl 1986). Similar studies have found that shifting production to developing countries influenced product quality ratings, purchase intentions, and brand value (Chao 1989b; Johansson and Nebenzahl 1986; Schooler and Wildt 1968). Hence, international managers must understand and assess the impact of foreign country images associated with their products to see how those images affect product quality perceptions and product preferences. Understanding the effects of country images can help managers develop more effective global marketing strategies.

Identification of the Problem

A review of the literature reveals some specific problems. Although, substantial country of origin research has found that country of origin influences product quality perceptions and willingness to purchase, it fails to explain how or why this occurs. Another weakness in country of origin research is that it generally assesses developed countries and compares them to developing countries, but it seldom examines differences between developing countries. Global products are frequently assembled in and receive components from developing countries.

Therefore, research which specifically assesses differences in these countries is essential.

The country image literature provides more insight about why country of origin influences quality perceptions and purchase decisions, and how country image is used (e.g., halo for unfamiliar products and summary for familiar product), but the literature fails to explain how images are formed and what dimensions make up the country image construct.

Specifically, country image research is limited in three areas. First, existing country image research has failed to provide a valid and reliable means of measuring the construct. Most measures of "country image" were built upon the seminal work of Nagashima (1970, 1977) and were constructed based on intuition and logic with no testing for validity or reliability (Erickson, Johansson, and Chao 1984; Lillis and Narayana 1974; Nagashima 1970, 1977; White 1979). In attempts to validate these country image scales, researchers have concluded that existing scales not only have low reliability, but also the scales were seldom tested for internal consistency and stability (Cattlin, Jolibert, and Lohnes 1982; Jaffe and Nebenzahl 1984; Narayana 1981).

Second, the existing scales do not clearly separate country image from product image. Nagashima's original (1970, 1977) six dimensions of country image, price & value, service & engineering, advertising & reputation, design & style, and consumers' profile are more product image than country image specific. A valid scale requires precise definition of the constructs domain (Churchill 1979). If country image is the construct to be measured, then the dimensions and scale items should attempt to capture country relevant attributes like economics, politics, and

culture. It is difficult to evaluate the impact of country image on product evaluations without an accurate instrument of measurement. The research to date has not done this, and is limited in that respect.

Finally, the few existing scales with formal analytical procedures or specific country image dimensions focus exclusively on superpower comparison of countries like the U.S., Germany, and Japan where country images are well developed and product familiarity is common place (Martin and Eroglu 1993; Heslop and Papadopoulos 1993). It is not known if existing measures of country image are generalizable to developing countries where information about and consumer experience with the country, people, and products is limited.

In sum, the country of origin and country image literature has not explained how country images are formed, nor has it provided researchers with a valid and reliable scale for measuring the construct.

Purpose of the Study

The purpose of this study is to increase understanding of country of origin effects by examining how country images are formed. This study incorporates a model, an adaptation of the Brunswick's Lens model (Urban and Hauser 1993), that explains and predicts how images are developed. Also this study defines the country image construct and develops a scale to measure it. The scale development will help uncover potential country image variables consumers use to make judgements about products with foreign origins. Specifically, this research focuses on identification of country image dimensions that influence perceived product quality and willingness to buy products assembled in or out sourced from developing countries. Such a study

makes it possible for managers to understand and predict consumers' reactions to outsourcing and/or assembly in developing countries before they invest financial and other resources in foreign projects.

The results should be of interest to academicians and managers who study and apply marketing strategies related to direct foreign investment, publicity, sales, and advertising in an international business environment. At this time, insights on country image are limited to specific countries included in any given study. Highly industrialized countries like the U.S., Japan, Germany, and France are commonly used. Without further research, one would have to generalize from these countries to infer country of origin effect on China, Ireland, or Poland. This study is interested in developing country images and their influence on quality perceptions and willingness to purchase because these countries are the new frontier for global sourcing and assembly.

The specific objectives of this study are:

1. Develop a multi-dimensional scale to measure the country image construct.
2. Explain willingness to purchase imported products based on country image for the country of origin.
3. Determine the relative importance of each dimension of country image in explaining willingness to purchase.
4. Determine how the importance of each dimension of country image differs over product categories.
5. Identify objective measures of economic development (e.g., GDP and standard of living) that explain country image.

Contributions of the Study

This study should make an important contribution to existing marketing research and has meaningful implications for public policy makers, managers, and

consumers. Understanding *how* country image influences product attributes and its subsequent influence on buyer's decision making is vital in today's global market place, yet it has received little attention in the country of origin literature. This study makes a contribution to the country of origin research in that it provides insight and understanding about how U.S. buyers react to a developing country's products.

Although this study does not directly provide information about consumer awareness of multi-country origin products, it does address the issue of consumer perceptions about made-in USA claims, and the related advantages and disadvantages of new labels for certain U.S. brands. This information may assist public policy makers in developing appropriate legislation regarding new labels for multi-origin products with implications for future government involvement in campaigns promoting made-in USA across industries like the previous clothing industry's "crafted with pride in the USA" promotional campaign.

Marketing researchers have found that negative country images associated with developing countries can reduce sales and increase barriers to market entry (Schooler, Wildt, and Jones 1987; Wang and Lamb 1983). Understanding consumers' reactions to developing countries' assembly or components could help public policy makers determine whether or not manufacturers are currently misleading consumers in promotions, and if so what action should be taken to protect them. New legislation for firms and educational programs for consumers may emerge. Managers who understand and can predict consumers' reactions to foreign assembly or components for specific countries and the effect of those

reactions on various product categories will be able to develop strategic advantages and better marketing strategies to reduce entry barriers and increase sales.

If consumer awareness of foreign country assembly or components decreases product quality ratings and willingness to purchase U.S. brands, then managers of those brands may consider promoting U.S. symbols, flags, colors, names and so on to create a stronger U.S. and brand association early on in the development of the product image. For strong U.S. brands like IBM or Hewlett Packard, developing country assembly and sourcing may be of less concern to consumers. Therefore, managers can devote more time and attention to the development of strategies related to competition, taxes, duties, trade zones, legal restrictions, political climate, culture, and so on, because these factors are what truly dictate where companies must source components and assemble the product.

Country of origin researchers have found that global companies with foreign manufacturing in countries with negative images risk damaging brand image, quality perceptions, and purchase intentions (Chao 1989b; Johansson and Nebenzahl 1986; Schooler and Wildt 1968). This study is important because it may provide some detail for strategic improvement of brand loyalty, awareness, image and perceptions of quality.

The implications for buyers, both consumer and business, include the possibility of new labeling requirements providing greater information to assist decision making. Automobiles and clothing, for example, have recently been required to provide this information. If more product categories are required to follow suite, buyers will in time become more familiar with the additional information. Thus, buyers' ability to use the new information should improve.

Although limitations exist, as they do in all studies, the findings quite likely provide marketing researchers, public policy makers, marketing managers, and business and individual buyers useful information. Therefore, this study is important and necessary.

CHAPTER II

LITERATURE REVIEW

Country of Origin

This chapter examines country of origin, country image, and interrelated literature, and introduces a model (Brunswick's Lens) that explains how country images are developed and which dimensions of country image have the greatest influence on product choice.

It is important that the country of origin literature be reviewed because it forms the foundation of knowledge upon which further advances can be made. The country of origin literature review also helps define and clarify the domain of the country of origin, country image, and product preference concepts. The country image and related literature is reviewed to define the domain of country image and as the basis for the development of the country image scale.

In connection with the literature review process, this study uncovers gaps or question marks which need to be answered, expands the country of origin and country image literature, and strengthens the existing theory base.

The following sections of the country of origin literature review are explained as follows: (1) define the concept, (2) justify the importance of country of origin as an information cue, (3) explain what is measured as the outcome of country of origin, (4) discuss how country of origin effects differ across product categories, (5) reveal the limitations of country of origin studies, and (6) examine the economic development dimension of the concept.

Country of Origin Concept

. The research on country of origin is substantial. In these studies a variety of country of origin definitions exist. Simply put, country of origin refers to the country where the product is manufactured, often communicated by the phrase "Made-in" (Bilkey and Nes 1982). Besides the specific country, the term has been used to denote anything from a city, to a state, a country, a geographic region, a continent, or, in the case of global products, the world.

Others, however, have suggested that country of origin refers to country where corporate headquarters are located (Johansson, Douglas, and Nonaka 1985). This definition implies that country of origin refers to the country with which the company is associated, and it contends, for example, that some brands are automatically associated with some countries (e.g., Honda and Sony with Japan and IBM and Levis with the U.S.).

Ozsomer and Cavusgil (1991) pointed out that with the recent global developments, separating the location of the manufacture of the product from the country with which the company is associated is an important distinction which must be made. This is important, but it should also be pointed out that other distinctions also exist; that is, the origin of component parts of the product, the origin of design, and the origin of assembly, and so on.

In sum, country of origin has been historically interpreted to mean the country in which a product is manufactured, often referred to as "Made-in." However, country of origin has come to represent more than a place where products are manufactured. It now refers, for many products, to multiple origin activities,

including assembled-in, designed-in, components-from, and country of corporate headquarters.

An Important Information Cue

In many situations consumers rely more on extrinsic cues than intrinsic cues to make purchase decisions (Zeithaml 1988). This section develops the foundation and justification for studying country of origin — an important extrinsic information cue which consumers use to evaluate products and make purchase decisions.

Country of origin is an important product attribute which consumers use to evaluate products. Broadly speaking there are two kinds of product attributes: (1) intrinsic and (2) extrinsic. Cox's (1962) study demonstrated that consumer purchase decisions are often made under varying degrees of uncertainty regarding the product and its attributes. A product may be viewed as a variety of information cues. A consumer's task in evaluating products includes using these various cues as the basis for making judgements about the product (Cox 1962).

Researchers have suggested that product preference or choice is often determined by product quality evaluations. Product quality evaluations are frequently based on extrinsic cues like price and brand (Olson 1977; Rao and Monroe 1989). Other researchers have suggested that product preference or choice is determined by a product quality evaluation process which includes intrinsic cues like features, form, and function (Bettman 1979; Fishbein and Ajzen 1975; Howard and Sheth 1969). Olshavsky (1979) combined these two research perspectives on perceived quality and decision making, suggesting that two relevant preference

formation strategies exist. He termed these two perspectives, decision making-based (intrinsic cues) and surrogate-based (extrinsic cues).

When decision making-based preference formation is used, a consumer establishes or changes his/her preference for a product based on one or more criteria. These criteria are primarily based on intrinsic cues. Intrinsic cues are physical product characteristics that cannot be changed without altering the nature of the product itself, including taste, smell, texture, form, and function (Zeithaml 1988). These intrinsic cues offer explicit information concerning product quality. Olshavsky (1979) explains, on the other hand, that the second type of this product evaluation behavior is surrogate-based preference formation. In surrogate-based preference formation the consumer forms an overall evaluation of the product based on extrinsic cues. Olson and Jacoby (1972) defined extrinsic cues as related to, but not a part of the physical product. Because extrinsic cues are "outside" the product they tend to act as surrogates, indexes, or summaries of the overall product quality. Essentially, consumers assume that a reliable association exists between these cues and the quality of the product. Examples of extrinsic cues are brand, price, warranty, retail store, and country of origin. Olshavsky (1979) suggested that the characteristics of consumers, the market place, the social environment, and the physical environment determine whether a surrogate-based (extrinsic cues) or a decision making-based (intrinsic cue) preference strategy will be used.

Zeithaml's (1988) means-ends model relating price, quality, and value provides additional insight about when intrinsic and extrinsic cues are used. Zeithaml proposed that consumers use intrinsic cues more than extrinsic cues: (1) in pre-purchase situations when intrinsic cues are search attributes, (2) when intrinsic cues

have high predictive value, and (3) at the point of consumption. On the other hand, the researcher proposes, that consumers are more likely to use extrinsic cues over intrinsic cues: (1) when intrinsic cues are not available, (2) when the quality of the product is difficult to evaluate, and (3) when the evaluation of the intrinsic cues demands more time and effort than the consumer believes is worthwhile.

In support of Zeithaml's latter proposition, researchers have found that when a simple decision is made, intrinsic information may be easily accessed and processed. However, when the intrinsic attribute information becomes difficult to process, decision making becomes more complex. To handle complex processing tasks, consumers frequently attend to only a few of the many attribute cues in the bundle in an attempt to reduce the cognitive processing. Heuristic or mental shortcuts simplify the task (Bodenhausen and Lichtenstein 1987; Bodenhausen and Wyer 1985; Alba and Hutchinson 1987). One such strategy is to look for extrinsic cues, "summary statistics" like brand, which encompass all or most of the attributes (Howard and Sheth 1969; Johansson 1988). Johansson (1988) argued that country of origin is another such summary statistic. Other researchers agreed (Olson and Jacoby 1972).

In sum, researchers have found that consumers frequently use extrinsic attribute information in many situations to evaluate products and make choices based on those evaluations. Country of origin researchers have shown that country of origin is an extrinsic attribute which is as important or more important than other dominant extrinsic cues like brand or price when it comes to perceived quality and purchase choice. In this era of increasing international trade and globalization of products, continued research on the country of origin cue is vital.

Influence on Product Evaluations

This section introduces the common dependent variables used in country of origin studies and the categories of products affected by the cue. Since Schooler's (1965) pioneering work on developing country stereotypes and their influence on purchase evaluations, many studies have investigated country of origin effects. These studies invariably find that when a buyer becomes aware of the country in which a product is produced, purchase evaluations are affected. Specifically, the literature revealed that the dependent variables used in these studies are rating scales for perceived quality, risk, value, likelihood of purchase, or willingness to purchase (Bilkey and Nes 1982; Liefeld 1993; Johansson 1993; Ozsomer and Cavusgil 1991).

Bilkey and Nes (1982), for example, reviewed 25 studies dating from 1965 to 1979. They found that country of origin influenced product evaluations in all of the 25 studies they reviewed. Later reviews on country of origin support the findings of Bilkey and Nes (Baughn and Yaprak 1993; Liefeld 1993; Ozsomer and Cavusgil 1991). Researchers have also found that the country of origin cue affects evaluations of: products in general (Anderson and Cunningham 1972; Bannister and Saunders 1978; Darnorff, Tankersley, and White 1974; Gaedeke 1973; Krishnakumar 1974; Lillis and Narayana 1974; Nagashima 1977; Reierson 1966; Wang 1978; White 1979), classes of products (Chao 1990; Dornoff, Tankersley, and White 1974; Etzel and Walker 1974; Gaedeke 1973; Kaynak and Cavusgil 1983; Nagashima 1970), specific types of products (Cordell 1991; Chasin and Jaffe 1979; Halfhill 1980; Hampton 1977; Roth and Romeo 1992; Schooler 1965, 1971; Schooler and Suno 1969; Schooler and Wildt 1968; Tonberg 1972; White and

Cundiff 1978) and specific brands (Cordell 1991; Gaedeke 1973; Hand and Terpstra 1988; Kincaid 1970; Tse and Gorn 1992; Uglado and Lee 1993; Yaprak 1978).

In sum, country of origin influences a variety of brands and products. The most common measures of country of origin effect are perceived product quality and willingness to purchase. This study includes both perceived quality and willingness to purchase as measures of a broader concept called product preference because in the country image literature review we find that there are dimensions of country image like human rights, conflict, or politics that logically should not directly influence perceived quality ratings, yet it is very likely that they will have direct influence on consumers' willingness to purchase products from those countries. Entry barriers and reduction in sales related to political events in South Africa and China are anecdotal illustrations of just such an effect.

Effects Across Products

This section justifies our selection of products to be used in the study and aids the development of related hypotheses. Heslop, Liefeld, and Wall (1987) compared single-cues (country of origin only) to multi-cues (country of origin, brand, and price) in an experiment using tangible products — shirt, wallet, and telephone. They found, using a consumer sample, that the country of origin effect on product quality ratings was stronger when country of origin was presented without the other cues. And although the effect was not as strong, a significant country of origin effect was found for the wallet and the telephone when price and brand were included. The strongest of the two effects was for the telephone. The product quality rating of the shirt, interestingly enough, exhibited no significant country of

origin effect. One explanation the researchers offered for these different product findings was that as product complexity increases, the ability to make judgments decreases. Therefore, consumers become more dependent on extrinsic information like brand and country of origin for complex products.

Similarly, in other multi-cue research, country of origin had a significant effect on product evaluations for complex, infrequently purchased products (Han and Terpstra 1988; Heslop, Liefeld, and Wall 1987). These effects appear less important for simple products (Ettenson, Wagner, and Gaeth 1988; Heslop, Liefeld, and Wall 1987; Hester and Yuen 1986). Liefeld's (1993) twenty-two study, meta-analysis found that the magnitude of the country of origin effect appears to be related to the nature of the product. Specifically, the *eta* values (a measure summarizing the magnitude of the strength of relationship between variables associated with the F-statistic) were larger for technically complex products, fashion-oriented products, and expensive products. Therefore, it is expected that country image will have a greater influence on expensive technically complex products like computers or cellular phones than on simple inexpensive products like shirts and wallets. Both computers and wallets are included in the study.

Limitations of Country of Origin Studies

In this section the limitations of the country of origin studies are explained with specific attention to the limitations of single-cue (i.e., country of origin cue only) research. This section of review points out first, that new country image scale development is needed, and second, depending on the purpose of the study, that

single-cue studies, which do not include price, brand or other variables of interest, are appropriate and important. Hence, this section justifies our research.

In the following section we review country of origin studies which used multiple-cues like price, brand and country of origin, and find that in these studies country of origin effect is still significant, and as important or more important than other cues in affecting perceived quality and willingness to purchase.

Although this research has found that country of origin does have a significant influence on product evaluations, many of the studies prior to 1982 have been highly criticized for methodological weaknesses (Bilkey and Nes 1982; Johansson, Douglas, and Nonaka 1985; Ozsomer and Cavusgil 1991). These weaknesses include internal and external validity issues related to three concerns. First, many of the country of origin research results were not consistent. Bettman (1979) offered a general explanation about inconsistent findings. He suggested that the order or the format of the information presentation can greatly influence how the information is processed. Jaffe and Nebenzahl (1984) found that country image studies used two different formats based on Nagashima's (1970) original scale. The two formats tested were not equivalent and the researchers contend that finding better scales for measuring country image is necessary.

Second, and perhaps most importantly, in most of the studies, the only information given to respondents was the country of origin. The use of a single-cue may create problems for external validity. A single-cue is likely to bias the results, artificially inflating the magnitude of the country of origin effect (Bilkey and Nes 1982; Johansson, Douglas, and Nonaka 1985; Liefeld 1993).

There is little doubt that any study which attempts to measure country of origin effects, independent of other cues, on buyers' ultimate purchase choices, may overestimate its importance. This is true not only of country of origin cues, but also of brand, price, or any other intrinsic or extrinsic cues. However, single-cue and multi-cue country of origin studies are both important, and before a single- or multi-cue study is decided upon, the objective of the study must be carefully considered. Both approaches can be useful, but each has a different purpose. If the researcher's objective is to study inputs to origin images or to compare the general images of various nations, as is the case with this study, then a single-cue study is appropriate. If the researcher is concerned with identifying how origin is processed in relation to other cues, then a multi-cue study is appropriate (Papadopoulos 1993). The purpose of this study is concerned with the former and therefore a single-cue approach, one that does not include brand, price, and other extrinsic or intrinsic cues seems applicable.

Multi-Cue Studies

This section of the literature review explains that the country of origin effects remain strong despite the inclusion of other cues. After the Bilkey and Nes (1982) country of origin review, which pointed out the limitations of single-cue studies, many country of origin studies began to include multiple extrinsic cues like price, brand, service, retail outlet, salesperson, advertising, and warranty in their research (Chao 1989a; Ettenson, Wagner, and Gaeth 1988; Han and Terpstra 1988; Heslop, Liefeld, and Wall 1987; Hulland, Todino, and Lecraw 1996; Wall, Liefeld, and Heslop 1991; Johansson and Nebenzahl 1986; Schooler, Wildt, and Jones 1987;

Thorelli, Lim, and Ye 1989; Tse and Gorn 1992; Uglado and Lee 1993). This stream of research often found that the country of origin effects were diminished when other attribute information was included (Hong and Toner 1989; Wall, Liefeld, and Heslop 1991).

However, other country of origin studies which included cues like price and brand found that country of origin effects remained strong despite the inclusion of other cues. For example, Kincaid's (1970) research on brand and country of origin effects found, for a wide variety of brand name products (i.e., brand name razor blades, typewriters, cars, and TV sets), that brand ratings differed significantly when it was made known that the brand was of foreign origin. Tse and Gorn's (1992) study provides some support for country of origin importance in foreign product evaluations. These researchers manipulated country of origin (Japan vs. Indonesia) and brand name (Sony vs. unknown) for a stereo system. Their findings suggest that brand does not override a negative country of origin effect and that country of origin was equally important to brand in product evaluations and even more enduring than brand when before and after evaluations were conducted.

Wall, Liefeld, and Helsop (1991) tested the effect of country of origin labeling on consumer's evaluations of product quality, purchase risk, perceived value, and likelihood of purchase in a multi-cue (country of origin, price, and brand), multi-product (shirt, leather wallet, and telephone) experiment. They found country of origin was more important in influencing product quality perceptions than were price or brand. Price was more important in perceived value assessments. Brand, on the other hand, was not found to be significant except in a few product-specific cases.

The researchers did concede, however, that much of the variation was not accounted for by the variables in the experiment.

Han and Terpstra (1988) evaluated uni-national and bi-national products (TVs and cars made in Korea, Japan, Germany, and the U.S.). Using a within subjects experimental design, they found that brand name and country of origin both influence consumer perceptions of quality, but for bi-national products country of origin stimuli had a stronger effect than brand name. It appears from above research that there are many cues which influence quality perceptions. In the extrinsic cue domain, price, brand, and country of origin all play an important role. It is not clear which cue is most important, but it is very clear that country of origin plays a vital role in quality perceptions and willingness to purchase. Both single-cue and multi-cue studies confirm its importance.

Developed Country Evaluations

This section is important because it introduces one of the essential dimensions of country image, economic development. It also points out that country of origin research fails to explain what other dimensions (e.g., culture or politics) influence perceived quality and willingness to purchase. The Tiananmen square incident, for example, though it had little relevance to economic development, had a profound effect on U.S. consumers willingness to purchase products from China.

Also, by considering only one dimension, the research to date essentially lumps all developing countries into one category and makes little attempt to explain perceived differences across these countries. However, global sourcing and

assembly are increasingly accomplished in developing countries, thus research specific to these countries is important and necessary.

Country of origin researchers have found that country of origin influences are pervasive for products from developed countries. But unlike the rather consistent negative stereotype for products from developing countries, products made in developed countries are not necessarily perceived to be alike or equal when it comes to quality, value, risk, and other product characteristics (Bannister and Saunders 1978; Dornoff, Tankersley, and White 1974; Hampton 1977; Johansson, Douglas, and Nonaka 1985; Kincaid 1970; Krishnakumar 1974; Lillis and Narayana 1974; Nagashima 1970, 1977; Reierson 1966, 1967; Schooler 1971; Schooler and Wildt 1968; Tonberg 1972; Wang 1978; White and Cundiff 1978; Yaprak 1978). Damanpour (1986, 1993), for example, surveyed U.S. consumers' attitudes towards products from developed countries. American consumers perceived "Made in Great Britain" products as being expensive, traditional, luxury items, reliable, and slightly above average when it comes to quality and technical sophistication, designed for an older, upper class, male population. French products were perceived as exclusive, very expensive, technically advanced, but not particularly innovative or well advertised, and made for the young, upper class, male and female population. West German products were perceived as not too expensive, yet they scored high in workmanship and recognizable brand names. They were considered to be very reliable, innovative, technically advanced, and made for the young, middle class male consumer. Japan's products were perceived to be inexpensive, reliable, necessary items which exhibit good workmanship and technological sophistication, made for the young, lower and middle class, male and female consumer, and

produced for worldwide consumption. In the area of price and value, U.S. products were ranked second behind Japan, and not perceived to be as reliable as Japan or Germany. And U.S. products were perceived to be made more for domestic rather than international consumption.

Papadopoulos' (1993) review of country of origin research found that product images are formed by means of past experience with the product, other products from the same country, and images of the country and people. The country of origin research to date, however, has not examined the later (i.e., images of country and people). Yet, for developing countries experience with the product or other products from the same country is unlikely because in most cases this information, until recently with some label changes, has been hidden from the consumer. Thus, perceptions of country and people becomes the vital and essential means of evaluating products from those countries.

Developed Country Home Bias

The literature in this section of the review indicates that consumers have a positive bias for home products. The literature fails to explain this finding as it relates to global products. Future research questions emerge. For example, how will consumers react to products with a home brand and foreign assembly? Which is more important: brand, assembly, design, or component origin? Although this study does not directly answer these questions it does provide more detailed insight into U.S. consumers' attitudes concerning various developing countries.

A large number of country of origin studies suggest that for developed countries, and in some cases for developing countries a bias or preference for

domestic products exists (Baumgartner and Jolibert 1977; Darling and Kraft 1977; Dickerson 1986; Hooley, Shipley, and Krieger 1988; Lillis and Narayana 1974; Nagashima 1970; Schooler 1965; Wall, Liefeld, and Heslop 1991). Schooler (1965) found that Guatemalan students perceived Guatemalan juice and fabric to be of better quality than juice or fabric made in Mexico, El Salvador, or Costa Rica. Although a home country bias is not likely to exist for all products and in all situations, Hooley, Shipley, and Krieger (1988) found some degree of "home country preference" for the developed countries of France, Germany, Finland, Holland, Japan, and the U.S. Wall, Liefeld, and Heslop (1991) found that Canadian-made products were perceived by Canadian consumers to be of higher quality than their Japanese, Italian, Hong Kong, or Taiwanese product counterpart (but, not statistically different from U.S. made products). Similarly, Haakansson and Wootz (1975), sampling Swedish purchasing agents, found that Swedes gave higher quality ratings to domestic products over the same products manufactured in Germany, Italy, and France.

There is, however, some evidence that these domestic preferences can change over time. Dornoff, Tankersley, and White (1974) using longitudinal analysis mapped the improvement of the Japanese image and the deterioration of the U.S. image. They found domestic preferences changed. U.S. consumers began to favor certain Japanese products over domestics. Erickson, Johansson, and Chao (1984) found, for example, that U.S. consumers' perceptions of automobile quality were significantly more favorable for Japanese automobiles than for U.S. automobiles.

Developed country preferences can fluctuate or change over time, but Papadopoulos, Heslop, Graby, and Avlontis (1987) found, although home country is

not always first choice for all products, a bias favoring products from home country always exists. Levin, Jasper, Mittlestaedt, and Gaeth's (1993) study, which examined U.S. consumers' attitudes towards U.S. and Japanese automobiles, to some extent, supports the home country preference theory. They found that U.S. consumers gave higher ratings to Japanese cars and workers, yet most endorse the "Buy American" concept. Respondents gave preferential rankings to companies which employ mostly American workers. They found that a products' country of origin appears to influence feelings of nationalism, and this nationalism dominates in the pre-purchase decision phase of the buying process.

Heslop and Papadopoulos' (1993) study is one of the largest international marketing studies ever conducted and it summarizes much of the research on the subject of home country preference. Consumer surveys were carried out with a team of nine noted researchers in eight countries. A summated score of a 21-item product attitude scale across eight countries allowed for a thorough analysis of whether or not consumers always (or even usually) preferred domestic products. Their conclusion suggests that a universal domestic preference is simplistic and largely erroneous. If it does exist it is susceptible to attack over time. Of the eight countries tested only France and Germany expressed a clear preference for domestic products. The Netherlands ranked Japanese products to be just as good as their own. American and British respondents gave Japanese products higher rankings. In Canada, domestic and American products were tied, but behind Japan. And Greek and Hungarian respondents rated their products at the bottom of the list.

The factors affecting domestic preference appear to be: (1) the degree of nationalism (e.g., French and German consumers are known for their strong national

sentiments — Canadians are not); (2) the level of industrialization — domestic preference will be lower where production technology is less advanced; (3) the market development — domestic preference will be lower in "open" economies; and (4) the level of perceived economic vulnerability — domestic preference will be higher if consumers believe foreign products threaten domestic economy. Thus, domestic brand managers should carefully consider those factors which influence domestic preference in order to develop strategies which could influence domestic consumer choice and brand equity. Local producers have no guaranteed special status, but all else being equal, a domestic preference can quite possibly be created via promotional activities like Made-in-the-USA campaigns which may provide domestic producers a strategic advantage over foreign competition.

Therefore, brands considered to be U.S., like Hewlett Packard, Black & Decker and IBM, all else being equal, may hold a competitive advantage over their foreign counterparts with domestic consumers. However, global products may dilute if not dissolve the domestic preference advantage depending on consumer awareness and expectations. Global products are also more likely than not to be assembled-in or outsourced from countries where labor is cheap. Hence it is essential that researchers begin to understand how consumers view these "developing countries." The existing literature is quite limited in this regard. Country of origin research to date has lumped almost every country other than the 'Super industrialized powers' into one category. Surely, Singapore's country image is different than Mexico's on some dimensions (e.g., cleanliness or productivity).

Developing Country Stereotypes

The most consistent finding in country of origin research is that products manufactured in developing countries, with rare exception, are rated lower for product quality and higher for perceived risk than are products from developed countries (Gaedeke 1973; Han 1989; Krishnakumar 1974; Papadopoulos, Heslop, Szamosi, and Ettenson 1997; Reierson 1966; Saltzmer 1966; Schooler 1965, 1971; Schooler and Sunoo 1969; Schooler and Wildt 1968). There is, however, little research that explains *why* country of origin cues have such an effect, nor is there much country of origin research which considers other country image dimensions besides economics. This section justifies the need for more research and helps build a foundation for this research.

Krishnakumar (1974) found, for example, sampling students from Taiwan and India attending U.S. universities, that subjects discriminated against their own country in favor of products from developed countries. Hampton (1977) found that consumers attached higher perceived risk to American products manufactured outside the U.S. than they did to American products manufactured within the U.S. He discovered that an inverse relationship existed between perceived risk and a country's economic development. Country of origin research has found that typical low perceived risk products like laundry soap or orange juice, if manufactured in developing countries, can become high perceived risk products. Alden, Hoyer, and Crowley (1993), for example, found that consumers' perceived purchase risk for Crest toothpaste was significantly higher when the product was made in Mexico as opposed to the U.S. Hampton's (1977) study did find, however, a few product exceptions. Hand-held calculators made in Hong Kong and freeze-dried coffee made

in Brazil scored lower on perceived risk than did coffee and calculators made in America, suggesting that developing countries can change a stereotypical image for specific products, and perhaps product categories, and products in general if the country/people image is strategically managed and promoted.

Gaedeke (1973) found that U.S.-made products like food, electronics, and textiles were rated higher on product quality than were products from various developing countries of Asia and South America. Also, specific brands were rated lower on product quality when it was revealed that the country of origin was a developing country as opposed to not mentioning any country of origin. These findings confirm that if new labels are mandated by the FTC, U.S. brand equity for companies who assemble-in or source from developing countries will suffer.

A limited number of studies have offered explanations for the developing country bias. These researchers suggest that the countries' economic, cultural, social, and political systems could be the cause of the phenomenon (Tonberg 1972; Wang 1978). These explanatory country image variables are not always consistent across countries. Researchers found that for many Eastern European countries ("Made-in U.S.S.R." was the least favorite of the seven Eastern European countries analyzed) that the negative bias towards products from those countries was stronger than their degree of economic development should indicate (Bannister and Suanders 1978; Chasin and Jaffe 1979; Darling and Kraft 1977). In other words, even developed countries can receive lower product quality ratings and have higher perceived product purchase risk if the political climate is unstable or incompatible with domestic country views. Chasin and Jaffe (1979) found that unfavorable attitudes and emotions connected to the social, economic, and political systems of

communist countries are transferred to the products made in those countries. It makes sense that this would apply to other countries as well.

These findings reinforce the notion that once stereotypes for countries are created they are difficult to change. There is some evidence that over time economic development combined with strategic promotion can change a country's perceived image (Jaffe and Nebenzahl 1993; Nebenzahl and Jaffe 1991; Reierson 1967). The dramatic improvement of the Japanese image over the last fifty years is the premier example of a country, with an image for building cheap trinkets, turning into an economic power house with an image for building some of the highest quality products in the world (Brunner, Flaschner, and Lou 1993; Damanpour 1993; Dornoff, Tankersley, and White 1974; Nagashima 1977). Other countries are beginning to have similar success by taking advantage of international events as a means of changing stereotypes and promoting a new image to the world. Nebenzahl and Jaffe (1991) found that for South Korea, the 1988 Olympic games held in Seoul resulted in a more positive attitude toward consumer electronics made in that country. On the other hand, "spectacular" international events can quickly change consumers' attitudes towards products in a negative direction. Brunner, Flaschner, and Lou's (1993) longitudinal study found, following the June 1989 Tiananmen Square incident, that consumers attitudes about Chinese product quality and purchase intentions decreased significantly.

Some recent studies have suggested that nations might do well to view themselves as "products" (Chao 1989a, 1990; Graby 1993; Wee, Lim, and Tan 1993). Graby (1993) points out that France is well aware of the importance of building its country image to increase export market penetration, and that promoting

this image requires the adoption of the view that countries, insofar as export markets are concerned, essentially are corporate entities. A specific committee, titled "Comite Image France," has been formed to promote France's image abroad. Collaborative industry-government programs for the promotion of national image must address three basic marketing questions: (1) what do we need to convey, (2) to whom do we need to convey it, and (3) how do we convey it?

With this in mind, countries, particularly newly developing countries, must pay close attention to the creation and promotion of the desired image, including managing where possible international events which can create immediate positive or negative reactions. Japan has set the standard for other countries to follow. And despite limited economic development, countries like South Korea, Hong Kong, Singapore, and Brazil have had some success in changing and creating positive product quality perceptions, albeit product specific, by carefully managing and promoting their country images abroad.

This study helps uncover the specific dimensions which influence country and people images and help explain how consumers form these images. Thus, the study has rich implications for developing countries who want to improve their country image and subsequently the image of their products and for managers of companies of who now are or soon will be assembling-in or sourcing-from developing countries. Economic, social, and political systems along with international events appear to influence consumers' country image formation.

Individual Difference Variables

This section creates the foundation for individual difference variables to be used in the study. The findings for demographic influences are inconsistent and inconclusive, but ethnocentric differences and travel appear to have a more consistent effect. Thus, the latter two variables are important and included in the measurement instrument as individual difference variables.

Demographic variables like age, sex, race, and education and personality variables like dogmatism and conservatism have been studied as they relate to foreign products (Anderson and Cunningham 1972; Dornoff, Tankersley, and White 1974; Damanpour 1986, 1993; Schooler and Sunoo 1969; Schooler 1971; Tonberg 1972; Wang 1978). The results are not consistent. For example, some studies have found that older people gave foreign products higher ratings than younger people did (Schooler 1971; Tonberg 1972). This is the opposite of what might be expected. Other studies found no such age effect (Schooler and Sunoo 1969; Wang 1978). Similarly, some studies found that consumers with higher levels of education rate foreign products more favorably than do those consumers with limited education (Anderson and Cunningham 1972; Dornoff, Tankersley, and White 1974; Wang 1978). Tonberg's (1972) study, on the other hand, found no such relationship.

More recently country of origin studies have included personality or individual difference variables like patriotism, nationalism and ethnocentrism and the findings have been more consistent. Han (1988), for example, found that patriotic responses played a significant role in product choice. His research suggested that advertisements aimed at arousing consumers' patriotic emotions (e.g., ads decrying job loss caused by foreign imports) would influence domestic product purchase.

Daser and Meric's (1987) study supports Han's proposition. They found that consumers in geographic regions hard hit by alleged import-induced job loss responded positively to "Buy American" advertisements. In addition to the above, many studies support Shimp and Sharma's (1987) research on consumer ethnocentrism, defined as beliefs held by consumers about the appropriateness and morality of purchasing foreign made products. Shimp and Sharma developed a valid and reliable scale (CETSCALE) for measuring consumer ethnocentrism. They found that highly ethnocentric consumers believed purchasing foreign products is inherently wrong. To them, it hurts the local economy, causes job loss, and is clearly unpatriotic. Respondents who rated high on the scale were found to be selectively accentuating positive attributes for domestic products while screening out those attributes for foreign products.

Although studies on the relationship between demographic variables and country of origin have often met with conflicting results, the findings on personality variables, particularly nationalism and ethnocentrism, appear to be quite consistent. Ethnocentric consumers are quite susceptible to the influences of country of origin. They have a definite preference for home country products and a strong bias against products from foreign countries (both developing and developed foreign countries). If new labels provide foreign country information about assembly or sourcing, then highly ethnocentric consumers' country/people images can be affected by their bias.

Another related individual difference variable is the consumers' knowledge and experience with the country itself. Papadopoulos and Heslop (1986) studied the effect of foreign travel on consumer evaluations of products from those countries. They found, for example, that while non-visitors to Japan gave high marks for

Japanese electronic and automobile quality, visitors gave higher ratings than non-visitors to goods which have not yet gained global recognition like fashion apparel. Travel to Great Britain was found to offset some of the negative beliefs about economic and labor problems. Visitors to the U.S. and Sweden, on the other hand, tended to have more negative images of those countries than did non-visitors.

Hence, with increasing global stability, decreasing travel costs, and increasing availability of information, country/people stereotypes and images will continue to be important to marketing researchers because of their impact on the purchase decision process.

Product Familiarity

Country of origin researchers have also found that product familiarity influenced the country of origin effect (Han 1989; Heimbach, Johansson, and MacLachlan 1989; Hong and Wyer 1989; Johansson 1988; Johansson, Douglas, and Nonaka 1985; Johansson and Nebenzahl 1986; Yaprak 1978). A common definition of product familiarity includes the consumer's prior knowledge level and subjective product experience (Park and Lessig 1981). The number of product-related experiences is often measured by self-reported rating scales and previous ownership (Alba and Hutchinson 1987; Bettman and Park 1980).

According to one argument, when consumers are unfamiliar with a product's attributes because of limited experience with the product or when more explicit information on product attributes is unavailable, then the country of origin cue often has a significant impact on product quality evaluations (Nagashima 1970; Reierson 1967). The reasoning is that when product information stored in internal memory is

scarce, then relevant indirect evidence, like country of origin, is used to evaluate products and brands (Johansson 1988). In such cases, country of origin cues are used as substitute or surrogate indicators of overall quality. Researchers found, in product categories where specific product information had not reached adequate levels of diffusion into the market, that country of origin cues significantly influenced purchase behavior.

On the other hand, Heimbach, Johansson, and MacLachlan (1989) found that when consumers have considerable product familiarity, country of origin has a significant influence on product quality evaluations. Johansson and Nebenzahl (1986) found that the correlation between self-assessed knowledge about product class and country of origin importance was significant and in a positive direction. Similarly, the Johansson, Douglas, and Nonaka (1985) study found a positive interaction effect for self-reported product familiarity and country of origin influence. These results suggest consumers who are knowledgeable or familiar with a brand or a product are more likely to use country of origin cues in their evaluations than are those who are less familiar.

Johansson (1988) offered one explanation for why consumers who are knowledgeable and experienced with a product use country of origin. He suggested that it relates to the simplified type of information processing that many consumers employ (Wright 1975). That is, in order to handle complex information, consumers frequently use only a few of the multiple attributes which make up the total bundle evaluated. Alba and Hutchinson (1987) suggested that consumers typically try to reduce the cognitive processing required for making decisions. One way to accomplish this is to use a summary statistic which circumscribes all or most the

attributes. Howard and Sheth (1969) suggested that brand name is the best known of these summary statistics. Country of origin is certainly another of the these summary statistics (Johansson 1988).

With regard to the apparent product familiarity paradox (i.e., are country of origin cues used more by consumers who have more product familiarity or less?), Han (1989) suggests that the country of origin cue may play a dual role. His model refers to situations involving high and low product familiarity. In both cases country of origin information may be used by consumers. When consumers are unfamiliar with a product, the halo effect suggested that consumers use country image to infer quality when true quality is unknown. Country image becomes a surrogate for other attributes when information is lacking, when there is lack of familiarity with the product, and when purchase context information is lacking (Belk 1975; Jacoby, Olson, and Haddock 1971; Monroe 1976). When consumers are highly familiar with a product, Han (1989) said that consumers "chunk" individual elements of information into higher units in order to simplify complex information processing. In this situation country image acts as a summary statistic.

The country of origin literature suggested that halo or summary perceptions for highly developed countries will have a positive effect on purchase evaluations, while for developing countries, there will be a negative effect on purchase evaluations. The limitation in the country of origin research stream again is in its simplistic single dimension categorization. Logically, other country image factors besides economic development should affect purchase evaluations, and all developing countries are unlikely to be perceived in the same way. If, for example, a certain brand of computer is made in Scotland and another brand is made in Mexico, then

consumer product quality ratings and willingness to purchase may not be equal. This study expands the existing research by examining country differences within the economic dimension.

Country of Origin Models

Theoretical models have been developed to explain country of origin effects (Han 1989; Johansson 1988; Obermiller and Spangenberg 1989). The Han (1989) model has already been discussed in the product familiarity section of this study. The other two models contend that the made-in label influences attitudes (i.e., cognitive, affective, and behavioral processes).

The Obermiller and Spangenberg (1989) model, for example, suggested that country of origin influences behavior (change in intentions) through either cognitive, affective, or normative processes. In the cognitive process, "the most likely process," consumers will use origin labels to evaluate other attributes. And though the affective and normative process are less likely to be used by consumers, all three share one common variable. That is, all are mediated by the clarity of the origin label. A specific threat, the researchers said, to clarity of the origin label is multiple countries of origin.

The Johansson (1988) model created a framework for understanding consumers' propensity to use "Made-in" labels. The propensity to use country of origin labels is influenced by the predictive value and the confidence value of the cue. The confidence value of the cue is defined as the degree to which the individual has confidence in the labeling in question. Johansson proposed that country/product familiarity and hybrid products influence the confidence value which

in turn influences the propensity to use the made-in label. With hybrids, Johansson suggested that consumers will be confused as to whether or not the product was actually manufactured in the country printed on the label.

Both models (Johansson 1988; Obermiller and Spangenberg 1989) argue that the reduction of clarity and confusion caused by global products with multiple origins may reduce the propensity to use the made-in label. This may be true, but because both studies were written before the most recent FTC investigations and subsequent change in label content requirements, these researchers did not take into account that the new global product labels would likely increase clarity and decrease confusion because the new labels clearly list assembly and sourcing country origins.

More importantly, neither model has attempted to explain how consumers develop attitudes and images of the origin countries. Yet understanding how country images are developed and what dimensions are used to form those images is essential for predicting how consumers react when presented with label or other promotional information about foreign country assembly or sourcing. In the marketing literature a variety of multi-attribute models have been used effectively for many years to help explain how consumers develop attitudes towards objects or products (Anderson 1974; Fishbein and Ajzen 1975). It is proposed here that a multi-attribute model could help explain how consumers develop attitudes about people and countries where assembly and sourcing is likely to occur.

Integrative Model

In the country of origin literature, models have been developed which attempt to explain under what circumstances country of origin affects purchase evaluations

(Berger and Cote 1997; Han 1989; Johansson 1988; Obermiller and Spangenberg 1989). However, research which explains how images of countries are developed and how those images influence purchase evaluations, is not available. In the following section a model is developed which helps fill this important gap in the existing country of origin literature.

Multi-Attribute Models

The extant country of origin research firmly established that consumers hold certain attitudes about countries and these attitudes influence the purchase decision process. A number of different multi-attribute models have been developed to help explain how consumers form attitudes toward objects. In the marketing literature, two traditional multi-attribute models dominate much of the attitude research — that is, Fishbein's attitude — toward the object or adding model (Fishbein and Ajzen 1975) and Anderson's averaging model (Anderson 1974). Both models have made unique predictions about how consumers form perceptions given limited information. The Fishbein model contended that consumers add attribute information and identified three factors that predict attitudes: (1) salient beliefs or attributes that are important, (2) strength of belief that the object has a particular attribute, and (3) the evaluation of each of the salient attributes. The Anderson model suggested that consumers average information on attributes in order to form an overall rating of the product. Evidence on the "averaging versus adding" problem is mixed. Fishbein's adding model, for example, predicted that the response to a stimulus described by two highly valued attributes will be greater than the response to the same stimulus described by only one highly valued attribute. Anderson, on the other hand,

predicts that the two responses should be equivalent (under averaging, when one attribute is "removed" all weight "shifts" to the remaining attribute).

Brunswick's Lens Model

Urban and Hauser's (1993) research on new product development offers additional insight into how product attributes are used to form product perceptions. Building on a consumer behavior model known as the Brunswick's Lens model (see figure 1), these researchers argued that consumers form their preferences for products based on subjective perceptions. They use these subjective perceptions as a "lens" for filtering the complex set of cues they receive about the product based on its objective features or physical attributes. In other words, an objective feature like leather interior might influence a subjective perception like luxury or comfort which in turn influences preference which influences choice.

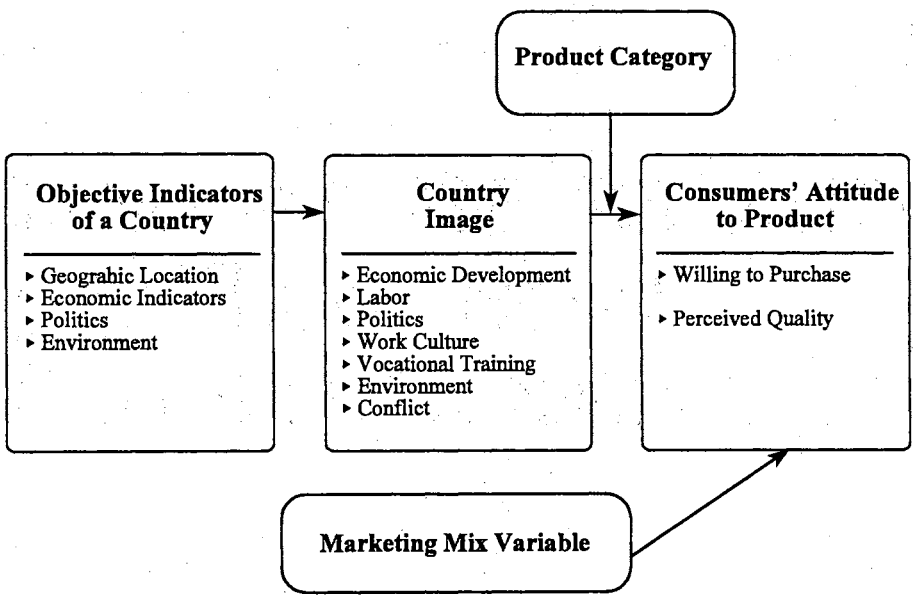


Figure 1. Brunswick's Lens model.

Based generally on common multi-attribute models and specifically on Urban and Hauser's (1993) research, this study proposes that objective country indicators are related to consumers' perceptions or images of countries. Consumers' country images are related to consumers' attitudes towards products, specifically perceived quality and willingness to purchase. The impact of country image on product attitudes is moderated by product category.

In order to map the physical attributes, secondary data are gathered. For example, Howe (1974) categorized 148 countries into four stages of economic development based on population, per capita GNP, life expectancy, literacy, and so on. Before gathering the objective data, an understanding of the subjective attributes consumers use in forming country and people perceptions was necessary. This was accomplished by collecting information from consumer focus groups and by reviewing various related literatures. The focus group data and the specific attributes selected are discussed in the methods section, and a foundation for understanding potential country image dimensions is developed in the following section on country images.

Country Image

While the research on country of origin is substantial, the more specific research on country image is brief and limited. In the following section the marketing and other relevant literatures are examined in order to develop a working definition of country image, and to gain a better understanding about the multiple dimensions of the country image construct.

Country Image Concept

The term image refers to an organized representation of an object in an individual's cognitive system. Image is an inferred construct which includes not only the individual's conception of the object at present, but also the individual's view of its past and future. Thus, associated with the image of an object, would be various specific memories and expectations, various generalized beliefs and opinions about the object (Kelman 1965).

How consumers conceptualize objects, specifically products, is an important part of consumer behavior research. Papadopoulos (1993) explained some of the valuable functions of images:

- the classification of objects;
- the development of element hierarchies;
- the understanding of objects through the many correlations among them;
- assessments about the substitutability of objects;
- the symbolization of elements or objects and of the bundles of attributes that characterize them, which facilitates recall;
- their use as input to syllogisms, or personal "theories" of causality--which, in turn permit us to interpret phenomena and act on or react to them;
- their dynamic nature, which makes it possible to change these "theories" of causality as the world evolves--while also making it difficult to discriminate between cause and effect; and perhaps most importantly,
- their use as the basis for strong explanation of, and therefore strong chains of beliefs about, objects and their attendant phenomena.

As listed, one of the many important functions of images is classification. Consumers classify products into categories and use past experience and knowledge about the categories to make product evaluations (Meyers-Levy and Tybout 1989; Sujan 1985). Many of these categorizations are based on objective attribute evaluations.

The stereotype that all Japanese cars are reliable is based as much on inference as it is on objective observation of reality (Maheswaran 1994). Though these stereotypes are often biased, they can play a valuable part in providing coherence, simplicity, and predictability in complex decision situations (Taylor 1981).

Papadopoulos (1993) adds that his partial listing of the function of images helps explain their important role and the influence they can have in daily life. The image of objects results from people's perception of them. Given the basic definition of perception as "the meaning we attribute to things," and since people act on what they *believe* is true, "objective reality" plays a lessor role in human affairs than "perceived reality."

Country Image Definition

Nagashima (1970) was one of the first marketing researchers to examine country image. He defined the term country image as:

> *the picture, the reputation, the stereotype that businessmen and consumers attach to products of a specific country. This image is created by such variables as representative products, national characteristics, economic and political background, history, and traditions* (Nagashima 1970, p.68).

This study uses Nagashima's definition of country image, but points out that virtually all post-Nagashima country image research measures country image by focusing almost exclusively on the representative product variable. Dimensions like price and value (e.g., reasonably/unreasonably priced?), service and engineering, advertising and reputation (e.g., recognizable/unrecognizable brand names?), and design and style, were commonly used measures of country image (Cattlin, Jolibert,

and Lohnes 1982; Jaffe and Nebenzahl 1984; Nagashima 1970, 1977; Narayana 1981; Roth and Romeo 1992; White 1979).

Besides focusing on representative products, these studies are limited in that they only examined highly developed countries like Japan, United States, Germany, and England. For highly developed countries, representative products may be well established. However, today's global products are generally assembled-in, with components-from countries like Malaysia, India, or Mexico where U.S. consumers are far less likely to have knowingly experienced representative products.

This lack of familiarity with representative products from developing countries in part reflects current corporate strategy. Chrysler, for example, is unlikely to announce that a particular model is assembled in Mexico, because of the negative image, unless required by law to do so. Recent FTC regulations, however, now require automakers to reveal the country of assembly and the country which supplies the major percentage of component parts.

Therefore, understanding images of developing countries is important. The dimensions that make up these images are likely to exist outside the representative products dimension. To this extent the existing country of origin and country image research is limited and outdated.

Martin and Eroglu (1993) defined country image as the total of all descriptive, inferential, and informational beliefs one has about a particular country. Based on that definition, this study fills a gap in the country image research and examines in more detail Nagashima's definition of country image by measuring the effect of other country image variables like national characteristics, economic and political background, history, and traditions. These variables are more likely to explain

differences across developing countries than are the previous scales related to representative product variables.

Country Image Dimensions

This research has identified ten marketing studies that assessed country image based essentially on Nagashima's (1970) original country image study. The dimensions used to measure country image were basically associated with product perceptions as opposed to people and country perceptions, and developed countries rather than developing countries (Cattlin, Jolibert, and Lohnes 1982; Han and Terpstra 1988; Heslop and Papadopoulos 1993; Jaffe and Nebenzahl 1984; Johansson and Nebenzahl 1986; Nagashima 1970, 1977; Narayana 1981; Papadopoulos and Heslop 1986; White 1979).

Attitudes about the countries and people producing the products have seldom been included in the research on country image (Heslop and Papadopoulos 1993). The notable exception to this are the studies by Martin and Eroglu (1993) and Wang and Lamb (1983). Wang and Lamb (1983) categorized thirty-six countries into three levels of political and economic development and six cultural regions. Using an analysis of variance method, these researchers found that willingness to buy foreign products was associated with political, cultural, and economic dimensions of the country. Specifically, the findings indicated that respondents were most willing to buy products from highly economically developed countries and politically free countries with a European, Australian, or New Zealand culture.

Martin and Eroglu (1993), based exclusively on U.S. consumer images of Japan, developed a scale which included economic, political, technical, and social

desirability (which included items concerning quality of life, standard of living, and level of urbanization) dimensions. The social desirability dimension was not uncovered in the factor analysis. One explanation for this could relate to the country under investigation. In other words, quality of life might not be an important factor in consumers' country images of super powers like Japan with high standards of living, but for developing countries this factor may be an influential dimension of country image.

Heslop and Papadopoulos' (1993) eight-developed country image study measured country image following the basic dimensions of Nagashima's (1970) product attitudes. However, unlike most post-Nagashima studies, these researchers included some specific dimensions on country and people attitudes. Based on those dimensions, they found that good products appear to come from well-managed, technologically advanced countries with hardworking people who have refined taste, are likable, trustworthy, and admired for their role in world politics.

Also, in the Heslop and Papadopoulos study, culture was not defined as simple geographic regions (as it was in Wang and Lamb 1983), but was measured using scale items referring to questions about peoples' refined taste, trustworthiness, hard work, and likeableness.

Whether or not these economic, political, social, and cultural dimensions hold for developing countries remains to be tested by this study. In order to build on these few marketing studies, and in an attempt to gain more insight into the dimensions of country image this study also reviews other non-marketing literatures related to country image.

Other Literature Bases

Given the limitations of marketing research in this area, this study includes literature bases outside of marketing in order to confirm and more fully develop the dimensions that make up country image.

In a cross-cultural psychology study, Forgas and O'Driscoll (1984) found that there are psychological links between a person's perception of a country and his or her values, beliefs, attitudes, and behavior. These perceptions and attitudes that people have about other nations can influence economic decisions like purchase choice. This is consistent with the country of origin and country image literature. Previous taxonomic studies in psychology, political science, and sociology have found that individuals tend to focus on variables like: (1) degree of economic development, (2) level of education, (3) affluence, (4) size, (5) population density, and (6) political orientation when building country images (Russett 1967; Sawyer 1967; Woliver and Cattell 1981).

Within the social-psychology literature the following dimensions, though minor variations exist depending on the countries included in the study, are quite consistent with the above literature. The dimensions that are associated with country or "international" image include economic development, political climate, cultural development and geographic location, race or ethnicity, and affect for a country or people (Forgas and O'Driscoll 1984; Jones and Ashmore 1973; Kelman 1965; Robinson and Hefner 1967; Wish, Deutsch, and Biener 1970).

Kelman's (1965) book on the subject of international behavior summarized much of the early research on national image formation. In addition to the aforementioned economic, political, and cultural dimensions, he concluded that

international image development is connected to cross-national contact, international events, and international conflict.

In support of the international conflict dimension, Driver (1962) found that country images became more concentrated, simplified, and evaluative as *conflict* between the countries increased. In the marketing literature, Papadopoulos and Heslop's (1986) study supports Kelman's cross-national contact effect on country image. They found that consumers who had traveled to a country had different views from those who had not. Travel was clearly a factor which influenced country image formation. The marketing literature also provides support for Kelman's international events dimensions. Brunner, Flaschner, and Lou (1993) found that the tragic June 1989, suppression of the pro-democracy demonstration by the Chinese government, the Tiananmen Square incident, influenced China's country image. The event appears to have eroded sales for Chinese products above and beyond that related to U.S. sanctions. On the other hand, the 1988 Olympic games in Seoul helped create a more positive country image for South Korea, and the event appears to be associated with an increase in U.S. sales of South Korean products (Jaffe and Nebenzahl 1993).

Focus Groups

In addition to the marketing and non-marketing literature review, focus groups were conducted with 148 marketing students in three classes at two separate western universities in order to identify the most current dimensions of country image. Respondents were asked what they would like to know about the countries assembling or sourcing components for products that they might be buying, and what

things might influence their perceptions of quality or willingness to purchase products from those countries.

The focus group responses were listed by frequency and were organized into likely categories. The respondents' answers showed concern for *economic development* (ability to be innovative, and use high technology) and *political climate* (freedom and fair trade). Unlike any of the dimensions in the literature bases, the respondents also consistently wanted to know about the *labor environment* and *human rights* (plant conditions, pay, hours worked, child labor, and general treatment of workers), and *environmental protection* (water and air pollution, and animal rights).

Selected Dimensions

In summary, based on the marketing and non-marketing literature and the focus groups, economic development, politics, and culture consistently emerged as important dimensions of country image. The non-marketing literature also emphasizes conflict, that is the extent to which countries share commonalities, agree on important issues, and like each other, as a vital part of country image. The focus group discussions revealed that economics, politics, and culture were meaningful, but responses also uncovered two other vital dimensions of interest: labor environment and environmental protection.

Six dimensions (economics, politics, culture, conflict, labor, and environment) are included in this study as representative of the important dimensions of country image. The operationalization of these dimensions, the definitions, and the scale

items to be included will be explained in greater detail in Chapter III, the methods section of this study.

Research Hypotheses

Four hypotheses have been based on country of origin, marketing and non-marketing country image, multi-attribute, and Brunswick's Lens research.

Willingness to Purchase and Perceived Quality

Though never tested using the six country image dimensions of this study or with developing countries *per se*, the marketing (Bilkey and Nes 1982; Liefeld 1993; Johansson 1993; Ozsomer and Cavusgil 1991; Schooler 1967) and the non-marketing (Forgas and O'Driscoll 1984; Jones and Ashmore 1973; Kelman 1965; Wish, Deutsch, and Biener 1970) literature indicated that country image influences willingness to purchase and perceived quality, and that some country image dimensions like economic development may have a stronger influence on willingness to purchase and perceived risk than others. Therefore, it is hypothesized that:

H_1: Willingness to purchase is positively related to country image.

H_{1a}: Perceived quality is positively related to country image.

H_2: The dimensions of country image will differ in the strength of their relationship to willingness to purchase.

Product Categories

The study contends that predictability of the scale and relative importance of the dimensions will differ over product categories. Country of origin research has found that country of origin influences are relatively positive for products from economically developed countries and negative for products from developing

countries (Bilkey and Nes 1982; Ozsomer and Cavusgil 1991; Schooler 1971; Schooler and Wildt 1968; Heslop and Papadopoulos 1993).

Heslop, Liefeld, and Wall (1987) investigated a number of products (e.g., shirts, billfolds, and telephones) in a developed country versus developing country experiment. The researchers found a significant difference between countries in product quality ratings for telephones (i.e, a technical product), but product quality ratings for shirts exhibited no significant country of origin effect. The researchers concluded that the country of origin effect becomes more powerful as product complexity and risk increases, and as purchase frequency of the product decreases.

Similarly, other country of origin research found a significant country of origin (economic dimension) effect on product evaluations for complex, infrequently purchased products. These effects, however, appear less important for simple products (Ettenson, Wagner, and Gaeth 1988; Han and Terpstra 1988; Heslop, Liefeld, and Wall 1987; Hester and Yuen 1986). Liefeld's (1993) twenty-two study, meta-analysis found that the magnitude of the country of origin effect appears to be related to the nature of the product. Specifically, the eta values (a measure summarizing the magnitude of the strength of relationship between variables and associated with the F-statistic) were larger for technically complex products, fashion-oriented products, and expensive products. For these products the country of origin had a significant influence on perceived quality and willingness to purchase. Therefore, it is hypothesized that:

H_3: The relationship between willingness to purchase and country image will be stronger for technologically complex products than for technologically simple products.

Economic Development and Country Image

Naturally, some variability in objective knowledge, and individual differences in the interpretation of what those objective measures should be, may exist. None the less, one the most consistent and pervasive findings in the country of origin literature is that economic development influences purchase choice. This study examined how objective measures of a country's economic development related to subjective measures of country image.

The extant country of origin researchers firmly established that consumers hold certain attitudes about countries and these attitudes influence the purchase decision process (Bilkey and Nes 1982; Ozsomer and Cavusgil 1991; Heslop and Papadopoulos 1993). In the marketing literature, two traditional multi-attribute models dominate much of the attitude research (Anderson 1974; Fishbein and Ajzen 1975). Both models make unique predictions about how consumers form perceptions given limited information. The Fishbein model contended that consumers add attribute information to form their overall attitude toward the object. The Anderson model suggested that consumers average information on attributes in order to form an overall rating of the product. Whether averaging or adding, both models provide the theoretical foundation for explaining how country images are formed. In other words, attitudes about a country come from a composite of a variety of country attributes. The relevant country image dimensions have been identified through focus groups, and marketing and non-marketing literature bases.

Urban and Hauser's (1993) research offers additional insight into how product attributes are used to form product perceptions. Based on a consumer behavior model known as the Brunswick's Lens, Urban and Hauser theorized that consumers

form their preferences for products based on subjective perceptions. They use these subjective perceptions as a "lens" for filtering the complex set of cues they receive about the product based on its objective features or physical attributes. That is, objective attributes of country image form the basis for the subjective perception of country image attributes. For example, based on complex objective information about Gross National Product (GNP), Per Capita Income, and Gross Export Sales information and so on, consumers develop simplified subjective perceptions about the country. Hypothesis four is based on the Brunswick's Lens and Multi-Attribute theory. It is hypothesized that:

H_4: Country image is positively related to objective indicators.

These four hypotheses have been empirically texted with the results reported in Chapter IV.

CHAPTER III

RESEARCH METHOD

This chapter explains the methods used to examine the dimensions of country image and the affect country image has on consumers' willingness to purchase foreign products. The chapter consists of five sections: (1) the product selection, (2) the country selection, (3) the two stages of data collection, (4) the scale development, and (5) the analytical methods used to develop the scale and test the research hypotheses.

Product Selection

The review of the literature indicated that expensive products, fashion products, and technologically complex products are most influenced by country image effects (see review, Bilkey and Nes 1982; Liefeld 1993; Papadopoulos 1993). A long list of products within the above three product categories have been used in the country image literature. Of that list personal computers and refrigerators were selected for this study based on a survey about technologically complex products. Further details on the survey and product and selection are given in the section connected with testing Hypothesis 3.

Country Selection

Most country of origin and country image studies have focused on industrialized countries and superpowers like the U.S., Germany, and Japan. As mention in this study, current attention is being focused on developing countries for outsourcing, assembly, component parts, design, and so on. Leong and Tan (1990)

surveyed one hundred and seventy top executives from the U.S., Germany, and Japan. They concluded that although North America would continue as the most important geographic region for corporate activity, Asia, Central America, and Eastern Europe would continue to be very attractive areas of foreign investment.

The fall of communism and an increasing number of international trade agreements like NAFTA, increase the likelihood of further trade activity with these countries. Thus, geographic regions consistent with the above, and, in an attempt to reflect current trends and possibilities for global trade, country selection was based on three geographic regions (countries were restricted to developing economies):

1. Pacific Rim (China, S. Korea, Singapore)
2. Europe (Spain, Poland, Greece)
3. South America (Mexico, Brazil, Peru).

Data Collection

Data were collected in two stages. The first set of data is used to develop a valid and reliable country image scale. The second set of data is used to test the research hypotheses.

The first set of data were collected by surveys administered to undergraduate business students at a mid-western university. In both marketing and non-marketing research, student respondents are commonly used for scale development. The method is considered reasonable and appropriate for this type of research (Malhotra 1981; Zaichowsky 1985). Previous country of origin researchers who used similar methods and techniques have reported sample sizes which range from 100-250

respondents (Damanpour 1993; Erickson, Johansson, and Chao 1984; Lillis and Narayana 1974; Nagashima 1970, 1977; White 1979).

Hair *et al.* (1995) recommended that the researcher not factor analyze a sample of less than 50. The preferable sample size would exceed 100 respondents. And as a general rule, the research should include, as a minimum, at least five times as many observations as there are variables. This study has approximately 40 country/people image variables. Hence, a reasonable sample size would include about 100 respondents reporting on two countries each for two hundred observations.

Each respondent was asked to answer questions (39 items) related to the six country image dimensions for two separate countries. The survey included two questions on willingness to purchase a wallet or a computer.

In the first study the countries of China, Scotland, Mexico, South Africa, Russia, and Singapore were examined. This selection of developing countries created a broad geographical cross section of countries which are currently or likely in the future to be involved in assembly and sourcing. The diversity of countries also diffused specific individual bias for one particular region or country.

In the second round of data collection, surveys were hand delivered to church groups, clubs, and other organizations willing to participate in the study. Because of the length of the questionnaire (about 15-20 minutes to complete) this method of administration was selected over other survey methods.

To reduce fatigue and boredom and increase response rate, the number of questions in the original student survey were reduced when the second data collection occurred. Assuming the country image scale met requirements for

appropriateness, reliability, and variance explained, the highest loading item for each of the six country image dimensions was kept for the second survey. This created approximately 8-10 questions for each country. As mentioned in the country selection section, three different countries were included in each survey (9 countries in all from three regions — Asia, Latin America, and Europe — with differing levels of economic development). The variety of geographic areas and countries as included to create a broad cross-sectional perspective and allow for some country differences in economic development. Thus, the second survey (2 country sets) included about 75 questions per survey.

Scale Development

The importance of proper scale development has been emphasized by a number of researchers (e.g., Churchill 1979; Jacoby 1978; Peter 1981). Churchill contended that many of the existing measurement problems could be eliminated if multi-item measures were used. To develop multi-item measures, Churchill suggested that initially the domain of the construct must be defined (a limitation of existing country image studies), then sample items are to be generated by examining various literatures, conducting experience surveys and focus group interviews.

Dimensions of Country Image

Following Churchill's (1979) admonition to specify the domain of the construct, the first critical step in scale development, we undertook a comprehensive review of literature on country of origin and country image. This process revealed six dimensions of the multi-dimensional construct, country image: (1) economic development, (2) political environment, (3) labor environment, (4) work culture,

(5) environmental preservation, and (6) international conflict. Next, the initial 39 scale items associated with the six dimensions were generated by conducting focus group interviews, and reviewing the literature (i.e., country of origin and country image literature, and other related literatures).

In the focus group interviews, 148 undergraduate marketing students in three separate classes at two different mid-western universities participated. The focus group participants were asked, "If a well-known brand name product were assembled in or had components sourced from countries unrelated to brand name country, what would you like to know about those countries? What would influence your perceptions of quality? What might influence your willingness to purchase?" Their responses generated a long list of interesting questions. The questions most frequently listed were oriented towards the labor environment, that is *human rights* issues (i.e., labor laws, standard of living, working conditions, etc.), *work culture* (i.e., education, training, trustworthy, reliable, work ethic, and so on), *environmental issues* (i.e., sanitation, pollution controls and environmental awareness, etc.), *politics* (fair trade, democratic, stable, friendly, and so on), and *economics* (technological advancement and global distribution).

One of the unique contributions of this study is its focus on country and people images vs product images. The country of origin research includes some product image scales (Erickson, Johansson, and Chao 1984; Lillis and Narayana 1974; Nagashima 1970, 1977; Wang and Lamb 1983; White 1979). In all, these scales were built upon the seminal work of Nagashima (1970, 1977). These scales were often based on logic and intuition with very limited testing for validity or reliability.

The few with formal analytical procedures developed product image dimensions based strictly on superpower comparisons of countries like U.S., Germany, England, France, and Japan. Nagashima's (1970, 1977) study included price/value, service/engineering, advertising/reputation, design/style, and consumers' profile. Although Nagashima's scale items were product image based, some of his dimensions apply to this country/people image study of developing countries. For example, the price/value dimension asks a question about product reliability. This could easily be asked about the reliability of the people. Similarly, the service/engineering dimension asks questions about technical advancement, meticulous workmanship, and inventiveness. These items apply as much or more to country/people images as they do to product images and hence are included in the scale.

Studies specifically related to country and people dimensions of country image are rare in the country of origin literature. The notable exception is Wang and Lamb's (1983) study. Although no scale was developed, the researchers discovered through country comparisons that economic, political, and cultural environment influenced country/people image which influenced willingness to buy foreign products.

The non-marketing literature revealed not only economic, political, and culture dimensions of country image, but also an international conflict dimension (Driver 1962; Forgas and O'Driscoll 1984; Jones and Ashomore 1973; Kelman 1965; Robinson and Hefner 1967; Russett 1967; Woliver and Cattell 1981).

Based on the focus group interviews, the marketing and non-marketing (i.e, psychology, social and cultural psychology, and political science) literature, the following six anticipated dimensions or summary variables, economic development,

labor environment, political environment, work culture, environmental preservation, and cross-national conflict, and 39 scale items are listed below and operationalized in the questionnaire using seven point Likert-type scales which range from 1 to 7.

Economic Development

Economic development refers to a country's ability to effectively manage its resources. It has to do with the efficient production, distribution, and consumption of wealth. It denotes the country's capacity for creating a standard of living for its citizens that is competitive with other countries. The literature and focus groups suggest that this dimension of country image could be operationalized by focusing on:

1. Highly developed economy?
2. Well managed economy?
3. Average citizen wealth?
4. Highly industrialized economy (vs. agricultural economy)?
5. Technologically advanced?
6. Powerful economy?
7. Modern economy?

Labor Environment

Labor environment refers to the conditions under which the work is performed. It includes the basic human rights of workers and denotes the general attitude of government towards labor rights, companies' treatment of labor, and the working environment generally. The literature and focus groups suggest that this dimension of country image could be operationalized by focusing on:

1. High regard for human/worker rights?
2. Working conditions clean and comfortable?
3. Working conditions very safe?
4. Workers well paid for their work?
5. Short work hours each day?

6. Workers treated very well?
7. Non-exploitation of labor (child, elderly, prison etc.)?
8. Standard of living?

Political Environment

Political environment refers to a country's form of government and the policies, laws, rules, and regulations which guide the countries' decisions. The laws and policies play an important role in the interaction between its people and other countries. The literature and focus groups suggest that this dimension of country image could be operationalized by focusing on:

1. Highly admired for role in world politics?
2. Political system is very stable?
3. Very peaceful government?
4. Amount of personal freedom?
5. Politics similar to the U.S.?

Work Culture

Work culture denotes the basic values and beliefs that a people have about physical and mental effort. It refers to the workers efficiency and productivity. It includes the common characteristics and traits of the people, their way of life. The literature and focus groups suggest that this dimension of country image could be operationalized by focusing on:

1. Very well trained?
2. Very hardworking?
3. Very trustworthy?
4. Very admired?
5. Very well educated?
6. Pay close attention to detail?
7. Very reliable?

Environmental Preservation

Environmental preservation refers to a country's awareness of the global consequences of pollution and the vital need for protection of the environment. It also includes the creation of policies aimed at reducing air, water, and soil pollution. The focus groups suggest that this dimension of country image could be operationalized by focusing on:

1. Very concerned about the environment?
2. Very high standard for pollution control?
3. Aggressive effort to protect the environment?
4. Non-exploitation of environment (animals, oceans, etc.)?
5. Clean air and water?

International Conflict

Conflict suggests that two entities are antagonistic, incompatible, or in opposition to each other. International conflict results when two nations have an incompatible or contradictory mixture of economic, ideological, and power differences, and their resulting strategies and modes of resolution (Kelman 1965). The focus groups suggest that this dimension of country image could be operationalized by focusing on:

1. Fair trade practices with the U.S.?
2. People very friendly?
3. Similar values and beliefs?
4. Very likeable people?
5. Government cooperative with ours?
6. Economy compete with ours for jobs?
7. Very dependable military ally?

Global Measure

In order to test relative importance of the different dimensions a global scale is required. In the country of origin literature, overall evaluation of country image

influence was frequently based on questions pertaining to willingness to purchase (Bilkey and Nes 1982; Liefeld 1993; Ozsomer and Cavusgil 1991). Urban and Hauser's (1993) adaptation of the Brunswick's Lens Model explained that subjective perception influences product preference. This study suggests that preference could be measured by willingness to purchase. Therefore, questions on consumers' willingness to purchase foreign products are included in the survey.

Analysis

The following section explains the methods of analysis used to examine the objectives and test the hypotheses.

Factor Analysis

Based on research objective #1 of the study, factor analysis, the multivariate technique concerned with the identification of data structure was selected as the appropriate tool for understanding the underlying items and dimensions or factors which relate to country image scale development.

Before factor analysis is performed, the appropriateness of using factor analysis should be considered. This can be determined by using Kaiser's measure of sampling adequacy. Hair *et al.* (1995) says an MSA score of 0.70 "middling" or above indicates that factor analysis is appropriate. The scale should meet this initial criteria before the study proceeds.

To assess the quality of the instrument, Churchill (1979) said that a coefficient alpha is absolutely the first measure one should calculate. A coefficient alpha is calculated for each of the dimensions. For early stages of research, reliabilities or

coefficient alphas of 0.50 to 0.60 are sufficient (Nunnally 1978). The scale met the minimum requirement to be considered reliable.

After checking for reliability, Churchill (1979) recommended that items which produce a substantial drop in the item-to-total (ITT) correlations should be deleted. This is applied in the analysis.

Overall, there are 39 country/people scale items for each country. R-factor analysis was used to evaluate consistent dimensions within the scale. Specifically, Principal Components Analysis with Varimax rotation was used. Factoring was stopped when additional factors no longer significantly reduced the explained variance. To determine the number of factors to be included in the factor analysis a minimum eigenvalue criterion of one and Cattell's Scree Plot Test was used.

To be included in a factor, Gorsuch (1983) recommended that items loading on one factor should have a loading of at least 0.30. Hair *et al.* (1995) suggests that factor loadings of 0.40 are considered important, and loadings of 0.50 are considered practically significant. If the loadings of the items in the different factors are very close (crossload), then the items should be excluded from all factors. Items that do not meet this criteria were eliminated. Then, the factor loadings were examined to interpret and name the factor dimensions.

Regression Analysis

The Brunswick's Lens model provides a structure by which to explain how consumers develop country images and how a country's objective attributes influence consumers' perceptions of attributes. The combination of these perceived attributes influences preference (measured by a seven point bipolar adjective question on

willingness to purchase). Multiple regression analysis is the appropriate method for analyzing a research problem where a single metric dependent variable is thought to be related to one or more metric independent variables. Thus, multiple regression analysis was used to analyze the relationship between dimensions of country image (independent variables) and willingness to purchase (a dependent variable), and to test Hypothesis 1, Hypothesis 2, and Hypothesis 3.

Hypothesis 1 is supported if the correlation coefficient (r) is positive and statistically significant. The correlation coefficient indicates the strength of the relationship between the dependent and independent variable(s). It was examined. The coefficient of determination (R^2) was also examined to explain the explanatory power of the regression equation or how well country image predicts willingness to purchase. An F-test was calculated to see if the overall relationship was statistically significant.

Hypothesis 2 is supported if the beta coefficients differ among themselves in magnitude. The beta coefficient allows for direct comparison between the regression coefficients and their explanatory power on the dependent variable (willingness to purchase). The beta coefficients were tested to see if they were significantly different from each other. The M-test was applied as the statistical test commonly used to test differences in regression coefficients.

Hypothesis 3 is supported if the correlation coefficients (r) for willingness to purchase technologically complex products is larger and significantly different from the correlation coefficients (r) for technologically simple products. Fisher's z Transformation is the appropriate technique for testing the difference between correlation coefficients (Cohen and Cohen 1975).

Multiple Analysis of Variance

Hypothesis 4 proposed that a positive relationship exists between country image and objective indicators. Hypothesis 4 is tested using multiple analysis of variance. Multiple analysis of variance is the correct procedure for testing situations where the researcher desires to measure the differences for two or more metric dependent variables (country image dimensions) based on a set of categorical independent variables (region and economics). If main effects of region and economies are significant at the multivariate level, then H_4 is supported.

CHAPTER IV

ANALYSIS AND FINDINGS OF THE STUDY

This chapter reports the results of data analysis designed to study the research questions and test the hypotheses developed in Chapter III. The data analyzed in this chapter were collected in two stages. First, pre-test data were collected to create a valid and reliable measure of the country image construct. Then, main study data were collected to test the research hypotheses.

The results of the pre-test analysis are presented first. The report includes data collection and sample size, appropriateness of factor analysis, reliability analysis, and factor analysis (principal component and common factor analysis with varimax rotation). The results of the main study analysis are presented next. These include data collection, survey design, reliability tests, factor analysis, multiple regression analysis, Fisher's z transformation, M-test, and multiple analysis of variance.

Pre-Test Study

Country Image Scale Development

To develop better measures of marketing constructs, multi-item measures should be used. Multi-item measures tend to increase reliability and decrease measurement error (Churchill 1979). The first four steps of Churchill's (1979) procedure for developing better measures includes: (1) specify the domain of the construct, (2) generate sample items, (3) collect data, and (4) purify the measure. The specification of the domain and how the sample items were generated have already been explained in Chapters II and III. Hence, they are only briefly

mentioned here. However, data collection and purification of the measurse are explained in detail.

The domain of country image included six dimensions, *economic* development, *labor* environment, *political* environment, *work* culture, *environmental* protection, and *conflict*. The dimensions and the 39-items used in the pre-test study to measure the dimensions are based on extensive research in both the marketing and non-marketing literature, and on focus group interviews with 148 undergraduate marketing students from two mid-western universities. The initial items were carefully reviewed and the statements or questions were cautiously examined and edited so that the wording would be as precise as possible. The study essentially followed Churchill's (1979) method for specifying the domain and generating sample items.

Data Collection

The pre-test data were collected from a group of 107 undergraduate business students in three separate classes (two marketing and one accounting class) at a mid-western university campus (the focus group and pre-test group respondents were not the same group). Student respondents are commonly used for scale development in both marketing and non-marketing research, and the method is considered reasonable and appropriate for pre-tests of this kind (Malhotra 1981; Zaichowsky 1985).

The student sample was relatively diverse across demographic and socioeconomic characteristics. Such information is provided in Table 1. This study has 39 items and 107 student respondents. Each respondent was asked to answer questions about two separate countries (China and Scotland, Mexico and South Africa, or Russia and Singapore). This created a total of 214 country observations.

TABLE 1

PRE-TEST SAMPLE PROFILE

Age	Gender	Marital Status	Income	Citizenship
20-34 (76%)	Female (49%)	Single (43%)	$0-24,999 (38%)	U.S. (87%)
35-49 (24%)	Male (51%)	Married (53%)	$ -49,999 (42%)	Other (13%)
		Divorced (4%)	$ -74,999 (20%)	

For scale design and analysis, previous country of origin and country image researchers have used similar data collection methods and have reported similar sample sizes ranging from 100-250 respondents (Damanpour 1993; Erickson, Johansson, and Chao 1984; Nagashima 1970, 1977). Hair *et al.* (1995) recommended that the researcher not factor analyze a sample size of less than 50 (preferably more than 100), and as general rule, the research should include at least five times as many observations as there are variables. This study exceeds these recommendations.

Scale Dimension Analysis

To determine the appropriateness of using factor analysis, Kaiser's measure of sampling adequacy (MSA) can be used. Hair *et al.* (1995) suggested that 0.90 or above is "marvelous", 0.80 or above is "meritorious," and 0.70 or above is "middling." Analysis of the pre-test data for this study shows an overall MSA of 0.92 or "marvelous," and individual variables range from 0.74 to 0.96. Thus, factor analysis is appropriate.

Factor analysis was used to determine whether or not the 39 country image scale items reflect the country image dimensions as anticipated. The 39-items were analyzed using principal components and common factor analysis with varimax rotation to determine the number of factors and representative items to be retained. The latent root or eigenvalue greater than 1.0 criterion and the scree plot test criterion were examined to help determine when factors cease to add significantly to the amount of variance explained. Both the eigenvalue and the scree plot test criterion indicate that seven factors should be retained rather than the originally postulated six factors.

The scree test criterion is used to identify the optimum number of factors that can be extracted before the amount of unique variance begins to dominate the common variance. The scree test is derived by plotting the eigenvalues against the number of factors in order of extraction. The point at which the curve first begins to straighten out indicates the maximum number of factors to be extracted (Hair *et al.* 1995). In this study the curve begins to straighten out at approximately six or seven.

Latent roots or eigenvalues represent the column sum of squared loadings for a factor or the amount of variance accounted for by the factor. The rationale for using eigenvalues is that any individual factor should account for the variance of at least a single variable if it is to be retained (Hair *et al.* 1995). The eigenvalues for the seven retained country image factors are provided in Table 2. Based upon the eigenvalue greater than one and scree plot criterion seven country image factors were selected. The results of factor analysis are presented in Table 3.

TABLE 2

EIGENVALUES FOR COUNTRY IMAGE SCALE

Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
14.31	3.24	2.85	1.84	1.48	1.33	1.24

The Seven Dimensions

Churchill (1979) suggested that items which produce a substantial or sudden drop in the item-to-total (ITT) correlations should not be used. Based on Churchill's recommendation, three items should not be considered for the main study: (1) within the labor environment dimension the ITTs for seven items range between 0.81 − 0.62, but the work long hours item (ITT = 0.42) represents a sudden drop; (2) within the political environment dimension the ITTS for four items range between 0.68 − 0.58, but the admired for role in world politics item (ITT = 0.40) represents a sudden drop; and (3) within the conflict dimension the ITTS for seven items range between 0.70 − 0.55, but the competes with us for jobs item (ITT = 0.32) represents a sudden drop. The dimensions underlined in Table 3 represent these three items.

Hair *et al.* (1995) suggested that factor loadings of 0.40 are considered important, and loadings of 0.50 are considered practically significant. Gorsuch (1983) recommended that factors which load highly on more than one variable be deleted.

TABLE 3

PRE-TEST COUNTRY IMAGE FACTOR ANALYSIS

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7
E	**0.86536**	0.19726	0.23410	0.16648	0.19043	0.04138	0.07296
E	**0.83430**	0.22979	0.22955	0.11358	0.19690	0.01666	0.13426
E	**0.82621**	0.32999	0.22470	0.14670	0.12478	0.05470	0.10775
Eexploit	**0.65897**	0.22818	0.15280	0.19468	0.20645	0.05954	0.14507
E	**0.62398**	0.36213	0.19812	0.18850	0.09835	0.07016	0.21697
L	0.35340	**0.74841**	0.16912	0.26098	0.08884	0.08547	0.10621
L	0.33299	**0.71827**	0.30027	0.23058	0.17274	0.03658	0.06662
L	0.24810	**0.68998**	0.21130	0.23020	0.29778	0.01436	0.14646
L	0.19644	**0.64585**	0.16578	0.26543	0.20613	0.01884	-0.03011
L	0.32643	**0.62014**	0.25479	0.10289	0.30390	-0.06459	0.12136
L	0.10445	**0.46824**	0.03607	0.21569	0.04380	-0.09273	0.20909
L	0.34091	**0.43509**	0.31528	0.00841	0.31905	-0.01353	0.19749
E	0.12970	0.09457	**0.77965**	0.10493	-0.01365	0.04747	0.33277
E	0.19769	0.14666	**0.76022**	0.13929	0.11987	0.07342	0.03390
E	0.17259	0.30246	**0.71163**	0.09443	0.09729	0.19563	0.00772
E	0.00834	0.02821	**0.68143**	0.11632	0.10873	0.02753	0.16236
E	0.27868	0.09504	**0.65875**	-0.08335	-0.01787	0.14138	0.08982
E	0.33954	0.27616	**0.53880**	0.06606	0.44076	0.26540	-0.07269
E	0.28144	0.44164	**0.47759**	-0.00864	0.26850	0.10554	0.01321
C	0.12762	0.14801	0.09669	**0.76860**	0.21535	-0.05031	0.08207
C	0.11143	0.10764	0.03394	**0.73583**	0.22152	0.09593	0.09467
C	0.08640	0.07455	0.14659	**0.54263**	0.20455	0.21732	0.08659
C	0.15088	0.11064	0.15194	**0.51320**	0.41397	0.03080	0.20741
C	0.10583	0.29831	0.11306	**0.51263**	0.20888	0.09259	-0.12604
C	0.24304	0.16677	0.04095	**0.48289**	-0.04541	0.19684	0.03119
C	0.29112	0.18045	0.09652	**0.41744**	-0.02516	0.34192	0.26129
C	-0.10196	0.24458	-0.17251	**0.35718**	-0.00513	0.07518	0.08944
P	0.21648	0.12798	0.23759	0.25218	**0.16387**	-0.07133	0.22675
P	0.21933	0.28015	0.05571	0.41479	**0.60028**	-0.01114	0.03653
P	0.28921	0.29616	0.12085	0.19458	**0.58529**	0.07192	0.17715

(CONTINUED NEXT PAGE)

TABLE 3

PRE-TEST COUNTRY IMAGE FACTOR ANALYSIS

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7
P	0.25153	0.19651	0.01850	0.32930	**0.55801**	0.13935	0.10829
P	0.05688	0.19038	0.19889	0.36265	**0.55764**	-0.05574	0.05152
C	0.10790	0.04257	0.10997	0.17626	0.09983	**0.77442**	0.13057
C	-0.03936	-0.04927	0.09268	0.16158	-0.00707	**0.71983**	0.05659
C	0.17340	0.05797	0.21755	0.07451	0.11139	**0.57123**	0.37607
L	0.14044	0.36746	-0.02684	0.09972	0.12256	-0.43734	0.21803
C	0.15652	0.22754	0.34884	0.15246	0.07264	0.37573	**0.59758**
C	0.28864	0.15031	0.23633	0.17303	0.19777	0.16536	**0.55566**
C	0.25693	0.28061	0.35516	0.11858	0.13157	0.24196	**0.52451**

For this analysis, items with loadings of less than 0.40 or those loading highly on more than one factor were not retained for the main study. Except for the items with sudden drops in item-to-total correlations, the remaining 36-items exceed factor loadings of 0.40. Some items do cross-load on other factors. Those four items with cross-loadings exceeding 0.40 are underlined in Table 3. These items were removed from the main study.

The first factor includes five items. This is clearly a environmental dimension. Factor loadings range from 0.87 – 0.62. All items should be considered for the main study. This factor accounts for an average of 59.2 percent of the variance.

The second factor includes eight items (seven items if the "LHOURS" item is dropped). The items appear to represent the labor environment dimension. Factor

loadings range from 0.75 – 0.44. This factor accounts for an average of 12.0 percent of the variance.

The third factor includes seven items. The factor represents the economic development dimension of the country image scale. Factor loadings range from 0.78 – 0.48. Factor three accounts for 10.4 percent of the variance.

The fourth factor includes eight items (seven items if the "CNCMPETE" item is dropped). The items appear to represent the conflict dimension. Factor loadings range from 0.77 – 0.36. This factor accounts for an average of 6.5 percent of the variance.

The fifth factor includes five items (four items if the "PADMIRE" item is dropped). The items appear to represent the political environment dimension. Factor loadings range from 0.60 – 0.16. This factor accounts for an average of 4.6 percent of the variance.

The work culture was initially considered to be a single dimension, however, factor analysis suggests that consumers perceive two dimensions. Factor six includes three items (i.e., hardworking, reliable, and pay attention to detail). These three items represent the work culture dimension. They account for 3.9 percent of the variance. The factor loadings range from 0.77 – 0.57.

Factor seven includes three items (i.e., well trained, admired, and well educated). This dimension, from here on, will be referred to as "vocational training" and will be retained along with the other six country image dimensions. It accounts for 3.4 percent of the variance. The factor loadings range from 0.56 – 0.53. A summary of the above is presented in Table 3.

In the main study survey it was necessary to include approximately forty-five additional questions beyond the existing country image questions. Also, the main study survey included country image questions for two countries. The length of the main study survey could create response problems associated with fatigue and boredom. Hence, for the main study it was decided that only the three items with the highest factor loadings on each of the seven country image factors would be retained (21 items in all). This action both reduced the length of the scale and strengthened the internal consistency as discussed in the following section.

Internal Consistency

To ensure the quality of the country image scale, 21 of the original 39 items from the pre-test data were retained and the data re-analyzed for internal consistency (reliability). The recommended measure for internal consistency is coefficient alpha — the first measure one should calculate to assess the quality of the instrument (Churchill 1979). Although determining an overall measure of internal consistency for a multi-dimensional scale is not particularly meaningful (Peter 1979), Churchill (1979), explained that a coefficient alpha should be calculated for each individual dimension.

The results of the coefficient alpha analysis for the 21 item, seven dimension country image scale are provided in Table 4. The Cronbach's coefficient alphas for the seven country image dimensions ranged from 0.78 to 0.96.

As compared to other studies on country image, these coefficient alpha values are very acceptable and meet the guidelines recommended by scale development researchers (Churchill 1979; Nunnally 1978; Peter 1979). In fact, for early stages

of research, Nunnally (1978) suggested that reliabilities of 0.50 to 0.60 are sufficient. The scales in this study appears to meet or exceed the initial requirements for reliability.

TABLE 4

COEFFICIENT ALPHA FOR COUNTRY IMAGE DIMENSIONS

DIMENSIONS (21 items total)	COEFFICIENT ALPHA
Economic development (3 items)	0.84
Labor environment (3 items)	0.87
Political environment (3 items)	0.78
Work culture (3 items)	0.79
Vocational training (3 items)	0.85
Environmental awareness (3 items)	0.96
Conflict (3 items)	0.82

In summary, factor analysis was deemed appropriate. Factor analysis revealed seven country image dimensions instead of the six dimensions originally postulated. Essentially, the work culture dimension was split into two more specific dimensions: *work culture* (value and believe in hard work, paying attention to detail and reliability) and *vocational training* (well trained and educated). For the main study survey, 21 of the original 39 scale items were selected for retention. Reliability analysis demonstrates that these 21 items are internally consistent and reliable. A second factor analysis was performed on the seven dimension, 21 item country image scale. The factor patterns and loadings remained stable and consistent with

the original analysis except for the "CDETAIL" item in factor seven. It cross loads on factor 4. The results are provided in Table 5. ,The seven dimensions and 21 items are included in the construction of the final instrument.

TABLE 5

21 ITEM COUNTRY IMAGE FACTOR ANALYSIS

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7
EEFFORT	**0.88412**	0.21473	0.16828	0.17708	0.18133	0.06405	0.14371
ESTNDS	**0.84178**	0.20350	0.22276	0.17178	0.21618	0.02185	0.08665
ECONCER	**0.80340**	0.15892	0.21460	0.15161	0.31861	0.05665	0.14467
PFREE	0.21508	**0.73172**	0.12554	0.04296	0.24806	0.00522	0.17130
PPEACE	0.22477	**0.63415**	0.14167	0.03863	0.20155	0.16686	0.08838
PSIMILAR	0.07516	**0.61319**	0.06710	0.20052	0.17301	0.00998	0.18879
CTRAIN	0.12637	0.10881	**0.71909**	0.30148	0.19331	0.28818	0.05694
CADMIRE	0.23725	0.18757	**0.66397**	0.17592	0.08709	0.07066	0.15144
CEDUCATE	0.22270	0.11689	**0.65991**	0.26010	0.22710	0.16083	0.13344
CDETAIL	0.12518	0.07233	0.51517	0.15527	0.03622	**0.49555**	0.08411
ETECH	0.16447	0.01782	0.29664	**0.80021**	0.11508	0.10443	0.01845
EMODERN	0.24285	0.11355	0.10295	**0.74325**	0.14525	0.11630	0.13603
EINDSTRY	0.02976	0.13976	0.18130	**0.69677**	0.05474	0.04951	-0.00660
LSAFE	0.33741	0.19548	0.22506	0.11826	**0.73399**	0.05945	0.20983
LTREAT	0.25177	0.37189	0.20393	0.19826	**0.66940**	0.02516	0.11511
LKIND	0.21154	0.31529	0.08680	0.11772	**0.66100**	0.00684	0.12436
CRELIABL	0.11501	0.12502	0.18365	0.09095	0.04538	**0.85930**	0.05394
CHARDWK	-0.04991	0.00074	0.10714	0.07437	-0.00105	**0.75212**	0.12411
CNCOOP	0.09867	0.48628	0.09980	0.11000	0.12916	0.00784	**0.64690**
CNFAIR	0.05627	0.49367	0.12288	0.06666	0.09536	0.12356	**0.57079**
CNLIKE	0.17535	0.08312	0.12068	0.00891	0.15743	0.16774	**0.52474**

MAIN STUDY

Data Collection

Surveys were distributed to a variety of respondents in a large western city. The convenience sample included an elementary school (faculty and staff), a city organization (judges, attorneys, clerks, and staff), a light manufacturing company (owners, managers, and employees), and two neighborhoods (one upper-middle and one lower-middle income group). The variety of different organizations and groups were deliberately chosen to create a diverse sample of respondents. A drop-off and pick-up method was used to distribute and collect the surveys. In total, 250 surveys were distributed to the above groups. Of these, 176 surveys were picked up or returned. This represents a response rate of 70.4%. All returned surveys were correctly and completely filled out. An inquiry into the reasons for non-response revealed a general lack of motivation. Non-respondents consistently commented, "I planned to fill it out, but became too busy with other things." Given the 70.4% response rate, non-response bias doesn't appear to be a problem.

The respondents are demographically quite diverse. The results are provided in Table 6.

TABLE 6

MAIN STUDY SAMPLE PROFILE

CITIZEN-SHIP	AGE	GENDER	MARITAL STATUS	INCOME	EDUCATION
U.S. (100%)	16-29 (36%)	Female (49%)	Single (15%)	$-24,999 (25%)	H. School (13%)
Other	30-49 (45%)	Male (51%)	Married (79%)	$-59,999 (39%)	College (39%)
	50-up (19%)		Divorced (6%)	$-89,999 (29%)	Graduate (32%)
				$-above (7%)	Post-grad (16%)

Survey Design

Three regions, Latin America, Asia, and Europe were included in the study. As explained in Chapters II and III, these regions were chosen because they represent some of the currently popular areas for manufacturing and assembly. The study is interested in the influence of economic development on country image. Hence, for each region three countries were selected based on three different levels of economic development (high, medium, and low): Mexico, Brazil, and Peru; Singapore, South Korea, and China; and Spain, Greece, and Poland.

Of the original 39 items in the pretest study, 21 were retained for the main study. The 21 items or questions about country image from the pre-test study were included for each of the nine countries in the main study. Also, 18 questions about willingness to purchase, perceived quality, and feelings concerning computers and refrigerators made in those countries were included in the survey. Three questions about consumer ethnocentrism, four questions concerning perceived knowledge relevant to countries and products, four questions about travel and friends or relatives from related countries, two questions about perceived product complexity, and six demographic questions were included in each survey creating a total of 97 questions per survey.

To control effects related to region bias or country combination, nine country combinations or sets of surveys were constructed as follows: (1) Mexico/S. Korea, (2) Mexico/China, (3) Singapore/Greece, (4) Singapore/Poland, (5) Spain/Brazil, (6) Spain/Peru, (7) S. Korea/Peru, (8) Greece/China, and (9) Brazil/Poland.

Main Study Country Image Factor Analysis

The main study follows the same procedures for analysis as outlined in the pre-test study section. Kaiser's measure of sampling adequacy (MSA) for the main study was 0.87, appropriate for conducting factor analysis. Factor analysis was performed on the main study data to ensure that the scale items work together and form consistent subgroups which represent the dimensions discovered in the pre-test. The main study factor analysis results were similar to those of the pre-test study. The internal reliability was also very high, and is reported next.

Reliability Tests

As mentioned in the pretest study section, measures should be reliable and valid. The use of multiple items in a scale is an important means of increasing reliability (Churchill 1979). The main study includes multiple item scales to measure the country image dimensions, willingness to purchase, perceived quality, and affect. To test the reliability of the main study measures, reliability analysis (Cronbach's alpha) was performed.

Country Image Measures

Statistical analysis was used to test the reliability of the seven three-item, seven-point, Likert type (strongly agree/strongly disagree) scales. The analysis shows that the reliability coefficients for the seven measures of the country image dimensions exceed values of 0.65, indicating high internal consistency for each set of items (Nunnally 1978). Reliability coefficients (Cronbach's alpha) are summarized in Table 7.

TABLE 7

RELIABILITY COEFFICIENTS FOR COUNTRY IMAGE DIMENSIONS

SCALES	CRONBACH'S ALPHA
Environment (3 items)	0.93
Economy (3 items)	0.79
Labor conditions (3 items)	0.91
Politics (3 items)	0.83
Conflict (3 items)	0.78
Work culture (3 items)	0.90
Vocational training (3 items)	0.85

Willingness to Purchase

The willingness to purchase scale used in this study was based on an existing marketing scale which reported a reliability coefficient of 0.95. The construct was assessed via a three-item seven-point, semantic differential scale anchored with adjectives probable/improbable, likely/unlikely, and possible/impossible. The results of the analysis of the scale indicated a reliability coefficient of 0.971 for willingness to purchase a computer and 0.980 for willingness to purchase a refrigerator (see Table 8). These results meet or exceed acceptable standards for reliability.

Perceived Quality

The perceived quality scale used in this study was created from existing marketing scales which report a reliability coefficient of 0.88 and 0.84 for the two products examined (Petroshius and Monroe 1987). In this study, the perceived quality construct was assessed via a three-item, seven-point, semantic differential

scale anchored with adjectives dependable/undependable, good quality/poor quality, and reliable/unreliable. The results of the analysis indicated a reliability coefficient of 0.979 for computers and 0.978 for refrigerators (see Table 8). These results meet or exceed acceptable standards for reliability.

TABLE 8

RELIABILITY COEFFICIENTS FOR DEPENDENT MEASURES OF COUNTRY IMAGE

SCALES	CRONBACH'S ALPHA COMPUTER	CRONBACH'S ALPHA REFRIGERATOR
Willingness to purchase (3 items)	0.97	0.98
Perceived quality (3 items)	0.98	0.98
Affect (3 items)	0.96	0.98

Affect

The feelings scale used in this study was developed from existing marketing scales which report reliability estimates ranging from 0.89 to 0.95. In this study, the feelings about purchases construct was assessed via a three-item seven-point semantic differential scale anchored with adjectives proud/not proud, excited/not excited, and confident/not confident. The results indicate a reliability coefficient of 0.960 for computers and 0.977 for computers (see Table 8). These results meet or exceed acceptable standards for reliability.

Tests of Hypotheses

The statistical analysis methods and statistical findings for each hypothesis are presented in the following sections.

Test of Hypothesis 1: Effects of Country Image on Willingness to Purchase and Perceived Quality

$\mathbf{H_1}$ proposed that willingness to purchase is positively related to country image. $\mathbf{H_{1a}}$ proposed that perceived quality is positively related to country image. Multiple regression analysis is the statistical technique used to test $\mathbf{H_1}$, i.e., analyze the relationship between willingness to purchase, a single metric dependent variable, and country image with its seven metric independent variables. It is also used to test $\mathbf{H_{1a}}$, i.e., analyze the relationship between perceived quality, a single metric dependent variable, and country image with its seven metric independent variables.

Multiple regression models were used to assess the relationships in an equation of the form:

$$WP = B_0+B_1X_1+.....B_7X_7$$

where WP = the mean of the three item willingness to purchase scale, X_1 to X_7 = the means of the three item, seven dimension country image scales;

$$PQ = B_0+B_1X_1+.....B_7X_7$$

where PQ = the mean of the three item perceived quality scale, X_1 to X_7 = the means of the three item, seven-dimension country image scale.

The two regression models included analysis of two products, computers and refrigerators, creating four regression equations in all. The results of the multiple regression analysis for $\mathbf{H_1}$ and $\mathbf{H_{1a}}$ for the two products are summarized in Table 9.

TABLE 9

EFFECT OF COUNTRY IMAGE ON WILLINGNESS TO PURCHASE AND PERCEIVED QUALITY RESULTS OF MULTIPLE REGRESSION

	Variable	Multi R	Adj R^2	F	Sig F	(b_n)	t	Sig t
COMPUTER	Willingness	0.52	0.25	17.64	0.00			
	Environment					0.06	0.76	0.44
	Economic					0.41	5.88	0.00
	Labor					-0.08	-0.88	0.38
	Politics					-0.08	-0.82	0.41
	Conflict					0.05	0.55	0.58
	Work Culture					0.30	3.85	0.00
	Training					0.20	2.28	0.02
REFRIGERATOR	Willingness	0.38	0.13	8.12	0.00			
	Environment					0.04	0.53	0.59
	Economic					0.22	3.06	0.00
	Labor					0.06	0.58	0.57
	Politics					-0.02	-0.22	0.83
	Conflict					0.17	1.64	0.10
	Work Culture					0.23	2.84	0.00
	Training					0.05	0.54	0.57

(continued next page)

TABLE 9

EFFECT OF COUNTRY IMAGE ON WILLINGNESS TO PURCHASE AND PERCEIVED QUALITY RESULTS OF MULTIPLE REGRESSION

	Variable	Multi R	Adj R^2	F	Sig F	(b_n)	t	Sig t
COMPUTER	P. Quality	0.59	0.34	25.94	0.00			
	Environment					0.16	2.58	0.01
	Economic					0.33	5.68	0.00
	Labor					-0.05	-0.58	0.56
	Politics					0.00	0.03	0.98
	Conflict					-0.02	-0.24	0.81
	Work Culture					0.27	3.95	0.00
	Training					0.26	3.45	0.00
REFRIGERATOR	P. Quality	0.47	0.20	13.64	0.00			
	Environment					0.02	0.32	0.72
	Economic					0.23	3.73	0.00
	Labor					0.01	0.13	0.89
	Politics					-0.01	-0.13	0.90
	Conflict					0.14	1.63	0.10
	Work Culture					0.19	2.69	0.00
	Training					0.20	2.55	0.01

The results shown in Table 9 indicates that the four multiple regression models (willingness to purchase computer, willingness to purchase refrigerator, perceived quality of computer, and perceived quality of refrigerator) had reasonable explanatory power. Adjusted R^2 values range from 0.34 to 0.13. All four regressions were able to explain a significant amount of the variance in the dependent variables.

The F-statistics [F(7, 345) = 17.64, F(7,345) = 8.12, F(7,345) = 25.94, and F(7,345) = 13.64] for the four regressions were significant at the 0.01 level, indicating that country image is a good predictor of willingness to purchase, and country image is a good predictor of perceived quality. Thus, support is obtained for H_1 and H_{1a}.

Ethnocentrism, product familiarity, and country familiarity were included as control variables. Covariate analysis revealed only a very slight increase in the amount of variance explained.

Test of Hypothesis 2: Country Image Dimensions will Differ in the Strength of Their Relationship to Willingness to Purchase

H_2 proposed that the dimensions of country image will differ in the strength of their relationship to willingness to purchase. An examination of the beta coefficients from the four multiple regressions in Table 9 indicate that the coefficients are different from each other suggesting support for H_2. The results are summarized in Table 10. Analysis of the beta coefficients indicates that economic, work culture,

TABLE 10

BETA COEFFICIENTS

	WP(COMP)	WP (REFRG)	PQ (COMP)	PQ (REFRG)
Environment	.06	.04	.16[a]	.02
Economics	.41[a]	.22[a]	.33[a]	.23[a]
Labor	-.08	.06	-.05	.01
Politics	-.08	-.02	.00	-.01
Conflict	.05	.17	-.02	.14
Work Culture	.30[a]	.23[a]	.27[a]	.19[a]
Training	.20[a]	.05	.26[a]	.20[a]

[a] **Significant at p < 0.01.**

and training factors have a strong impact willingness to purchase computers and refrigerators, and perceived risk associated with those products.

Test of Hypothesis 3: The Relationship between Willingness to Purchase and Country Image will be Stronger for Technologically Complex Products than for Technologically Simple Products

H_3 proposed that the relationship between willingness to purchase and country image will be stronger for technologically complex products than for technologically simple products. Personal computers were selected as the technologically complex product and refrigerators were selected as the technologically simple product. Product selection was based on a survey in which twenty-one business students were asked to rate fifteen different products on technological complexity. The scale ranged from 1-not very complex to 7-very complex. The mean score for personal computers was 5.14 and 2.48 for refrigerators [t = 9.28 (19, 1), p = 0.0001]. Other products like flashlights had lower mean scores than refrigerators, but refrigerators were much closer in price to computers. Hence, potential confounding effects of price were decreased by the refrigerator product selection.

In the main study, manipulation checks demonstrated that the manipulation of the two products was successful. The mean value for perceptions of technological complexity computers was 5.84 and was 3.81 for refrigerators [t = 18.96 (344, 1), p = 0.0001].

Fisher's z transformation was the statistical technique used to test H_3. Fisher's z transformation is the appropriate technique for testing the difference between two correlation coefficients (Cohen and Cohen 1975). Multiple R (the correlation coefficient in simple regression) indicates the strength or degree of the association

between the dependent and independent variables. Thus, if the Multiple R for willingness to purchase a computer and willingness to purchase a refrigerator are significantly different, then support for $\mathbf{H_3}$ will exist. The Multiple R for willingness to purchase a computer (0.52) and willingness to purchase a refrigerator (0.38) are reported in Table 9 and used in the following equation.

To test the statistical hypothesis that the Multiple Rs are different ($\mathbf{H_0}$: Multi R_1 = Multi R_2). The following formula was used:

$$z = \frac{z_1 - z_2}{\sqrt{\left(\frac{1}{n_1 - 3}\right) + \left(\frac{1}{n_2 - 3}\right)}}$$

Multi R_1 and Multi R_2 are converted or transformed into Fisher's z functions (z_1 and z_2). In solving the formula, z was found to be 2.37. The null hypothesis is rejected. Therefore, the difference between the computer Multiple R and the refrigerator Multiple R is statistically significant at the 0.05 level. This statistically significant result provides support for $\mathbf{H_3}$. Country image influence on product choice depends on the technological complexity of the product.

Test of Hypothesis 4: Country Image is Positively Related to Objective Indicators

$\mathbf{H_4}$ proposed that country image is positively related to objective country indicators. In other words, consumers develop their perceptions or images of countries based in part on exposure to existing objective information.

Secondary (objective) data were collected on some of the dimensions of country image. For example, gross domestic product per capita data could be used by consumers as an objective indicator of a countries' economic or work

culture/productivity dimension (World Fact Book 1996). The type of government a country has could be used to represent an objective indicator of that country's political dimension (World Fact Book 1996). Illiteracy rate of a country could be used to represent an objective indicator of the country's vocational training dimension (Statistical Abstract of the World 1994). $C0_2$ emissions (in million tons of carbon/annum) could be used to represent an objective indicator of country's environmental dimension (Planet Management 1993).

Multivariate analysis of variance (MANOVA) is the statistical technique used to test $\mathbf{H_4}$, (i.e, analyze objective information influence on country image formation). In the MANOVA analysis, the seven country image dimensions were used as the metric dependent variables. Geographic region and economic development were used as the categorical independent variables. Each of the two independent variables were separated into three categories: *geographic region* — Latin America, Asia, and Europe; and *economic development* — high, medium, and low. This arrangement resulted in a 3×3 between subjects factorial design.

MANOVA results indicate a significant overall interaction effect between region and economics (multivariate $F = 3.03$, $p > 0.001$), and a significant overall main effect for region (multivariate $F = 16.92$, $p > 0.001$) and economics (multivariate $F = 3.69$, $p > 0.001$). The findings demonstrate that the combination of objective region and economic indicators have a significant influence on consumers' overall perception of a country's image as proposed in $\mathbf{H_4}$. Similarly, objective region and economics indicators have an individual influence on consumers' overall impression of a country's image. Thus, support is obtained for $\mathbf{H_4}$. The results are provided in Table 11.

TABLE 11

COUNTRY IMAGE IS POSITIVELY RELATED TO OBJECTIVE INDICATORS MULTIVARIATE AND UNIVARIATE ANALYSIS OF VARIANCE

VARIABLES	MULTI- F	UNI-F	DFS	P-VALUE
Region	16.92		8;337	0.001
Environment		12.13	1;344	0.001
Economic		41.57	1;344	0.001
Labor		16.50	1;344	0.001
Politics		19.54	1;344	0.001
Conflict		16.69	1;344	0.001
Work Culture		19.08	1;344	0.001
Training		20.63	1;344	0.001
Economics	3.69		8;337	0.001
Environment		3.07	1;344	0.047
Economic		4.81	1;344	0.009
Labor		3.09	1;344	0.047
Politics		11.97	1;344	0.001
Conflict		8.80	1;344	0.002
Work Culture		0.11	1;344	0.899
Training		5.57	1;344	0.004
Region X Economics	3.03		8;337	0.001
Environment		2.22	1;344	0.067
Economic		3.42	1;344	0.009
Labor		0.89	1;344	0.473
Politics		3.92	1;344	0.004
Conflict		3.67	1;344	0.006
Work Culture		1.04	1;344	0.389
Training		2.24	1;344	0.064

Based on Table 11 results, regional country comparisons can be made. For interpreting the results in this section it is important to note that the 21 country image scale items were reverse-scored. That is, 1 equals strongly agree and 7 equals strongly disagree. Hence, a low mean score implies that respondents perceive the country dimension in a positive or complimentary way.

The pattern of the interaction between objective indicators of economy and region are consistent and significant at the univariate level for country image dimensions of *economy* (univariate $F = 3.42$, $p > 0.009$), *politics* (univariate $F = 3.92$, $p > 0.004$), and *conflict* (univariate $F = 3.67$, $p > 0.006$). Univariate interaction effects are marginally significant for *environment* and *vocational training* ($p > 0.067$ and $p > 0.064$ respectively).

The arithmetic means for interpreting the country image dimensions with significant interaction effects (economical, political, and conflict) are provided in Table 12, and the graphs of the interaction means is provided in Plots 1, 2, and 3. The means for the economy dimension indicate that when the consumers analyze regions in the high economy category, they perceive lower levels of technological advancement and modern industry for Latin America than they do for Europe or Asia. This is not the case in the medium economy category for Latin America and Europe. The means for the politics dimension indicated that when consumers analyze regions in the high economy category they perceive lower levels of freedom and democracy for Latin America than they do for Europe or Asia. This is not the case in the medium economy category for Asia and Latin America. The means for the conflict dimension indicate that when the consumers analyze regions in the high

TABLE 12

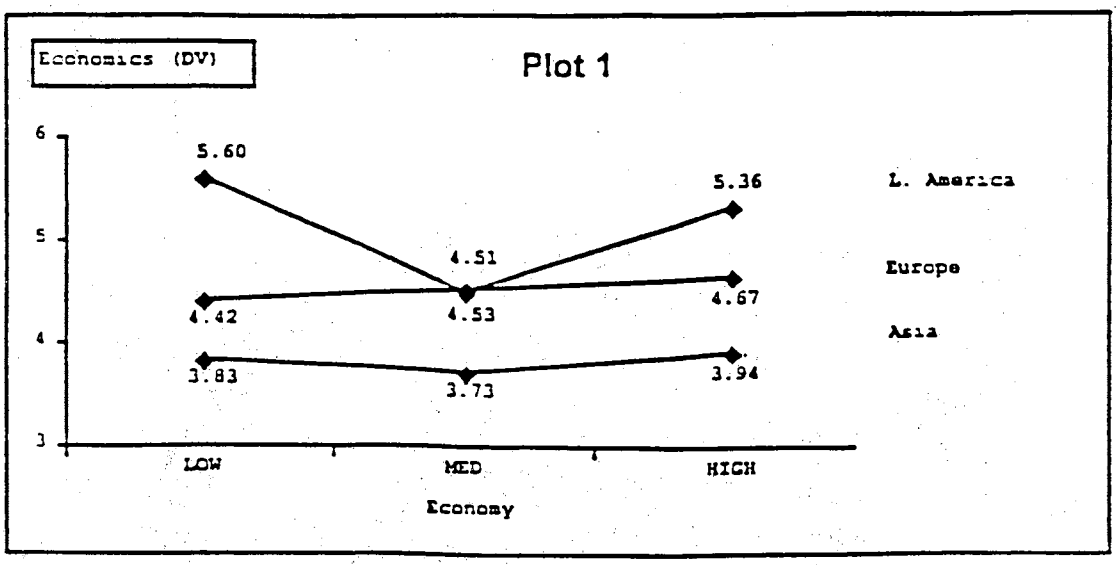
MEANS FOR COUNTRY IMAGE DIMENSIONS
WITH SIGNIFICANT INTERACTION EFFECTS

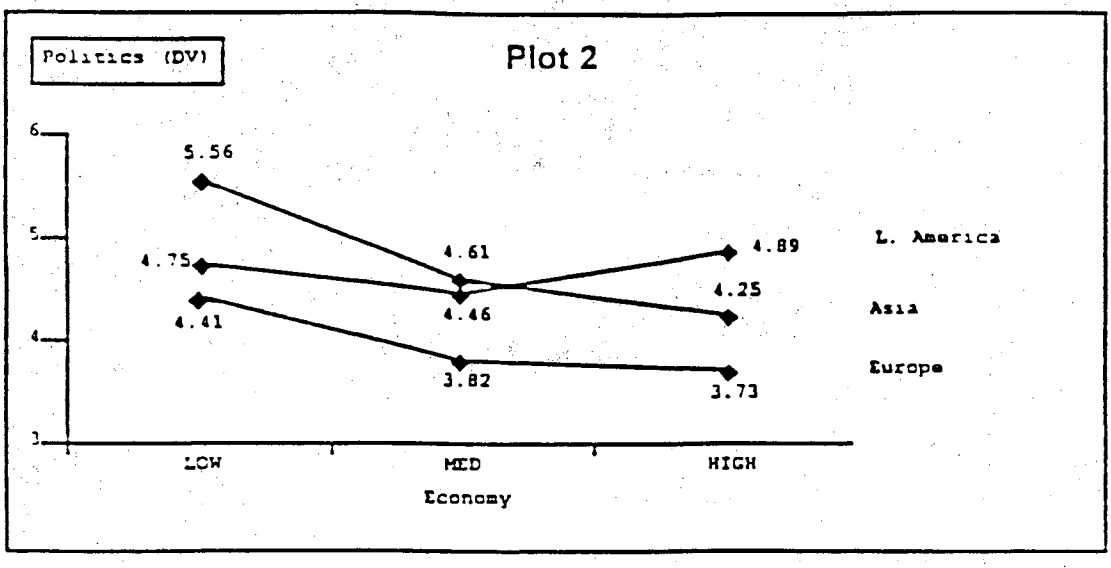
		Economic Region			Politics Region			Conflict Region		
		Asia	Europe	LAm.	Asia	Europe	LAm.	Asia	Europe	LAm.
ECONOMIC	High	3.94	4.67	5.36	4.25	3.73	4.89	4.07	3.42	4.14
	Med	3.73	4.53	4.51	4.61	3.82	4.46	3.21	3.63	3.93
	Low	3.85	4.42	5.60	5.56	4.41	4.75	5.01	3.95	4.03

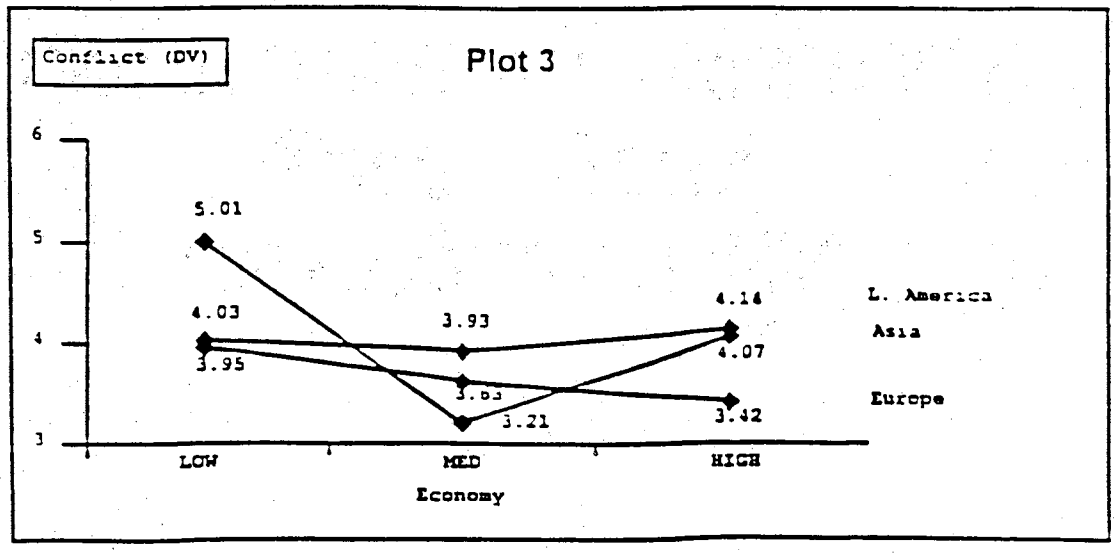
Note: A lower mean score implies a more positive perception of the country image dimension.

economy category they perceive lower levels of cooperation and fair trade for Latin America than they do for Europe or Asia.

The main effects of region are also significant at the univariate level for all country image dimensions: *environment* (univariate $F = 12.13$, $p > 0.001$), *economic* (univariate $F = 41.57$, $p > 0.001$), *labor* (univariate $F = 16.50$, $p > 0.001$), *politics* (univariate $F = 19.54$, $p > 0.001$), *conflict* (univariate $F = 16.69$, $p > 0.001$), *work culture* (univariate $F = 19.08$, $p > 0.001$), and *training* (univariate $F = 20.63$, $p > 0.001$). The main effects of economic are also significant at the univariate level for all country image dimensions except work culture: *environment* (univariate $F = 3.07$, $p > 0.047$), *economic* (univariate $F = 4.81$, $p > 0.009$), *labor* (univariate $F = 3.09$, $p > 0.047$), *politics* (univariate


Economics (DV)
Plot 1
6
5
4
3
5.60
5.36
4.51
4.42
4.53
4.67
3.83
3.73
3.94
LOW
MED
HIGH
Economy
L. America
Europe
Asia


Politics (DV)
Plot 2
6
5
4
3
5.56
4.89
4.61
4.75
4.25
4.46
4.41
3.82
3.73
LOW
MED
HIGH
Economy
L. America
Asia
Europe


Conflict (DV)
Plot 3
6
5
4
3
5.01
4.14
4.03
3.93
4.07
3.95
3.21
3.42
LOW
MED
HIGH
Economy
L. America
Asia
Europe

F = 11.97, p > 0.001), conflict (univariate F = 8.80, p > 0.002), *work culture* (univariate F = 0.11, p > 0.899), and *training* (univariate F = 5.57, p > 0.004). The results of the univariate tests are summarized in Table 12.

The means for interpreting the region main effects follow a consistent pattern indicating that Latin America's image rates lower than Europe or Asia for all dimensions except conflict and politics. The marginal means for the univariate main effects of region and economics for each of the seven country image dimensions are provided in Table 13.

TABLE 13

MEANS FOR COUNTRY IMAGE DIMENSIONS — MAIN EFFECTS

		REGION			ECONOMICS		
		Asia	**Europe**	**L.Am.**	**High**	**Med**	**Low**
CI DIMENSIONS	Environment	4.77	4.47	5.20	4.92	4.61	4.90
	Economics	3.84	4.60	5.19	4.64	4.30	4.69
	Labor	4.90	4.42	5.26	4.81	4.70	5.04
	Politics	4.80	3.97	4.70	4.25	4.29	4.90
	Conflict	4.36	3.65	4.02	3.82	3.87	4.31
	Work Culture	3.12	3.83	3.95	3.64	3.62	3.67
	Training	4.02	4.38	4.95	4.64	4.24	4.47

Note: a lower mean score indicates a more positive perception of the country image dimension.

The means for the regional effects indicate that U.S. consumers perceive Latin American countries to be less concerned about the environment, have a lower

economy, have less concern for labor conditions, have lower levels of peaceful, democratic politics (about the same as Asia), have more conflict with the U.S. (less than Asia, but more than Europe), and have poorer trained and less reliable workers than their European or Asian counterparts.

The pattern of the means for the economic effect indicates that consumers rate the high economic country category (Mexico, Singapore, and Spain) lower on vocational training and environmental concern than the medium (Brazil, South Korea, and Greece) or low (Peru, China, and Poland) economic country categories. Consumers rate the low economic country category lower on economics, labor, politics, and higher on conflict than the high or medium country categories. There was no main effect for work culture. One explanation for high economic countries rating lower on environmental concern is that consumers may perceive these emerging countries as trying desperately to compete with developed countries at any cost with little regard for environment control or pollution.

The MANOVA results for the interaction and main effects of region and economy are statistically significant at the multivariate level, and at the univariate level in many cases as explained above. To capture practical significance separate from the statistical tests, Hair *et al.* (1995) suggest that effect size should be examined. Cohen (1977) defines effect size as the degree to which the phenomenon is present in the population or the degree to which the null hypothesis is false. The formula for calculating effect size is:

$$\text{Effect size} = \frac{\text{F}(df \text{ between})}{\text{F}(df \text{ between}) + df \text{ within}}$$

The findings indicate that the degree to which the phenomenon is present in the population is minimal for the interaction effect and main effect of economy, but greater for the main effect of region. The effect size for the interaction and main effects of region and economy are provided in Table 14.

TABLE 14

EFFECT SIZE FOR MULTIVARIATE LEVEL INTERACTION AND MAIN EFFECTS

	Effect Size
Region X Economy	.066
Region	.264
Economy	.072

In conclusion, the results of our analysis indicate support for the hypotheses of the study. Table 15 summarizes the findings of the data analysis with regard to these hypotheses.

TABLE 15

SUMMARY OF HYPOTHESES

HYPOTHESIS:		SUPPORT FOUND
H_1:	Willingness to purchase is positively related to country image.	Yes
H_{1a}:	Perceived quality is positively related to country image.	Yes
H_2:	The dimensions of country image will differ in the strength of their relationship to willingness to purchase.	Yes
H_3:	The relationship between willingness to purchase and country image will be stronger for technologically complex products than for technologically simple products.	Yes
H_4:	Country image is positively related to objective indicators.	Yes

CHAPTER V

DISCUSSION AND CONCLUSIONS

In this chapter the research findings of the study are summarized and discussed. Further, theoretical, public policy, and managerial implications are presented, the limitations of the study are identified and considered, and the directions for future research are addressed.

Research Findings and Conclusions

Over the past couple of decades technology and competition have created a global marketplace where individual companies design, source components, manufacture, and assemble products in a variety of countries. Developing countries now have ready access to the latest technology and information which increases their ability to provide quality outputs for many of these production processes at relatively low cost. Hence, developing countries are becoming popular targets for many companies seeking competitive advantages relevant to those production processes.

Country of origin researchers have shown that consumers have identifiable images of countries, and these country images can influence purchase decisions. Most country image research has, however, focused on superpower comparisons and developed countries.

The primary purpose of this study was to examine country image effects for developing countries. Specifically, the study proposed to carefully analyze the dimensions that make up a country's image, develop a scale to measure country image, examine how country images are formed, and study what influence country image has on willingness to purchase and perceived quality.

The country image literature has focused almost exclusively on economic dimensions and product experience dimensions of country image relevant to developed countries and superpowers. These dimensions may be less meaningful for developing countries because they have weak economies and few recognizable products. Thus, we examined other literatures for relevant country image dimensions. The non-marketing literature indicated that political, labor, and conflict dimensions are part of country images. For potential dimensions not mentioned in the literature, consumer focus groups were conducted. The focus groups confirmed the importance of the dimensions presented in the literature, but also indicated that environmental issues, and the treatment of workers were important elements of country image. The combination of marketing, non-marketing, and focus group information indicated that at least six distinct dimensions made up the country image construct. These included economic development, labor environment, political environment, work culture, environmental protection, and conflict.

The results of the study indicated that consumers perceived the work culture dimension as two separate categories. One dimension is associated with the kind of training and education provided to the work force. The second dimension included attitudes, values and beliefs that the workforce has towards the work itself (e.g., hardworking, reliable, and attention to detail).

Overall the results of our study are consistent with our predictions. The results indicate that seven country image dimensions are vital and necessary factors that should be included in any instrument designed to measure country image. The results also support our hypothesis that country image has an important influence on consumers' willingness to purchase products and perceptions of quality. These

findings are timely and vital to marketing managers because increasing consumers' perceptions of product quality and consumers' willingness to purchase products is a fundamental goal of any marketing strategy.

These results also provide interesting insights into what factors make up consumers' perceptions of countries and which of these factors have the greatest impact on willingness to purchase and quality perceptions. The study proposed that the seven country image dimensions would differ in the strength of their influence on willingness to purchase. The results of the study support our conjecture. Consumers' perceptions of a country's economic development had a strong influence on willingness to purchase as the country image literature indicated (Bilkey and Nes 1982; Papadopoulos 1993; Schooler 1971), but work culture and vocational training also had a strong influence on willingness to purchase as indicated by the focus groups and non-marketing literature (Kelman 1965; Woliver and Cattell 1981). This is an important discovery because, although it may be difficult for developing countries to make quick increases in economic standing, they can take immediate action on education and training programs. Both training and work culture can be effectively added to promotional campaigns for countries interested in attracting new companies and improving consumers' perceptions of their country.

The results of the study also supported our proposition that country image has a stronger impact on certain product categories (e.g., technology and fashion) than on others (Liefeld 1993). The study findings indicated that country image had a stronger influence on consumers' willingness to purchase computers than refrigerators. These findings provide intriguing insight into how consumers use country image information and which products are more likely to be affected by a

shift in production or assembly to developing country. Before a company commits the financial resources to direct foreign investment, managers must carefully weigh the impact of the investment with the implications of this study.

Other than by experience with existing products, the literature has failed to explain how country images are formed. For many developing countries where developed country consumers have little experience with their products, product experience is of little practical strategic value. An important finding of our study, one that separates our research from others in this area, is support for our proposal that consumers' country images are developed by exposure to existing objective information.

The results indicate for example that objective information about economies (i.e., per capita GDP) and region (Asia, Latin America, and Europe) have a significant impact on overall country image formation. The study also found that the combination of objective indicators like region and economies can have a strong impact on overall country image development.

Objective regional information had a significant individual effect on each of the seven country image dimensions. Specifically, Latin America's image rated lower than that of Europe or Asia on all country image dimensions except politics and conflict. These results have meaningful implications for countries and companies in the context of promotional campaigns and strategies.

For example, the results in this study have already demonstrated the important influence that economics, work culture, and vocational training have on perceived quality and willingness to purchase, and the specific findings about region indicate that global companies planning to use developing countries in design, assembly,

sourcing and so on would be better off choosing developing European or Asian countries than those of Latin America.

Implications

The results of this study have many timely and useful implications for public policy makers, marketing mangers, and researchers.

Public Policy Implications

A dilemma for public policy makers is the current "Made-in" labeling law. In light of the reality of a global economy, the Federal Trade Commission is currently investigating, proposing, and in some cases implementing changes to the existing "Made in USA" labeling laws.

For example, in an apparent bow to pressure from global companies, the Federal Trade Commission has proposed a new standard that would allow more firms to claim "Made in USA" as long as no more than a quarter of the content is made outside the country. Also, labeling rules for products sold domestically are much more conservative with regard to percent content than are those for exported products. In addition to the above, certain industries like the automobile and clothing industries have been singled out and are now required to include the percent of foreign component parts and assembly information on their product labels. Naturally, these industries believe they have been unfairly targeted.

The Federal Trade Commission's lack of sound planning or execution with regard to "Made-in" labeling, and the inconsistency of existing policies is creating increasing confusion and conflict between domestic and foreign manufacturers.

The study findings contain important information for public policy makers. For example, the study results show that country image influences willingness to purchase and perceived quality. This finding has important implications for domestic and foreign companies. A generic North American Free Trade Zone label, for example, could create a very different perception of quality than one which informs the consumer of more specific country content (e.g., eighty-five percent of the major component parts come from Puerto Rico and seventy-five percent of the assembly comes from Mexico). In fact, the results of the study demonstrate that consumers generally have more negative images of Latin American countries than that of their Asian or European counterparts. Hence, companies with product content from certain regions may have an advantage over others depending on the requirements of the labeling policy.

The study results indicate that country image has more influence on consumers for certain product categories like technology and fashion. These findings have important strategic implications for public policy makers investigating the effects of various labeling policies for specific industries like automobile and clothing. Any change in policy, our study implies, could have serious consequences for one industry while having little impact on another.

Our study findings demonstrate that objective country information influences consumers perceptions of countries and these images have significant influence on product choice. This implies that public policy makers should plan and collect accurate objective data, and carefully plan policy decisions about presenting or withholding collected information because it could have significant effects for domestic business and foreign trade partners. For example, promotional campaigns

which present this kind of information to the public could be used as a subtle form of protectionism, creating trade barriers for foreign countries which don't comply with domestic policy or reciprocate with fair and equal trade practices.

Managerial Implications

Since the North American Free Trade Agreement went into effect some three years ago, many U.S. companies have considered or have implemented cost-saving moves to Mexico. Other indicators, like U.S. direct foreign investment which has more than tripled since 1982 (Department of Commerce 1996), denote the growing number of U.S. companies using foreign country resources for developing their products. In the future, to remain competitive, more and more companies will be required to conduct business globally.

The results of our study have important managerial implications for companies using foreign country resources and for those companies who choose to maintain exclusive U.S. product content. For example, understanding which dimensions influence consumers perceptions of countries and knowing that country images influence perceptions of quality and willingness to purchase is extremely valuable to marketing managers. The results of this study indicate that consumers' purchase decisions are affected by their perceptions of a country's environmental concern and policies, economic standing, treatment of labor, political system, fair trade practices, and workers. Marketing managers can use this information to promote the positive aspects of the seven country image dimensions, ignore or hide negative connotations, or exploit negative areas of their competitors. For example, China's Tiananmen Square incident had significant influence on U.S. purchase (Brunner, Flaschner, and

Lou 1993) of Chinese products. Managers who understand the implications of these findings can take pro-active strategic and tactical action.

The results of the study imply that countries seeking to increase direct foreign investment, accelerate exports, improve foreign currency reserves, and modernize their economy might do well to view themselves as "products," promoting strong, relevant positive country image dimensions. Graby (1993), for example, contended that France is well aware of the importance of building country image to increase its export market penetration. A specific committee, "Comite Image France" has been formed for the purpose of promoting Frances image abroad. The results of our study have implications concerning which country image dimensions U.S. consumers use. France could use the information for strategic market planning and promoting of their image. Developing countries with similar economic goals might be well advised to develop similar strategies.

This research also implies that "Made-in" label importance is often misunderstood. That is, country image importance is often associated with "Made-in" labels, but the notion is misguided because, while the argument that labels frequently go unnoticed may be accurate, the logic that follows, that country origins and images are unimportant, is incorrect. Noticing labels is not the point. Consumers will not notice a product's brand name, price, country origin, or any other cue for that matter until marketing managers execute effective promotion designs to emphasize or hide information cues.

Papadopoulos (1993) pointed out a variety of ways that marketing managers can promote country image cues: (1) embed them directly into the brand name (e.g., Alitalia airlines or Columbian coffee); (2) suggest them indirectly through

brand name and association (e.g., Toyota or Lamborghini); (3) indicated them in the company name; (4) promoted them expressly as part of the brand unique selling proposition (e.g., "BMW: engineered in Germany"); or (5) express them as part of the package design (e.g., Reebok has a symbol of and English flag on its box).

The findings from this study imply that products manufactured in developing countries of Europe and Asia have a better image than those from Latin America. Thus, managers may want to find ways to promote European and Asian connections to brands while hiding or de-emphasizing those associated with Latin American product content.

Theoretical Implications

Country image researchers agree that theoretical development is still lacking in this area of study. In recent years, a small number of researchers have initiated the process of developing a theoretical framework for understanding, explaining, and predicting the role of country image in the consumer purchase decision process (Chao 1990; Johansson, Douglas, and Nonaka 1985; Johansson 1988; Han 1989; Hong and Wyer 1989; Obermiller and Spangenberg 1989; Zeithaml 1988). However, continued theoretical work is needed to increase our understanding of the complex and dynamic process of country image effect on consumer choice.

The findings of this study advance an understanding of the choice process and add to the existing theoretical framework by defining the country image construct, the first step to developing a sound theoretical country image framework. The previous literature failed to clearly define the country image construct. Much of it focused on product dimensions rather than country and people dimensions. This

study develops a more concise definition. The findings from our study indicate that there are at least seven country image dimensions that consumers use when making purchase decisions. Future researchers should empirically test our findings to confirm and refine the country image construct further.

This study also significantly adds to the theoretical framework building process by providing an existing theory [Brunswick's Lens (see Urban and Hauser 1993)] to explain consumers' information process in the context of country image. The results of the study indicate that consumers' perceptions of countries are influenced by exposure to existing objective information. Future researchers should consider building on country image research by adding Brunswick's Lens theory to the overall country image theory framework.

Finally, our study adds support to the growing body of empirical evidence that country images do influence consumers' perceptions of quality and willingness to purchase. The results of the study demonstrate that country images have a significant effect on quality perceptions and willingness to purchase refrigerators and computers.

Limitations

The findings of the study have valuable theoretical, managerial, and public policy implications. However, these findings should be viewed with caution because of the exploratory nature of the study and the limitations presented in the following section.

The purpose of this study was to identify how country images are formed, develop a better measure of the construct by more precisely defining its dimensions,

and predict how country image influences willingness to purchase and perceived quality.

The results of the study generally support our hypotheses, but the findings are limited in that the study focused exclusively on country image, therefore the magnitude of the country image affect on willingness to purchase and perceived quality, independent of other cues, may tend to be overestimated or overemphasized. Practitioners and future researchers should consider the impact of the combination of other cues like price, brand, retail outlet and so on along with country image.

Some methodological limitations and concerns about sampling and measurement exist. Sampling adequacy of the target products raises some questions. That is, only two products were included in the study — computers and refrigerators. In the context of products, other researchers have come to the same conclusions as we did (see review, Liefeld 1993); however, the results of this and most other country image studies are limited in that only descriptions of products as opposed to actual, tangible products were used. Physical products should be incorporated into future studies to increase the external validity of the results.

With regard to the sampling of subjects, some researchers have pointed out that most studies use atypical populations like students or small consumer samples selected in a non-random, non-representative basis. Chao (1990) expressed concern that regional differences may affect the research outcomes. Hence, for this reason and others related to state by state differences, regional differences in the study sample may exist, and these differences could affect the research findings.

The study also focused exclusively on U.S. consumers. Thus, the research findings are limited to U.S. consumers' images of regions and countries, and the

study does not wish to imply that it represents the images foreign consumers may hold concerning the countries under investigation in this research project.

The measurement scale has some limitations. To begin with, most country of origin and country image research has focused on product dimensions of country image. This study is unique in that it focuses exclusively on country and people dimensions as a means of measuring country image. There are no other studies which support the inclusion of all seven dimensions included in our study.

Another potential limitation of the study is that the survey itself was quite long and with no particular incentive to fill it out accurately, respondents may have become lazy and marked long strings of similar responses without carefully reading and considering each question. These measurement weaknesses could affect the findings of the study.

Relatedly, region was not included in the measurement of country image as a specific dimension. Region was included as a objective indicator. Results indicate that region significantly influence the development of country image. Region may need to be included in the subjective measurement of future country image research as an eighth dimension.

Some limitations regarding country selection should be considered. The country selections were limited by design to only nine developing countries, but developed countries and superpowers should be examined in future research to ensure that the country dimensions and scale items remain stable. For developed and superpower countries with well known products (e.g., Japan), a product image dimension would be an important country image factor.

Examining developing countries exclusively creates some potential problems which could have influenced the economic findings. That is, the breadth of the economic difference between these countries is very narrow, and consumers may have had difficulty recognizing or perceiving subtle economic differences between countries in the same region [e.g., Mexico (GDP/capita = $7,900) and Brazil (GDP/capita = $5,580)]. Consistency across regions was also limited. For example, in the medium economic category for the Asia region, South Korean GDP/capita is $11,270. In the medium economic category for Europe, Poland's GDP/capita is $4,920. Thus, regional comparisons may have limitations which could affect the results.

To make the design of the study manageable, only nine countries, three per region, were selected for the study. Restricting the study to a small number of countries made it difficult to match countries as in the economic case, but also with regard to other objective indicators that could not be included. For example, there were not enough countries to create categories and match objective information on objective indicators of environment protection. The small number of countries also created potential problems in that very strong consumer reactions towards one country (e.g., China is frequently in the news) could bias the results of the entire region, thus, affecting the results of the study generally.

Future Research Directions

The study, it is hoped, will stimulate future interest and research in country image — a very timely subject with a host of questions and problems yet to be answered by marketing researchers or implemented by marketing managers. Much

theoretical and empirical research remains to be done in this growing field before the effects of country image can be fully understood.

With the increasing attention given to trade zones, trade barriers, global products, and labeling laws, conceptual and empirical studies which focus on current managerial and public policy problems with regard to understanding and predicting country image effects are urgently needed. Research about U.S. and other nations' patriotism (Han 1988) and ethnocentrism (Shimp and Sharma 1987), offers timely opportunities for researchers to link consumer willingness to purchase or resistance to purchase to national loyalty. Research examining how highly ethnocentric consumers' country images differ from less ethnocentric consumers between countries and across nations might also be addressed. In the same vein, future research might examine nationalism as a time-specific construct. That is, does it intensify during particular incidences related to the country image dimensions? For example, does an incident like the Tiananmen square situation heighten human rights interests; do these strong perceptions affect other country image dimension like environment, work culture, politics, etc.; and what impact do these time specific incidences have on purchase decisions?

The limitations of this study also point to future research directions worthy of consideration. Future researchers may consider experiments which combine other extrinsic cues like brand, price, and warranty along with country image information to see whether or not country image influence on willingness to purchase and perceived quality is diminished. Future research should consider the impact of specific dimensions like environment, politics, conflict, work culture, and vocational training on purchase choice in conjunction with other extrinsic cues. For example,

how do individual cues like brand or price, and combinations of cues affect perceptions of these dimensions, and with what consequence for purchase decisions.

Future researchers may address the sampling limitation issues of this study. For example, do regions like "Rust Belt" states perceive foreign countries differently than other regions where the economy is healthy?

Researchers may want to tackle issues relevant to cross cultural studies. For example, how do effects of country image differ between U.S. and Japanese consumers when they evaluate conflict and politics for China? Researchers may also want to examine how foreign consumers perceive the U.S. based on the country image dimensions. In many cases, country image researchers have tended to focus on imports. Future researchers should increase emphasis on country image as it applies to U.S. exports. The research implications for global promotion strategies could be quite revealing and meaningful.

The development of the country image scale is exploratory. Factors or dimensions to be included were taken from a variety of research streams, including focus group reactions. Differences between the pretest and main study indicate that further research could be done. Researchers may address other types of statistical analysis like confirmatory factor analysis to increase our understanding of the country image construct and improve upon the existing measurement instrument.

This study only examined two products. Future researchers may consider tracking acceptance of foreign products across product types. The results of this study indicated that country image does have a greater influence on certain product categories than others. Consumers may have positive regard for certain countries and products generally, while maintaining negative images for some specific

products. Future researchers should not hesitate to examine the affects of country image on other product categories and specific products.

With the future of the "Made in USA" labels in disarray, researcher may conduct studies which assess consumer awareness of foreign country components sourcing, and assembly of certain products with and without various labels. Post-purchase intercept studies could facilitate understanding of "Made-in" label awareness, and provide insight into consumers' understanding of the current increase in foreign product content and its effect on purchase decisions. Future research should study consumers' awareness of multiple country content in the products they currently purchase. If new labels were included, would consumers notice or use the new information in the purchase decision processes?

As mentioned, future researchers must always keep in mind that whether or not labels are noticed or go unnoticed is far less important than research which advances our understanding, explanation, and prediction of how consumers process country image information because consumer awareness of foreign country content information will always depend, for the most part, on a how effectively companies or countries choose to promote country images to consumers.

Conclusion

The explosive growth in globalization over recent decades has become one of the most pervasive influences in business today (Darling and Arnold 1988). As consumers increasingly become exposed to products and partial content of products from foreign countries, and as domestic firms continue to expand their opportunities

overseas, issues related to country image become ever more salient (Baughn and Yaprak 1993).

This study was concerned with three main issues: (1) developing a better measure of the country image construct, (2) understanding how consumers develop country images, and (3) predicting the influence of country image on consumers' purchase decisions.

The results of the study led to three main conclusions: (1) country image includes at least seven or more country and people specific dimensions (economic, environment, politics, labor, conflict, work culture, and vocational training); (2) consumers use objective information as part of the process of building country images; and (3) developing country images have a significant influence on consumers' perceptions of product quality and willingness to purchase products.

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APPENDIX A

PRE-TEST QUESTIONNAIRE

PUBLIC OPINION SURVEY

The purpose of this survey is to find out what a person thinks about a certain country. Your participation is very important. Ultimately this research can help businesses and individuals make better choices.

There is no need to write your name on the survey. Your responses will remain anonymous and confidential. You will be asked a series of questions. There are no right or wrong answers. Circle the one that most closely represents your honest opinion or impression. We are only interested in how *YOU* perceive the country.

We will ask you to rate **2** different countries. The questions will make it clear which country is being discussed. Consider the following example:

Circling **# 1** would mean you have a strong impression that the average Chinese citizen is very wealthy.

In Singapore the average citizen is very wealthy?
Strongly agree *1* *2* *3* *4* *5* *6* *7* *Strongly disagree*

Circling **# 7** would mean you have a strong impression that the average Chinese citizen is NOT very wealthy.

In Singapore the average citizen is very wealthy?
Strongly agree *1* *2* *3* *4* *5* *6* *7* *Strongly disagree*

Circling **# 4** would mean you have a strong impression that the average Chinese citizen is *in between* very wealthy and NOT very wealthy.

In Singapore the average citizen is very wealthy?
Strongly agree *1* *2* *3* *4* *5* *6* *7* *Strongly disagree*

This survey will take about fifteen minutes to complete. Please give it your full attention.

PLEASE answer all questions. Incomplete surveys cannot be used.

Thank you very much. Your time and participation is greatly appreciated.

SINGAPORE:

1. **Singapore has a highly developed economy?**
   Strongly agree 1 2 3 4 5 6 7 Strongly disagree
2. **The average Singapore citizen is very wealthy?**
   Strongly agree 1 2 3 4 5 6 7 Strongly disagree
3. **Singapore's economy is very well managed?**
   Strongly agree 1 2 3 4 5 6 7 Strongly disagree
4. **Singapore is a highly industrial economy (as opposed an agricultural economy)?**
   Strongly agree 1 2 3 4 5 6 7 Strongly disagree
5. **Singapore is technologically very advanced?**
   Strongly agree 1 2 3 4 5 6 7 Strongly disagree
6. **Singapore has a very powerful economy?**
   Strongly agree 1 2 3 4 5 6 7 Strongly disagree
7. **Singapore's economy is very modern?**
   Strongly agree 1 2 3 4 5 6 7 Strongly disagree
8. **Singapore is very kind and considerate when it comes to its citizens' and workers' rights?**
   Strongly agree 1 2 3 4 5 6 7 Strongly disagree
9. **For most Singaporians, workplace conditions are very clean and comfortable?**
   Strongly agree 1 2 3 4 5 6 7 Strongly disagree
10. **Workplace conditions in Singapore are generally very safe?**
    Strongly agree 1 2 3 4 5 6 7 Strongly disagree
11. **Singapore's workers are generally very well paid for their time?**
    Strongly agree 1 2 3 4 5 6 7 Strongly disagree
12. **Singapore's workers are generally very well treated?**
    Strongly agree 1 2 3 4 5 6 7 Strongly disagree
13. **Singapore is unlikely to exploit labor (child, elderly, prison, etc)?**
    Strongly agree 1 2 3 4 5 6 7 Strongly disagree
14. **The average Singaporian worker puts in very short hours each day?**
    Strongly agree 1 2 3 4 5 6 7 Strongly disagree
15. **The average Singaporian worker has a very high standard of living.**
    Strongly agree 1 2 3 4 5 6 7 Strongly disagree
16. **The Singapore government and political system is very similar to ours (U.S.)?**
    Strongly agree 1 2 3 4 5 6 7 Strongly disagree

17. **Singapore is highly admired for its role in world politics?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

18. **Singapore's political system is very stable?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

19. **Singapore is a very peaceful country?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

20. **Singapore's citizens have a great deal of freedom (many rights)?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

21. **Singapore's workers are generally very reliable?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

22. **Singapore's workers are generally very hardworking?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

23. **Singapore's workers are generally very well educated?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

24. **Singapore's workers generally pay very close attention to detail?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

25. **Singapore's workers are generally very well trained?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

26. **Singapore's workers are generally very admired?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

27. **The Singaporians are generally very trustworthy?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

28. **Singapore is very clean?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

29. **Singapore is very concerned about the environment?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

30. **The Singapore maintains very high standards for pollution control?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

31. **Singapore makes an aggressive effort to protect the environment?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

32. **Singapore would never exploit the environment (animals, forests, oceans, resources etc.)?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

33. **Singapore's trade practices with the U.S. are very fair?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

34. **Singaporians are generally very friendly?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

35. **Singapore's values and beliefs are very similar to ours (U.S.)?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

36. **I like Singapore's people very much?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

37. **Singapore's government is very cooperative with ours?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

38. **Singapore's economy does NOT compete with ours for jobs?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

39. **Singapore is a very dependable ally?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

40. **Would you be willing to buy a computer made-in Singapore?**
Very willing 1 2 3 4 5 6 7 Not very willing

41. **How would you rate the <u>quality</u> of a computer made-in Singapore?**
Very high 1 2 3 4 5 6 7 Not very high

42. **Would you be willing to buy a shirt made-in Singapore?**
Very willing 1 2 3 4 5 6 7 Not very willing

43. **How would you rate the <u>quality</u> of a shirt made-in Singapore?**
Very high 1 2 3 4 5 6 7 Not very high

<u>RUSSIA:</u>

1. **Russia has a highly developed economy?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

2. **The average Russian citizen is very wealthy?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

3. **Russia's economy is very well managed?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

4. **Russia is a highly industrial economy (as opposed an agricultural economy)?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

5. **Russia is technologically very advanced?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

6. **Russia has a very powerful economy?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

7. **Russia's economy is very modern?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

8. **Russia is very kind and considerate when it comes to its citizens' and workers' rights?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

9. **For most Russians, workplace conditions are very clean and comfortable?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

10. **Workplace conditions in Russia are generally very safe?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

11. **Russian workers are generally very well paid for their time?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

12. **Russian workers are generally very well treated?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

13. **Russia is unlikely to exploit labor (child, elderly, prison, etc)?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

14. **The average Russian worker puts in very short hours each day?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

15. **The average Russian worker has a very high standard of living.**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

16. **The Russian government and political system is very similar to ours (U.S.)?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

17. **Russia is highly admired for its role in world politics?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

18. **Russia's political system is very stable?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

19. **Russia is a very peaceful country?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

20. **Russian citizens have a great deal of freedom (many rights)?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

21. **Russia's workers are generally very reliable?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

22. **Russia's workers are generally very hardworking?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

23. **Russia's workers are generally very well educated?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

24. **Russia's workers generally pay very close attention to detail?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

25. **Russia's workers are generally very well trained?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

26. **Russia's workers are generally very admired?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

27. **The Russians are generally very trustworthy?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

28. **Russia is very clean?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

29. **Russia is very concerned about the environment?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

30. **The Russians maintains very high standards for pollution control?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

31. **Russia makes an aggressive effort to protect the environment?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

32. **Russia would never exploit the environment (animals, forests, oceans, resources etc.)?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

33. **Russia's trade practices with the U.S. are very fair?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

34. **Russians are generally very friendly?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

35. **Russia's values and beliefs are very similar to ours (U.S.)?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

36. **I like Russian people very much?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

37. **Russia's government is very cooperative with ours?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

38. **Russia's economy does NOT compete with ours for jobs?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

39. **Russia is a very dependable ally?**
Strongly agree 1 2 3 4 5 6 7 Strongly disagree

40. **Would you be willing to buy a computer made-in Russia?**
Very willing 1 2 3 4 5 6 7 Not very willing

41. **How would you rate the <u>quality</u> of a computer made-in Russia?**
Very high 1 2 3 4 5 6 7 Not very high

42. **Would you be willing to buy a shirt made-in Russia?**
Very willing 1 2 3 4 5 6 7 Not very willing

43. **How would you rate the <u>quality</u> of a shirt made-in Russia?**
Very high 1 2 3 4 5 6 7 Not very high

Would you please take just a few more minutes to answer the following. Please circle the appropriate response.

1. Your age group: 19 or younger 20-34 34-49 50-64 65 or older

2. Gender: Female Male

3. Marital status: Single Married Divorced/Separated/Widowed

4. Annual Family Income:

   0-24,999 25,000-49,999 50,000-74,999 75,000-99,999 100,000 and above

5. Citizenship: U.S. Other

6. Education completed:

   High school Some college College graduate Post-graduate

APPENDIX B

MAIN STUDY QUESTIONNAIRE

PUBLIC OPINION SURVEY

The purpose of this survey is to find out what a person thinks about a certain country. Your participation is very important. Ultimately this research can help businesses, and individuals make better choices.

There is no need to write your name on the survey. Your responses will remain anonymous and confidential. You will be asked a series of questions. Circle the one that most closely represents your honest opinion or first impression. There are no right or wrong answers. We are only interested in how *YOU* perceive the country.

FOR EXAMPLE:
In answering the questions on the following pages, you will be asked to give your opinion about **2** different countries. The questions will make it clear which country is being discussed.

Consider the following example:

In China the average citizen is very wealthy.

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

Circling # **1**, on the above scale, would mean you have a strong impression that the average Chinese citizen is very wealthy.

Circling # **7**, on the above scale, would mean you have a strong impression that the average Chinese citizen is NOT very wealthy.

Circling # **4**, on the above scale, would mean you have a strong impression that the average Chinese citizen is somewhere in between very wealthy and NOT very wealthy.

You are not limited to #1, #7 or #4. Feel free to select any number on the scale to express your opinion. But, please select only one number per question.

This survey will take about fifteen minutes to complete. PLEASE allow yourself enough time to fill it out completely and without interruption. PLEASE answer all questions. Incomplete surveys cannot be used.

Thank you very much. Your time and participation is greatly appreciated.

02-01-06

Section I. Please consider your impression of **Mexico**. Indicate your response to the following questions by circling the number that comes closest to your true feelings.

	Strongly Agree						Strongly Disgree
1. Mexico makes an aggressive effort to protect the environment.	1	2	3	4	5	6	7
2. Mexico maintains very high standards for pollution control.	1	2	3	4	5	6	7
3. Mexico is very concerned about the environment.	1	2	3	4	5	6	7
4. Mexico is technologically very advanced.	1	2	3	4	5	6	7
5. Mexico's economy is mostly industrial (not agricultural).	1	2	3	4	5	6	7
6. Mexico's economy is very modern.	1	2	3	4	5	6	7
7. Workplace conditions in Mexico are generally very safe.	1	2	3	4	5	6	7
8. Mexico is very considerate of its workers.	1	2	3	4	5	6	7
9. Mexican workers are generally very well treated.	1	2	3	4	5	6	7
10. Mexico's government/political system is very democratic.	1	2	3	4	5	6	7
11. Mexico is a very peaceful country.	1	2	3	4	5	6	7
12. Mexican citizens have a great deal of freedom (many rights).	1	2	3	4	5	6	7
13. Mexico's government is very cooperative with ours.	1	2	3	4	5	6	7
14. Mexico's trade practices with the U.S. are very fair.	1	2	3	4	5	6	7
15. I like Mexico very much.	1	2	3	4	5	6	7
16. Mexican workers are generally very hardworking.	1	2	3	4	5	6	7
17. Mexican workers are generally very reliable.	1	2	3	4	5	6	7
18. Mexican workers generally pay very close attention to detail.	1	2	3	4	5	6	7
19. Mexican workers are generally very admired.	1	2	3	4	5	6	7
20. Mexican workers are generally very well educated.	1	2	3	4	5	6	7
21. Mexican workers are generally very well trained.	1	2	3	4	5	6	7

Assume you are currently considering the purchase of a personal **computer:**

22. Please indicate your general willingness to purchase a computer made in Mexico:								
Very likely	1	2	3	4	5	6	7	Very unlikely
Very probable	1	2	3	4	5	6	7	Very improbable
Very possible	1	2	3	4	5	6	7	Very impossible
23. Please indicate your general perception of a computer made in Mexico:								
Very dependable	1	2	3	4	5	6	7	Very undependable
Very good quality	1	2	3	4	5	6	7	Very poor quality
Very reliable	1	2	3	4	5	6	7	Very unreliable

Section I. Mexico--computer (cont.)

24.	Please indicate how you might feel if you purchased a computer made in Mexico:							
	Very proud	1	2	3	4	5	6	7 Not very proud
	Very excited	1	2	3	4	5	6	7 Not very excited
	Very confident	1	2	3	4	5	6	7 Not very confident

Assume you are currently considering the purchase of a **refrigerator**:

25.	Please indicate your general willingness to purchase a refrigerator made in Mexico:							
	Very likely	1	2	3	4	5	6	7 Very unlikely
	Very probable	1	2	3	4	5	6	7 Very improbable
	Very possible	1	2	3	4	5	6	7 Very impossible
26.	Please indicate your general perception of a refrigerator made in Mexico:							
	Very dependable	1	2	3	4	5	6	7 Very undependable
	Very good quality	1	2	3	4	5	6	7 Very poor quality
	Very reliable	1	2	3	4	5	6	7 Very unreliable
27.	Please indicate how you might feel if you purchased a refrigerator made in Mexico:							
	Very proud	1	2	3	4	5	6	7 Not very proud
	Very excited	1	2	3	4	5	6	7 Not very excited
	Very confident	1	2	3	4	5	6	7 Not very confident

Section II. Please consider your impression of **China**. Indicate your response to the following questions by circling the number that comes closest to your true feelings.

		Strongly Agree						Strongly Disgree
1.	China makes an aggressive effort to protect the environment.	1	2	3	4	5	6	7
2.	China maintains very high standards for pollution control.	1	2	3	4	5	6	7
3.	China is very concerned about the environment.	1	2	3	4	5	6	7
4.	China is technologically very advanced	1	2	3	4	5	6	7
5.	China's economy is mostly industrial (not agricultural).	1	2	3	4	5	6	7
6.	China's economy is very modern.	1	2	3	4	5	6	7
7.	Workplace conditions in China are generally very safe.	1	2	3	4	5	6	7
8.	China is very considerate of its workers.	1	2	3	4	5	6	7
9.	Chinese workers are generally very well treated.	1	2	3	4	5	6	7
10.	China's government/political system is very democratic.	1	2	3	4	5	6	7
11.	China is a very peaceful country.	1	2	3	4	5	6	7
12.	Chinese citizens have a great deal of freedom (many rights).	1	2	3	4	5	6	7

Section II. China (cont.)

13.	China's government is very cooperative with ours.	1	2	3	4	5	6	7
14.	China's trade practices with the U.S. are very fair.	1	2	3	4	5	6	7
15.	I like China very much.	1	2	3	4	5	6	7
16.	Chinese workers are generally very hardworking.	1	2	3	4	5	6	7
17.	Chinese workers are generally very reliable.	1	2	3	4	5	6	7
18.	Chinese workers generally pay very close attention to detail.	1	2	3	4	5	6	7
19.	Chinese workers are generally very admired.	1	2	3	4	5	6	7
20.	Chinese workers are generally very well educated.	1	2	3	4	5	6	7
21.	Chinese workers are generally very well trained.	1	2	3	4	5	6	7

Assume you are currently considering the purchase of a personal **computer:**

22. Please indicate your general willingness to purchase a computer made in China:

Very likely	1	2	3	4	5	6	7 Very unlikely
Very probable	1	2	3	4	5	6	7 Very improbable
Very possible	1	2	3	4	5	6	7 Very impossible

23. Please indicate your general perception of a computer made in China:

Very dependable	1	2	3	4	5	6	7 Very undependable
Very good quality	1	2	3	4	5	6	7 Very poor quality
Very reliable	1	2	3	4	5	6	7 Very unreliable

24. Please indicate how you might feel if you purchased a computer made in China:

Very proud	1	2	3	4	5	6	7 Not very proud
Very excited	1	2	3	4	5	6	7 Not very excited
Very confident	1	2	3	4	5	6	7 Not very confident

Assume you are currently considering the purchase of a **refrigerator:**

25. Please indicate your general willingness to purchase a refrigerator made in China:

Very likely	1	2	3	4	5	6	7 Very unlikely
Very probable	1	2	3	4	5	6	7 Very improbable
Very possible	1	2	3	4	5	6	7 Very impossible

26. Please indicate your general perception of a refrigerator made in China:

Very dependable	1	2	3	4	5	6	7 Very undependable
Very good quality	1	2	3	4	5	6	7 Very poor quality
Very reliable	1	2	3	4	5	6	7 Very unreliable

27. Please indicate how you might feel if you purchased a refrigerator made in China:

Very proud	1	2	3	4	5	6	7 Not very proud
Very excited	1	2	3	4	5	6	7 Not very excited
Very confident	1	2	3	4	5	6	7 Not very confident

Section III. Please take a few more minutes to consider the following questions. Indicate your response to the following questions by circling the number that comes closest to your true feelings.

	Strongly Agree						Strongly Disgree
1. Americans should buy American-made products instead of imports.	1	2	3	4	5	6	7
2. Only products that are unavailable in the U.S. should be imported.	1	2	3	4	5	6	7
3. Buy American-made products. Keep America working.	1	2	3	4	5	6	7

4. Compared to the average consumer, how would you rate your knowledge about computers.
   Very knowledgeable 1 2 3 4 5 6 7 8 9 Not at all knowledgeable
5. Compared to the average consumer, how would you rate your knowledge about refrigerators.
   Very knowledgeable 1 2 3 4 5 6 7 8 9 Not at all knowledgeable
6. Compared to the average consumer, how would you rate your knowledge about Mexico.
   Very knowledgeable 1 2 3 4 5 6 7 8 9 Not at all knowledgeable
7. Compared to the average consumer, how would you rate your knowledge about China.
   Very knowledgeable 1 2 3 4 5 6 7 8 9 Not at all knowledgeable

8. Have you ever traveled to Mexico? Yes No
8a. Do you have friends or relatives from Mexico? Yes No
9. Have you ever traveled to China? Yes No
9a. Do you have friends or relatives from China? Yes No

Please give your opinion about the technological complexity of the following products.

	Not very complex						Very complex
10. Computer	1	2	3	4	5	6	7
11. Refrigerator	1	2	3	4	5	6	7

12. You were born in: 19____ 13. Gender: Female Male
14. Citizenship: U.S. Other 15. Marital status: Single Married Divorced/Widowed/Other
16. Annual family income: $0-29,999 $30,000-59,999 $60,0000-89,999 $99,000 and above
17. Education completed: High school Some college College graduate Post-graduate

APPENDIX C

OBJECTIVE COUNTRY DATA

ENVIRONMENTAL INDICATORS

	CO2 Emission (in million tons of carbon/annum)	% Population with Access to Safe Drinking Water
Mexico	78	71
Brazil	610	96
Peru	not available	61
Singapore	40	78
S. Korea	29	78
China	380	72
Spain	73	100
Greece	20	97
Poland	56	not available

("Planet Management," Oxford University Press: New York 1993)

POLITICAL INDICATORS

	TYPE OF GOVERNMENT
Mexico	Federal Republic (operating under centralized government)
Brazil	Federal Republic
Peru	Republic
Singapore	Republic (w/in a commonwealth)
S. Korea	Republic
China	Communist State
Spain	Parliamentary Monarchy
Greece	Parliamentary
Poland	Democratic State

("The World Fact Book," Central Intelligence Agency: Washington D.C. 1996)

VOCATIONAL TRAINING INDICATORS

	ILLITERACY RATE (15 YEARS & OLDER)
Mexico	12.7
Brazil	18.9
Peru	14.9
Singapore	11.1
S. Korea	3.7
China	26.7
Spain	11.6
Greece	6.8
Poland	15.0

("Statistical Abstract of the World," Martin A. Reddy Editor. Gale Research Inc./International Thomson Publishing Co.: New York 1994).

ECONOMIC AND WORK CULTURE INDICATORS (COUNTRY GDP/CAPITA)

Americas		Asia		Europe	
Canada	22,760	Hong Kong	24,530	Belgium	18,040
Venezuela	8,670	Singapore	19,940	Austria	17,500
Argentina	7,990	Israel	13,880	Italy	17,180
Mexico	7,900	Taiwan	12,070	Finland	16,140
Puerto Rico	7,050	S. Korea	11,270	Ireland	14,060
Chile	7,010	S. Arabia	9,510	Spain	13,120
Brazil	5,580	Malaysia	8,650	Portugal	10,190
Costa Rica	5,050	Thailand	5,970	Greece	8,870
Columbia	4,850	China	2,500	Czech	7,550
Panama	4,670	Phillippines	2,310	Hungary	5,700
Peru	3,110	Pakistan	1,930	Poland	4,920
Guatemala	3,080	India	1,360	Turkey	4,910
Jamaica	3,050	Vietnam	1,140	Russia	4,820
Bolivia	2,370	Nepal	1,060	Romania	2,790
Honduras	1,820	Bangladesh	1,040	Bolivia	2,370
		Cambodia	630		

("The World Fact Book," Central Intelligence Agency: Washington D.C. 1996)

APPENDIX D

PRODUCT COMPLEXITY SURVEY

PUBLIC OPINION SURVEY

Relax, this is not a test. There are no right or wrong answers. Simply circle the answer that most closely represents your opinion or impression.

You will be asked to rate a number of products on their technological complexity. For example:

An electric pencil sharpener might be very low on complexity. Thus, you might circle a 2:

Not very complex — Very complex

1 2 3 4 5 6 7

Please rate the following their technological complexity.

	Not very complex						Very complex
1. Answering machine	1	2	3	4	5	6	7
2. Cellular telephone	1	2	3	4	5	6	7
3. Wrist watch	1	2	3	4	5	6	7
4. Personal computer	1	2	3	4	5	6	7
5. Clock radio	1	2	3	4	5	6	7
6. Video player	1	2	3	4	5	6	7
7. Automobile	1	2	3	4	5	6	7
8. Big screen television	1	2	3	4	5	6	7
9. Flashlight	1	2	3	4	5	6	7
10. Hair dryer	1	2	3	4	5	6	7
11. Washing machine	1	2	3	4	5	6	7
12. Compact disc player	1	2	3	4	5	6	7
13. Micro wave oven	1	2	3	4	5	6	7
14. Refrigerator	1	2	3	4	5	6	7
15. Heart pacemaker	1	2	3	4	5	6	7

APPENDIX E

OBJECTIVE AND PERCEPTION INDICATORS

OBJECTIVE AND PERCEPTIVE INDICATORS

Country	GDP/cap	Il.rate	Co_2 ems	% S. water	Politics	Environ	Econ	Labor	Politics	Conflict	W. Culture	Training
Mexico	7,990	12.7	78	71	R	5.51	5.36	5.42	4.88	4.14	3.84	5.21
Brazil	5,580	18.9	610	96	R	4.87	4.51	4.94	4.46	3.92	3.88	4.70
Peru	3,110	14.9	na	61	R	5.22	5.60	5.34	4.75	4.03	4.19	4.98
Singapore	19,940	11.1	40	78	R	4.82	3.94	4.89	4.26	4.07	3.21	4.42
S.Korea	11,270	3.7	29	78	R	4.87	3.73	4.82	4.61	4.04	3.21	3.97
China	2,500	26.7	380	72	C	4.65	3.85	5.04	5.55	5.01	3.00	3.73
Spain	13,120	11.6	73	100	P	4.51	4.67	4.23	3.73	3.42	3.95	4.47
Greece	8,870	6.8	20	97	P	4.08	4.53	4.275	3.82	3.63	3.76	4.00
Poland	4,920	15.0	56	na	D	4.81	4.42	4.74	4.41	3.95	3.75	4.67

APPENDIX F

IRB FORM

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
HUMAN SUBJECTS REVIEW

Date: 10-02-97 **IRB#:** BU-98-006

Proposal Title: MEASURING COUNTRY IMAGES TO EXPLAIN PRODUCT ATTITUDES

Principal Investigator(s): Stephen J. Miller, Anthony T. Allred

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

ALL APPROVALS MAY BE SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT NEXT MEETING, AS WELL AS ARE SUBJECT TO MONITORING AT ANY TIME DURING THE APPROVAL PERIOD.
APPROVAL STATUS PERIOD VALID FOR DATA COLLECTION FOR A ONE CALENDAR YEAR PERIOD AFTER WHICH A CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD APPROVAL.
ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

Comments, Modifications/Conditions for Approval or Disapproval are as follows:

Signature: _____ Date: October 7, 1997
Chair of Institutional Review Board
cc: Anthony T. Allred

2

VITA

Anthony T. Allred

Candidate for the Degree of

Doctor of Philosophy

Thesis: MEASURING COUNTRY IMAGES TO EXPLAIN PRODUCT ATTITUDES

Major Field: Business Administration

Biographical:

Personal Data: Born in Chicago, Illinois, on April 28, 1959, the son of Gordon T. and Sharon W. Allred.

Education: Graduated from Ogden High School, Ogden City, Utah in June 1977; received Bachelor of General Studies with minors in Art History, Engineering, and Physics from Weber State University in May 1984. Completed the requirements for the Doctor of Philosophy in Business Administration degree at Oklahoma State University in December 1997.

Experience: Labored as a missionary in Japan for two years after High School; employed as a real estate agent for two years while finishing undergraduate degree; established, owned, and operated a company for eight years; the company began importing luxury cars from Europe and evolved into an import and manufacturing company making water recreation products which were sold throughout the U.S. and to many foreign countries; employed by Weber State University Business Administration, 1995 to present.

Professional Memberships: Association for Consumer Research.