AN ANALYTICAL MODEL OF THE DETERMINANTS AND OUTCOMES OF NATION 
BRANDING

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Nation as a brand represents the intangible assets of a country, encompassing various dimensions such as politics, economics, culture, history, and technology. However, much of extant work in nation branding has been limited to the empirical investigations of its positioning and implementation for specific countries, while other scholarly works in nation branding are conceptual. Various factors associated with nation branding are discussed in the literature, but there is no organizing mechanism to connect these factors to explore the dynamics underlying nation branding. To fill this gap, this dissertation attempts to identify the relevant factors underlying the deployment of nation branding, and to develop models to assess the association among these factors.

Hunt and Morgan’s resource advantage theory serves as the theoretical foundation of this dissertation’s framework. After establishing panel data models that link the factors of building and developing the nation brand, the strategic implications of nation branding are discussed. Archival data were used for economic factors such as economic development, tourism, export, and inward foreign investment, and cultural, political, infrastructural, and geographical factors. The primary data were collected for qualitative factors perceived reputable brand and perceived reputable industry. The Anholt-GfK Roper’s 2008 Nation Brands Index™ was incorporated into the model as a moderating variable to test its impact on the relationship between the dependent variables and the independent variables. A total of 24 nations were analyzed to build and validate the models.
This dissertation makes several contributions to the nation branding literature. First, it clarifies the definition of nation brand and nation branding. Second, it builds a predictive econometric model to connect the critical determinant and outcome factors of nation branding. Finally, it discusses nation branding strategies in terms of resource advantage theory and provides crucial insights on the development and management of a nation brand that can be used by researchers, marketing managers, and stakeholders of the nation brand to gain a better understanding of the dynamics of nation branding.
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CHAPTER 1

INTRODUCTION

With the potential economic, political, and strategic values inherent in developing a favorable country image, nation branding has received increasing scrutiny from both practitioners and researchers in the last decade (Anholt 1998; Dinnie 2008; Fan 2006; Gudjonsson 2005; Olins 2002; Popadopoulos and Heslop 2002; Yan 2003). Nation branding refers to the practices of “applying branding and marketing communications techniques to promote a nation’s image” (Fan 2006, p. 6). The nation as a brand represents the intangible assets of the country, encompassing various dimensions such as politics, economics, culture, history, social psychology, and technology. However, much of extant work in nation branding has been limited to the empirical investigations of its positioning and implementation for specific countries (Dzennovska 2004; Florek 2005; Florek and Conejo 2006; Gilmore 2002; Loo and Davies 2006; Nuttavuthisit 2006; Wetzel 2006). Other scholarly works in nation branding are conceptual (Anholt 1998; Fan 2006; O’Shaughnessy and O’Shaughnessy 2000; Popadopoulos and Heslop 2002; Yan 2003). No organizing mechanism exists to connect the various factors identified in the literature to explore the dynamics underlying nation branding. To fill this gap, this dissertation attempts to identify the relevant factors underlying the deployment of nation branding, and to develop a model to assess the association among those factors.

The impetus for this study also comes from the fact that public policy makers, especially those from emerging countries, overtly attempt to attract foreign investments and increase exports using nation branding tactics (Anholt 2008; Beverland and Lindgreen 2002). The traditional perspective of country-of-origin (COO) image does not allow for this line of thinking, which assumes it to be static. However, O’Shaughnessy and O’Shaughnessy (2000),
Papadopoulos and Heslop (2000, 2002) and Paswan et al. (2002) propose that a country could be seen as a brand. This emerging stream suggests that nations, especially the ones from the emerging group, can change and enhance their country-brand images. Given this increasing interest in nation branding among researchers, practitioners and government agencies, the findings of this study have significant research, managerial and public policy implications in the global marketplace.

This investigation differs from the traditional COO stream where researchers assume that country image is static and national stereotype is the rule to judge the product/brand quality (Baker and Michie 1995; Chao 1993; Dichter 1962; Han 1990; Insch and McBride 1998; Krishnakumar 1974; Okechuku 1994; Papadopoulos et al. 1987; Roth and Remeo 1992; Smith 1993; Tse et al. 1996; Verlegh and Steenkamp 1999; Wang and Lamb 1983). Increasingly, researchers are challenging this perspective, treating the COO image as a target variable rather than as an explanatory variable (Moss and Estrada 2002).

Specifically, this dissertation has four main goals. The first goal is to clarify the definition of nation branding by drawing from the constructs of product and corporate branding. Second, this dissertation seeks to identify the relevant determining and outcome factors associated with nation branding. The third goal is to build a model to illustrate the underlying relationships among these various factors. The fourth goal is to discuss the strategic and public policy implications of nation branding. To achieve the first goal, literature on product branding, corporate branding and nation branding is explored to gain a more comprehensive perspective on the complex construct of nation branding. In addition, an extensive review of the literature in the country-of-origin, nation branding, destination branding, economics, organizational behavior and international business facilitates the attainment of these research objectives.
Research Questions

Both business practices and marketing and the international business literature have established the importance of economic and cultural factors as communication tools in the emergence of a nation brand. From the perspective of stakeholders of the nation brand, it is critical to understand how these factors influence the development and management of the nation brand. To address the underlying mechanism of nation branding, this dissertation poses three research questions that build upon and extend previous work:

1) Which factors identified in the existing literature are critical to the development of a nation brand?
2) How can these factors be connected (either as a determinant, a moderator, or an outcome) to illustrate the mechanism underlying nation branding?
3) How can the proposed model be applied in the practice of nation branding?

The Conceptual Model

To start with, a clarification of the definition of nation branding is necessary due to the various delineations of the concept in the literature. This clarification is based on an extensive literature review in product, corporate, and nation branding, and is the basis for the identification of determinant factors. The factors listed as the determinants and outcomes of nation branding are identified based on the country-of-origin, nation branding, destination branding, and international business literature. The following figure shows the framework for understanding nation branding, linking its determinants as well as outcomes. Hunt and Morgan’s (1995, 1996) resource advantage theory serves as the theoretical foundation of this framework. After establishing an econometric model that links the factors of building and developing the nation
brand, the strategic implications of nation branding will be discussed (along the lines of Hunt and Morgan’s seminal work on marketing and organizational strategy).

Figure 1: The Proposed Conceptual Model

The literature streams identified in Figure 1 help anchor the operational definitions of the determinant, moderating, and economic outcome factors in the proposed model. For example, the cultural factors are operationalized as individualism and collectivism based on Hofstede’s (1980) work. Economic development of a country refers to the level of gross domestic product per capita in a country. Reputable brands owned by a country are defined as the number of reputable brands that consumers perceive/recall from each country, and reputable industries in a country refer to the number of perceived reputable industries within a country. Infrastructural factors refer to the communication infrastructure in a specific country. Political factors refer to the Economic Freedom Index created by the Wall Street Journal and the Heritage Foundation. Geographical factors refer to the number of commercial natural resources each country has. Tourism is defined as the number of the foreign visitors to a specific country in a calendar year. Exports refer to the U.S. dollar value of a country’s total exports in a calendar year. Foreign
investment refers to the U.S. dollar value of the foreign direct investment inflows to a country in a calendar year. Nation brand is the Anholt-GfK Roper’s 2008 nation brands indexSM (GfK 2008). The non-economic outcomes of nation branding are discussed with the managerial and public policy implications.

Methodology

This dissertation attempts to model, test and then explain whether a nation’s culture, economy, infrastructure, politics, reputable brands, reputable industries, and geography, as determinants of the nation brand, have significant impacts on its economic outcomes, as measured by exports, foreign direct investment, and tourism. All of the dependent variables including exports, foreign direct investment, and tourism, and all seven independent variables are continuous. In addition, the Anholt-GfK Roper nation brands indexSM (GfK 2008) was incorporated into the model as a moderating variable to test its impact on the relationship between the dependent variables and the independent variables.

Archival data were used for economic factors such as economic development of a country, tourism, exports, foreign direct investment, cultural factors, infrastructure factors, political factors, and geographical factors. The economic, infrastructural, and political data for each country was collected for the period of 1995-2006. The data sources include databases from World Development Indicators (WDI), International Monetary Fund, The Wall Street Journal, and the Heritage Foundation. A survey was used to collect data for reputable brands and reputable industries.

This dissertation uses a panel data model to connect the various factors of nation branding because it offers two main advantages over pure cross-sectional or pure time-series data.
alone. First, it is able to simultaneously analyze the factors that affect nation branding both over time and across countries. This also allows the capture of any cross-country effects that may exist over time. Second, the panel data model is able to explicitly capture non-measurable factors, or “unobserved effects,” that differentiate one country from another or one time period from another.

Two studies were conducted to build the panel data models. First, a pretest study was conducted to estimate what kind of models can be used to connect the determinant and outcome variables of nation branding, utilizing thirteen countries who hosted either Summer or Winter Olympic Games during the period of 1995-2006. Next, the list was expanded to 24 countries across six regions: North America, South America, Asia, Europe, Africa, and Australia. The countries selected were also differentiated in terms of the level of their economic development. Based on the above criteria, the countries selected were Australia, Brazil, Canada, China, Denmark, England, France, Germany, India, Italy, Japan, Mexico, Malaysia, New Zealand, Norway, Peru, Russia, Singapore, South Africa, South Korea, Spain, Thailand, Turkey, and United States. In the second study, three one-way random effects panel data models were developed to explore the relationships among the determinant factors, the moderator, and the outcome factors of nation branding.

Managerial and Theoretical Contribution

The nation brand contributes not only to consumer-based images of the nation but also to the images held by all of its stakeholders such as its citizens, tourists, foreign investors, foreign customers, government agencies, and regional economic entities such as the European Union. There is increasing awareness that the nation as a brand can increase its product’s visibility,
recognition and reputation in the global marketplace. Against this backdrop, the emphasis of global marketing could be seen as shifting from product branding to corporate branding, and now to nation branding. To promote favorable nation image in the globalized world market or to overcome a negative country image, various nations have undertaken nation branding initiatives, which position and promote their countries, to increase exports, attract tourists, attract foreign direct investment, or to achieve political objectives. While various factors associated with nation branding have been discussed in the literature, no organizing mechanism exists in the literature to connect the critical factors relevant to nation branding. This dissertation intends to fill this literature gap in nation branding and to build a predictive econometric model to underpin the dynamics associated with nation branding.

The findings from this dissertation have important implications for practitioners, researchers, and all the stakeholders of a nation. Its contributions include: 1) clarifying the definition of nation brand and nation branding, 2) developing a predictive econometric model to connect the critical determinants and outcome factors of nation branding, 3) discussing the strategic implications consistent with Hunt and Morgan’s (1995, 1996) resource advantage theory, 4) offering practical implications for politicians and government agencies on how to promote and sustain their country’s image, and 5) providing crucial insights on the development and management of a nation brand that can be used by researchers, marketing managers and the stakeholders of the nation brand to gain a better understanding of the dynamics of nation branding.

Overview of the Dissertation

Chapter 1 introduces the overarching research objectives and conceptual framework for identifying the seminal factors that underlie nation brand building. It also discusses the potential
positive and normative research contributions that may be gleaned from an econometric model of
nation building. Chapter 2 reviews the literature across the social sciences that addresses both
determinants and outcome factors underlying nation branding. It also critically evaluates
theoretical approaches with a bent toward developing an integrated framework of nation
building. Chapter 3 outlines an econometric model that is consistent with the conceptual
framework in the preceding chapter. Chapter 4 describes the panel data model development and
presents the research findings for the pretest and final models. Finally, Chapter 5 critically
evaluates the implications derived from the research findings and discusses the dissertation’s
theoretical and practical implications, limitations, and suggestions for future research.
CHAPTER 2
LITERATURE REVIEW AND MODEL OVERVIEW

Overview

The research domain of this dissertation is nation branding and it intends to build a predictive econometric model to connect critical determinants and outcomes of nation branding. The first step for doing this is to critically explore the literature to date as it relates to nation brand and nation branding. While reviewing several definitions of nation branding in the extant literature from the perspectives of product branding, corporate branding and place branding, this study identifies gaps in these areas and provides a revised definition of nation branding. Once a clarification of the definition of nation branding is reached, critical pursuit of the important determinants and outcomes is possible.

Next, an extensive review of the existing literature in nation branding and country-of-origin image provides the theoretical background for the selection of the critical factors included in the model. Afterwards, this chapter outlines Hofstede’s (1980) cultural taxonomy and discusses the rationale for a singular focus on the individualism/collectivism dichotomy, which is then used as a mechanism for classifying the 24 nations chosen for this dissertation. Next, Hunt and Morgan’s (1995, 1996) resource advantage theory is discussed to provide the organizing theoretical foundation for this study. Finally, an overview of the conceptual model is discussed and the propositions are developed from it.
Literature Review

Product Brand and Product Branding

The brand management literature to date fails to provide a concordant definition of brand or branding. However, the multifarious definitions share a common theme of a valuation that transcends the physical or functional elements of a good or service. A brand refers to a name, term, sign, symbol, or design, or any combination of these that are used to identify the goods and services of one seller or group of sellers, to differentiate them from those of competitors (Barwise, Dunham and Ritson 2000; Kapferer 1997; Kotler 1991), or to enhance the value of a product beyond its price and functional performance (Farquhar 1989; Knox 2000). A brand is also used to deliver a promise as an implied contract between the company and the consumers (Neal and Strauss 2008), or to reflect a general meaning associated with the brand (Park, Jaworski and Maclnnis 1986). Because product features can be easily duplicated, brands are used to differentiate competing products and to make promises of value to consumers (Kotler and Gertner 2002). To increase the competitiveness of a brand with respect to its competitors and to enhance that brand’s market performance, marketers design different combinations of marketing mix variables to present favorable brand images to the consumers (Shocker and Srinivasan 1979).

One way to improve brand image is to satisfy consumers’ needs and preferences (Park, Jaworski and Maclnnis 1986). In general, consumers have three types of needs: functional needs, which refer to consumption related needs (Fennell 1978); symbolic needs, which are defined as needs for for self enhancement, role position, group membership or ego identification (Solomon 1983); and experiential needs, which include desires for sensory pleasure, variety seeking and emotional stimulation (McAlister and Pessemier 1982). Product branding illustrates the concept
of positioning strategy, which intends to create pleasurable consumer experiences with the brand (Schmitt 1999). The product can be positioned with either a functional, symbolic, or experiential image, or with a mixture of these benefits. The critical rationale of a positioning strategy is to create a unique identity for the brand and to differentiate it from other similar products.

Park, Jaworski and MacInnis (1986) identify three stages of brand concept management (BCM). The first stage is the introduction, with the purpose of building brand image through coordination of marketing mix elements. Based on the type of benefits provided by the specific brand, marketers establish the brand image reflecting the benefits of that brand. The second stage is elaboration, where the objective of the brand manager is to enhance the perceived value of the brand. The brand image can be improved by appealing to more specific functional needs for functional brands, by maintaining group- or self-image based associations for symbolic brands, or by offering brand accessories for experiential brands. The third stage is fortification, where the goal of branding is to extend the brand meaning to other products by strengthening the established brand image. Establishing meaningful linkage between the original brand and its siblings in other product categories is the key in this stage.

Once a favorable brand image is established, it represents the personality of the brand (Ogilvy 1983), or the brand equity. Based on different perspectives, brand equity also refers to the incremental value to the product of a given brand (Leuthesser 1988), the value of intangible benefits (Neal and Strauss 2008), the incremental cash flows accrued to branded products over unbranded products (Simon and Sullivan 1993), or the differential effect of brand knowledge on consumer response to the marketing activities of the specific brand (Keller 1993). The ultimate goal of product branding is to develop, reinforce, enhance, and sustain the brand equity of the product.
To build successful brand equity, the brand should have a good brand name. Simplicity, distinctiveness, and meaningfulness are the required characteristics of good brand name (Robertson 1989). In addition, the fittingness and meaningfulness of a brand name can increase the recall of the brand (Robertson 1987). The importance of brand equity is evident from its impact not only on consumers’ evaluations of the brand and their purchase intentions but also on the company’s financial performance (Simon and Sullivan 1993). A successful brand often represents the core values and ideology of the organization and endows the organization with sustainable competitive advantage. On the other hand, companies must manage their brands carefully to avoid any unpleasant or negative image associated with their brands. In such situations, companies conduct demarketing activities to avoid such negative images or to discourage consumer consumption of certain products (Kotler and Levy 1971). When in short supply, demarketing could reduce consumers’ dissatisfaction with the scarcity of the product (Mercer 1999). In general, demarketing intends to reduce the negative image of products or brands and facilitate the successful development of the brand equity.

Corporate Brand and Corporate Branding

With the increasing globalization of business and the expansion of product markets, there has been a strategic shift from product branding to corporate branding (Hatch and Schultz 2003). Although corporate and product branding have similarities, such as their common objective of building brand identity and differentiation from the competitors, they also have fundamental differences (Balmer and Gray 2003). The target of the branded product is the customer/consumer, while the expanded set of stakeholders of a corporate brand includes not only its customers, but also its employees, investors, suppliers, partners, regulators, and the local
communities (Hatch and Schultz 2003). Second, a corporate brand offers added economic value to the products and services of the company (Keller 2000; Olins 2000). Third, employees of the organization play a crucial role in the corporate branding process and work as the bridge between the internal and the external environments (Balmer and Wilkinson 1991; Schneider and Bowen 1995). Lastly, a corporate brand represents the strategic vision of a company while a product brand is usually managed by the middle-level managers (Hatch and Schultz 2003). Therefore, corporate branding has more strategic importance than product branding and it requires both internal and external communication (Balmer 2001) and cooperation of the different functions within the firm (Harkness 1999). In general, corporate branding involves three interconnected elements: strategic vision, organizational culture, and the corporate image (Hatch and Schultz 2003).

To gain a sustainable competitive advantage, a corporate brand has to build a dynamic core value, which refers to the summary identity of the brand (Urde 2003). This represents the functional, emotional, and symbolic aspects of the brand, and is “expressed as added values that the customer experiences as useful and unique” and “difficult for competitors to imitate” (Urde 2003, p. 37). According to the resources-based view of the firm, Balmer and Gray (2003) argue that a strong and well-managed corporate brand represents the organization’s “sustainable valuable resource,” which has the characteristics of rarity, durability, inappropriatability, imperfect imitability, and imperfect substitutability (p. 37). With the emergence of the Internet and the new economy, it is necessary to take into consideration the context of corporate branding. Leitch and Richardson (2003) illustrate a framework of the brand web to explore the context of corporate branding.
Corporate branding refers to the processes an organization uses to build and manage its corporate brand. To establish a successful corporate brand, a company should have a clear focus of the mechanism for developing a corporate brand effectively. Specifically, Knox and Bickerton (2003) developed the six conventions of corporate branding based on empirical evidence, that is, brand context, brand construction, brand confirmation, brand consistency, brand continuity, and brand conditioning. First, to develop a competitive context for the corporate brand, a company should understand the current image of the organization, its anticipated competition, the current culture of the organization, and its future vision. Secondly, the company needs to use customer value as a common starting point for brand construction and build a corporate brand positioning framework that takes into account the current brand strengths and the desired future position of the organization.

Thirdly, based on the common starting point and agreed corporate brand positioning framework, the company should proceed to brand confirmation by developing corporate brand statements and a proposition. Fourthly, the organization should develop brand confirmation through consistent corporate communications delivered via formal as well as informal communication channels. Next, the organization needs to align both communications and business processes with the corporate brand for delivering value with brand consistency. Finally, the company needs to continuously monitor brand conditioning of the corporate brand by ensuring its distinctiveness and relevance in delivering customer value. When there is a change of the corporate brand, it is necessary for the company to employ corporate rebranding strategies to re-align the functional components of the company to the revised corporate brand (Merrilees and Miller 2008).
Place Branding

Place branding, also known as destination branding, is often related to positioning strategies in the tourism industry. Place branding is defined as marketing activities to promote positive destination image in order to influence the consumers’ destination choice (Blain et al. 2005). Destination branding could be local, regional, national, or international in scope (Ward and Gold 1994). The purpose of place branding is to establish a clear and distinctive place image different from the competitors, to build associations with customers, and to deliver long-term competitive advantages (Hall 2002). Besides improving a positive image, place branding intends to reduce or eliminate the negative image associated with certain places (Medway and Warnaby 2008). In general, place branding intends to establish a positive connection between a place and its customers.

With respect to product brand image, place image or destination image is a more complex construct. Destination image is defined as general beliefs, ideas and impressions people have of a place (Cromption 1979); the tourists’ perceptions and attitudes towards a destination’s tourism attributes (Um and Cromption 1990); a composite impression of various attractions and attributes related to a place (MacKay and Fesenmaiser 1997; Mossberg and Kleppe 2005); or a multifaceted combination of factual and affective information related to a destination (Papadopoulos and Heslop 2002). A person’s destination image is context dependent. It could be built on either personal-specific factors, holiday-specific factors, or destination-specific factors (Foster and Jones 2000). Therefore, it is critical for place marketers to promote tourism destinations based on contextual considerations.
The impetus behind place branding may be attributed to various factors. Horner and Swarbrooke (1996) discuss the reasons for destination branding including enhancing place image to attract industry investment, improving local community infrastructure, offering funding for the conservation of the environment, instilling pride within local residents, and making a destination politically acceptable to outsiders (Baker and Cameron 2007). Other factors mentioned in the literature include the motivation to improve living standards of residents, to increase the number of tourists, to stimulate the development of local businesses (Buhalís 2000), and to create a credible emotional association between the destination brand and its stakeholders (Morgan and Pritchard 2004). Baker and Cameron (2007) also explore 33 success factors of place branding from the literature and classify them into four stages. The first stage is to establish a strategic orientation of tourism branding, followed, in the second stage, by identity development, image development, and vision communication. The third stage is to involve all stakeholders such as local people, local businesses, and local and national government agencies. Finally, continual monitoring, evaluation, and adjustment are seen as necessary for successful place branding.

*Nation Branding*

The literature shows a trend away from corporate branding and place branding toward nation branding. Now, while there are similarities, there also are differences between corporate brand and nation brand. For instance, Anholt (1998), using a bifurcation approach, classifies brands as either private or public domain brands. Viewed this way, product and corporate brands are private domain brands, whereas the place and nation brands are public domain brands. Regardless of their domain, the essential functions of a brand are to create a unique brand
personality and to differentiate itself from competitors. The brand represents the intangible assets of a product, corporation, place, or country. Although the principle of corporate branding can be applied to nation branding (Balmer and Gray 2003), nation brand has expanded stakeholders such as government agencies and other corporations.

On the other hand, nation branding maybe viewed as a special case of place branding with its scope limited to nations. There are different definitions of nation branding in the literature. Florek (2005) refers to it as the process of establishing positive association for the nation itself, its people, and its products. Gudjonsson (2005) defines nation branding as the procedure of building positive platforms and an effective environment for a nation’s brands to compete in the global markets. Nation branding is also suggested as a government’s practice of remaking its nation’s brand identity and shaping the conduct of its people (Dzenovska 2004). Fan (2006) equates the nation branding to the marketing activities of branding and communicating used to promote the image of a nation, whereas Anholt (2008) refers it as “the management of the country’s overall reputation” (p. 265). When compared with the product brand and corporate brand, nation brand equity refers to the intangible assets of a country (Fan 2006) or to the emotional value resulting from consumers’ evaluation of the country’s brands (Maheswaran and Chen 2006; Shimp, Samie and Madden 1993).

The objective of nation branding is to promote a positive nation-image for the nation and its people, to establish a nation’s brand identity, to increase the export of products, and to attract tourists and foreign direct investment (Anholt 2003; Dinnie 2008; Dzenovska 2004; Florek and Conejo 2006). The image of a country is a product of its geography, history, art and music, famous citizens, product brands, stereotypes, and other factors (Kotler and Gertner 2002). In addition, the extensive literature on product country image reveals three important country image
constructs; that is, the nation’s economic development, the general feeling about its people, and the desire for closer connection with the specific country (Papadopoulos and Heslop 2002). Since each country has a different historical and economic background, nation branding strategies vary among countries. In general, developed countries have better existing images than developing countries in terms of investment and business. Developing countries usually face more challenges than developed countries in finding enough resources for an adequate branding program due to their much smaller asset base and lower international attention (Florek and Conejo 2006).

The reasons for nation branding also vary by country. Anholt (1998) proposes that by comparison with the established nation brands such as United States of America, England, Scotland, Ireland, Spain, France, Italy, Germany, and Switzerland, the emerging countries without obvious nation brand personalities could establish their nation brand identity through promoting their export brands. This proposition finds favor with Florek and Conejo (2006), who advise Costa Rica and Moldova to promote their flagship export products in order to brand their countries. The reasons for Poland to brand its country include improving the welfare of its citizens, globalizing its economy, addressing challenges related to Poland’s accession to the European Union (EU), growing competition primarily from neighbors in the region, increasing needs to enhance the competitiveness of Polish companies and products, and existing negative perceptions and unhealthy stereotypes (Florek 2005). One reason why Thailand rebranded its country image was to counter its negative image resulting from a flourishing sex trade industry (Nuttavuthisit 2006). Gudjonsson (2005) discusses three reasons behind nation branding: protecting businesses and brands from undesirable and negative effects of government, politics, or other related domestic or international actions; supporting businesses and their brands in
global competition; and building prosperity and enhancing living standards within the nation. He proposes a nation brand’s influential map to illustrate the determinants of nation image. These include the nation’s people and social culture; the political culture and political and social system; the geographical characteristics such as nature, climate, position and cities; and economic health and the business culture.

Redefinition of Nation Brand and Nation Branding

Based on the above-mentioned literature reviews on product branding, corporate branding, place branding, and nation branding, we see a changing trend in the branding literature. Nation branding, as the emerging research stream, has received only limited attention from academics in the recent decade, although it attracts enormous attention from practitioners and government agencies. Practitioners focus on the positioning strategies of a specific country and the implementation of the branding strategies, whereas government agencies are interested in the promotion of exports and tourism, and the attraction of foreign direct investment. On the other hand, the mostly conceptual academic studies focus on various aspects of and factors relevant to nation brand and nation branding. However, the meaning of nation brand and nation branding are ambiguous and confusing in the academic literature, since there is a lack of an organizing mechanism to collect the variables identified in the literature. This dissertation proposes to clarify this issue by integrating the literature on product branding, corporate branding, place branding, and nation branding.

In this study, the nation brand is defined as the design, symbol, sign, color, or any combination of these that are used to deliver a symbolic meaning to the nation’s stakeholders.
Since every country has a name, a history, and a culture, it is not a good idea to build a specific identity for a nation without careful consideration of its history, culture, and society. The critical issue here is to build a distinctive image that is meaningful to the nation’s stakeholders and to establish an emotional bond between them and the nation. How to do this will depend on various elements such as the current image of the nation, its stakeholders, its future vision, and its culture. At the same time, nation branding is defined as the procedure of designing, implementing, evaluating, and monitoring the marketing activities for delivering a symbolic meaning of the nation to its stakeholders.

*Country of Origin Effect*

The country of origin (COO) effect has been extensively investigated in the marketing literature since Dichter (1962) first suggested that the country of origin of a product may have a “tremendous influence on the acceptance and success of products” (Verlegh and Steenkamp 1999). Despite of the restructuring of global markets through forces such as the growth of World Trade Organization and the popularity of e-commerce in recent decades, the COO effect receives continuous research scrutiny (Pharr 2005). The continued interest in the COO effect is partially fueled by the increasing presence of multinational corporations in different countries and the interconnectedness of the global economy (Ahmed and d’Astous 2007; Mihailovich 2006). Most studies in the COO literature have focused on the impact of COO on product evaluation, i.e., how country image can affect perceived product quality (Chao 1993; Insch and McBride 1998; Krishnakumar 1974), consumers’ attitudes (Okechuku 1994; Papadopoulos et al. 1987; Smith
Over the past 40 years, a majority of research on COO focuses on its effect on product evaluations. Schooler (1965) pioneered the empirical investigation of COO’s impact on consumers’ opinions of a product. Krishnakumar (1974) then found that people from developing countries tended to have an unfavorable “made in” image of their home country’s products in terms of workmanship, reliability, durability, and technical superiority. In addition, Han (1989) concluded that consumers used country image to evaluate a product in either or both of two constructs: as a halo construct or as a summary construct. When consumers are unfamiliar with a foreign product, they will use its COO to evaluate the product attributes and make judgments on the product’s quality. More, Tse, Kwan, Yee, Wah and Ming (1996) concluded that COO significantly affected consumers’ intention to purchase a product. Furthermore, Thakor and Katsanis (1997) investigated how brand and country cues may affect different dimensions of product quality, and found that country cues affected the experience and the credence dimensions of product quality.

Investigations of the COO effect differ across various dimensions. Studies can be differentiated in terms of the research designs such as single cue (Reierson 1966; Schooler 1965) and multi-cue (Johansson et al. 1985); or research location such as in different countries (Akaah and Yaprak 1993; Johansson et al. 1985; Nagashima 1970, 1977; Papadopoulos et al. 1987) versus single country (Kwok, Uncles and Huang 2006; Maheswaran 1994). Different types of products were investigated such as consumer goods (Schooler and Wildt 1968; Tse et al. 1996) and industrial goods (Dornoff et al. 1974; Festervand et al. 1985). Different samples were also used such as student samples (Johansson et al. 1985; Schooler and Wildt 1968) or representative

Across these research streams, there is a consensus that national stereotypes exists in foreign product evaluation, i.e., favorable country image will result in favorable evaluation of the products from that country (Han 1990; Schooler 1965). Moreover, national stereotypes are product specific, and the COO may function as a surrogate variable, having a stronger impact when little else is known about a product (Kaynak and Cavusgil 1983). This traditional view of the COO effect assumes that country image is the independent variable, which people use to judge the product quality. However, an emerging stream of the COO literature argues that the nation image is dynamic and can change over time (Bilkey and Nes 1993; Nagashima 1977). Country image can change due to such variables as the changes in perceived quality of the product from the country, national characteristics, economic and political development, technological development, history, and tradition.

Based on attribution theory, Sun (2008) further argues that product quality image influences the country image which then helps the consumers make inferences about a product’s quality. That is, higher perceived product quality leads consumers to have a more positive attitude toward a product and, therefore, a more favorable attitude towards the product’s country of origin. After this attribution is created, a national stereotype is established and customers use this stereotype to make their judgments about product quality in the same product categories. Japan and South Korea are two classical examples showing how to build a positive country image and how the new national stereotype changed consumers’ minds (Darling and Wood 1990; Han 1990; Lazer et al. 1985; Nagashima 1970; Nakanish 1981). Improvements in the quality of product from both countries contributed significantly to the turnaround of their
national images (Anonymous 2004; Nagashima 1977). Further, Bilkey and Nes (1993) point out that while it took Japan almost 20 years to substantially improve its image, South Korea has managed the same feat in half that time, suggesting that it is possible to reduce the time required for a country to change its image.

**Critical Factors to Nation Branding**

The literature on branding and COO alludes to several important factors relevant to nation branding. Economic factors are the most frequently mentioned critical factors in the nation branding literature. Countries strive to promote a distinctive nation brand image to stimulate their economic development and to improve their people’s standard of living. The major objectives behind nation branding are to increase a country’s product exports (Dzenovska 2004; Florek 2005; Florek and Conejo 2006; Loo and Davis 2006; Papadopoulos 2004; Ryan 2008), to attract foreign tourists (Beverland and Lindgreen 2002; Gilmore 2002; Henderson 2006; Nuttavuthisit 2006), and to enhance foreign direct investments (Florek and Conejo 2006; Papadopoulos 2004).

The historical, cultural, and social factors are additional critical factors mentioned in the literature (Anholt 1998; Dzenovska 2004; Fan 2006; Florek 2005; Gudjonsson 2005; Kotler and Gertner 2002; Nayir and Durmusoglu 2008; Ollins 2002; Papadopoulos 2004; Papadopoulos and Heslop 2002; Ryan 2008; Wetzel 2006; Widler 2007). Within the social and cultural factors, a country’s people are central to nation branding since they are representatives of their country (Baker and Cameron 2007; Paswan et al. 2002; Wetzel; Widler 2007). A third set of factors identified in the literature are the political consideration since they could be used as a tool to
build the country’s wealth and its political power (Fan 2006; Kotler et al. 1997; Rawson 2007). Finally, the geographical location of a country, which may influence the competitive advantage of a nation, is an important issue in nation branding strategies (Florek and Conejo 2006; Gudjonsson 2005).

*Risk Resource Advantage Theory and Sustainable Competitive Advantage*

Drawn from neoclassical theory, resource advantage theory was introduced by Hunt and Morgan (1995) to provide a better explanation of the key micro phenomena of firm diversity and the key macro phenomena of superior performance of market-based economies over command economies. According to resource advantage theory, the greater abundance in market-based economies is explained by the notion that rewards will flow to the efficient and effective through time (Hunt and Morgan 1995). Resource advantage theory not only incorporates Dickson’s higher-order learning processes, which can yield marketplace positions of competitive advantage, but also shows precisely how firms learn from the very process of competition itself (Hunt and Morgan 1996, 1997).

Resource advantage theory is based on the resource-based view, which is founded on Penrose’s (1958) concept of resources as the potential services provided by an entity. Penrose (1958) argues that the heterogeneity of these resources gives firms their uniqueness. Resources are defined as all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. i.e. tangible and intangible entities controlled by or available to a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness in producing a market offering that has value for some market segment(s) (Barney
1991; Hunt and Morgan 1995). Barney (1991) asserts that if all firms in an industry had homogenous and perfectly mobile resources, then all firms will implement all strategies equally well, leaving no scope for competitive advantage.

To have competitive advantage, a firm has to implement a value creating strategy not being implemented by current or potential competitors (Barney 1991). To gain a competitive advantage and superior financial performance, resources need to be heterogeneous and imperfectly mobile. This view is opposed to Porter’s five forces model that assumes that resources are homogenous and that if heterogeneity develops in the industry, it will be short-lived because resources are highly mobile (Porter 1980, 1999). The five forces include the degree of rivalry in the industry, the threat of substitutes, the buyer power, the supplier power, and the barriers to entry. The five forces model describes the attributes of an attractive industry and suggests that opportunities will be greater, and threats less, in these kinds of industries (Porter 1980). In contrast, the resource-based view makes the assumptions of heterogeneity and imperfect mobility of resources (Barney 1991) and focuses more on internal resources.

A firm is said to have sustainable competitive advantage (SCA) when it fosters a value creating strategy not being simultaneously implemented by any current or potential competitors, and when these other firms are unable to duplicate the benefits of this strategy (Barney 1991). A SCA does not mean that the advantage will last forever. Structural revolutions in the industry can change the industry structure and nullify competitive advantages (Barney 1991). However, SCA will not be nullified by rivals duplicating the benefits of competitive advantage. To gain sustainable competitive advantage, the resources of a firm should be heterogeneous, imperfectly mobile, and imperfectly inimitable. They must also be rare amongst current and potential
competitors, valuable (i.e. resources can exploit opportunities or neutralize threats so that firms can be effective and efficient), and nonsubstitutable (Barney 1991).

Barney (1991) asserts that formal planning is imitable and thus not a source of SCA. Other types of planning such as emergent, informal, and autonomous planning are much more rare, imperfectly imitable, and non-substitutable. An example of an intangible asset that gives competitive advantage and enhances the financial performance, and therefore shareholder value, is provided by Srivastava (1995) who explains how marketing activities can impact shareholder value through external market-based assets. These market based assets improve the timing, amount, risk, and residual value of the firm’s future cash flows.

Capabilities are complex bundles of skills and accumulated knowledge, exercised through organizational process that enables firms to coordinate activities and make use of assets. To outperform competitors, a firm’s capabilities must be distinctive and allow the business to (1) deliver value to customers in cost-effective ways, (2) resist imitation, and 3) be robust to speed its adaptation to environmental change (Day 1994). Capabilities are considered to be the glue that brings assets together and enables them to be deployed advantageously. These capabilities are hard-to-duplicate, distinctive resources that give rise to defensible competitive positions. These are cultivated slowly over time and may limit the ability of the firm to adapt to change. Day and Wensley (1983) identify the pressures for change and suggest that marketing’s long term strategic concept should shift to initiatives for innovation, sustainable competitive advantage, and long-term customers and channel relationships.

Day and Wensley (1988) further elaborate on the “source-positional advantage-performance” approach and the elements of competitive advantage. They assert that sources of advantage (superior skills and superior resources) lead to positional advantages (superior
customer value and lower relative costs) and consequently performance outcomes (satisfaction, loyalty, market share, and profitability). Such a procedural strategy is not sustainable unless firms continue their investment of profits to sustain advantage. They also propose a framework for assessing advantage. Superiority of a firm can be assessed by using management judgment to compare the firm’s value chain to that of target competitors and by using customer judgment to compare attribute rating of the firms to that of competitors. Bharadwaj et al. (1993) indicate that resources and skills are the main sources of competitive advantage. They elaborate Day and Wensley’s (1988) framework by suggesting that resources and skills lead to competitive positional advantage (differentiation and cost advantage), which, if sustained, leads to superior long-term performance.

In summary, the resource advantage theory is a theory of the sustainable competitive advantage. On the one hand, the comparative advantage of a company’s resources and capabilities leads to a competitive advantage in its market position, which results in superior financial performance of the company. On the other hand, the comparative disadvantage of a company’s resources and capabilities leads to a competitive disadvantage in its market position, resulting in inferior financial performance. The resources of a company are critical to the sustainability of its competitive advantage. In addition, firms respond strategically to their environmental factors to employ their resources and capabilities efficiently and effectively. As a result, resource advantage theory can help determine what particular marketing strategies will be successful and when. This dissertation relies on resource advantage theory to propose its theoretical framework, which is discussed in detail in the next section.
The Conceptual Model

Based on the literature on product branding, corporate branding, place branding, nation branding, and COO, this dissertation identifies the critical factors related to nation branding using the theoretical model shown in Figure 1. In this model, the economic, infrastructural, cultural, political, and geographical factors are all based on their identification with the nation brand and nation branding in the literature. The factors are classified into economic and non-economic factors because some non-economic factors (e.g. cultural, political, geographical and infrastructural factors) are employed to build the econometric model while other non-economic factors (e.g. political capital and national pride) are discussed with the managerial and public policy implications.

According to resource advantage theory (Hunt and Morgan 1996), comparative advantages in a firm’s resources will lead to its competitive advantage in the marketplace, which will result in the firm’s superior financial performance (Figure 2). Although resource advantage theory focuses on firms or organizations, we argue that a nation can be regarded as a “bigger” firm or organization with more stakeholders. By comparison, a nation can achieve superior “financial” performance (that is, attract more foreign visitors, increase exports and obtain more foreign investment) by branding itself to achieve a distinctive image in the competitive global market. To brand itself successfully, a nation should consider the critical determining factors in designing, implementing, and maintaining its symbolic meaning to the stakeholders. Thus, Figure 1 is an appropriate framework for understanding nation branding as the process that links determinants, moderators, and outcomes.

Literature streams on the concepts identified in Figure 1 help anchor the operational definitions of the determinant, moderating, and economic outcome factors in the proposed
model. For example, the cultural factors are operationalized as individualism and collectivism based on Hofstede’s (1980) work. Economic development of a country refers to Gross Domestic Product per Capita of a country. Reputable brands owned by a country are defined as the number of reputable brands owned by a country, reputable industries in a country.

**Determinants:**
1. Cultural factors
2. Economic factors (e.g., economic development of a country, reputable brands owned by a country, reputable industries in a country)
3. Infrastructural factors
4. Political Factors
5. Geographic Factors

**Outcomes:**
1. Economic Outcomes
   - Tourism
   - Exports
   - Foreign direct investment
2. Non-economic Outcomes
   - Political Capital
   - National Pride

Figure 2: The Proposed Conceptual Model

Figure 3: The Schema of the Resource Advantage Theory
of reputable brands that consumers perceive/recall from each country, and reputable industries in a country refer to the number of perceived reputable industries within a country. Infrastructural factors refer to the communication infrastructure in a specific country. Political factors refer to the Economic Freedom Index created by *The Wall Street Journal* and the Heritage Foundation. Geographical factors refer to the number of commercial natural resources each country has. Tourism is defined as the number of foreign visitors to a specific country in a calendar year. Exports refer to the U.S. dollar value of a country’s total exports in a calendar year. Foreign investment refers to the U.S. dollar value of the foreign direct investment inflows to a country in a calendar year. Nation brand is the Anholt-GfK Roper’s 2008 nation brands indexSM (GfK 2008), which is incorporated into the model as a moderator to measure its indirect effect on the dependent variables.

**Propositions Development**

According to the nation branding literature, cultural differences among nations lead to various nation branding practices (Anholt 1998; Dzenovska 2004; Fan 2006; Florek 2005; Gudjonsson 2005; Kotler and Gertner 2002; Nayir and Durmusoglu 2008; Papadopoulos 2004; Papadopoulos and Heslop 2002; Ryan 2008; Wetzel 2006; Widler 2007). A nation conveys a set of meanings that are both historical and contemporary (O’Shaughnessy and O’Shaughnessy 2000). The people of a country share similar values, beliefs, norms, and institutional culture. However, they may not share the same cultural values as those from another country. Cultural differences stem people’s different perceptions of other countries and their evaluations of the products or brands from those countries (Erdem et al. 2006). These differences could also
explain the reason behind the various nation branding activities (Anholt 1998; Papadopoulos 2004).

Hofstede’s (1980) cultural dimensions have been adopted in the branding literature to investigate the impact of culture on brand evaluation (Dawar and Parker 1994; Erdem et al. 2006; Gurhan-Canli and Maheswaran 2000; Trompenaars and Hampden-Turner 1997; Voich 1995). Among Hofstede’s cultural dimensions, individualism/collectivism is found to be most relevant to consumers’ brand evaluations and purchase decisions (Cray and Mallory 1998). Consumers in collectivistic cultures favor brands that stress group affiliation while those in individualistic cultures are more attracted by the brands that reinforce the independence and freedom (Roth 1995). In addition, credible brands that reinforce the collectivist consumers’ need to belong to a group could enhance their evaluation of product quality and purchase intentions (Erdem et al. 2006).

On the other hand, individualistic consumers rely more on personal experiences and less on interpersonal information exchange to make brand judgments (Money et al. 1998). Since collectivistic consumers tend to conform with norms and group behaviors while individualistic consumers are more likely to seek variety and hedonic experiences, we can expect that nation branding strategies would be aligned with the cultural characteristics of each country (Ryan 2008; Wetzel 2006; Widler 2007). For example, countries with collectivistic cultures are likely to focus more on the reinforcement of group membership and affiliation, while those with individualistic cultures may promote independence and freedom. Although it is reasonable to think that individualistic consumers favor individual cultural values while collectivistic consumers prefer collective cultural norms, extant work provides no concrete evidence of this or to the contrary.
The literature review on brand management notes that the purpose of branding is to create positive and favorable brand image and to increase the financial performance of the product, the place, or the nation. For example, product branding intends to increase a company’s sales, revenues and net cash flows (Simon and Sullivan 1993). Place branding seeks to promote positive destination image to attract more visitors (Blain et al. 2005). Similarly, the objective of nation branding is to promote positive country image in order to attract foreign tourists, to increase exports, and to encourage foreign direct investment (Anholt 2003; Dzenovska 2004; Florek and Conejo 2006). Therefore, it is proposed that:

*Proposition 1: A country’s culture will be positively associated with the country’s (a) tourism from countries having similar cultural orientation; (b) exports to countries having similar cultural orientation; and (c) foreign direct investments from countries having similar cultural orientation.*

*Proposition 2: A country’s image moderates the relationship between its culture and its tourism, exports and foreign direct investment.*

The economic development of the COO of a product is found to have a significant impact on consumers’ evaluations of a brand. People from developing countries tend to have an unfavorable image of their home country’s products in terms of workmanship, reliability, durability, and technical superiority (Ahmed and d’Astous 1995; Insch and McBride 1998; Khachaturian and Morganosky 1990; Krishnakumar 1974; Okechuku 1994; Wang and Lamb 1983). People from developing countries show preference for brands from developed countries (Agbonifoh and Elimimian 1999). For example, Wang and Lamb (1983) found that consumers were most willing to buy products made in economically developed countries with a Western cultural base.
Extant studies find that ethnocentrism moderates the link between the economic development of the COO and the consumers’ brand evaluation and choice decision. For instance, Acharya and Elliott (2003) observe that highly ethnocentric consumers have a strong preference for domestic brands, while less ethnocentric consumers are more receptive to high-quality brands from developed countries. Hamin’s (2006) study of Indonesian consumers verifies the modifying effect of ethnocentrism. They observe that highly ethnocentric Indonesians favor Indonesian brands over foreign brands even when domestic brands are lower in quality and/or higher in price, while less ethnocentric Indonesians choose foreign brands over Indonesian brands.

Moreover, Thai consumers believe that no life insurance plan from foreign countries compares to their domestic plans in terms of affordability and coverage, thus exhibiting strong ethnocentrism (Pinkaeo and Speece 2000). In contrast, Indian consumers, who hold strong nationalistic sentiments, still regard foreign brands as higher quality and more reasonably priced alternatives (Kinra 2006). While high ethnocentric consumers may prefer domestic brands more than foreign ones, low ethnocentric consumers show relatively greater preference for brands from developed countries. In other words, economically developed countries have more favorable nation image than less developed countries and this is likely to facilitate successful design and implementation of nation branding strategies. These arguments lead to the following propositions:

**Proposition 3:** A country’s level of economic development is positively associated with the country’s (a) tourism from other countries; (b) exports to other countries; and (c) foreign direct investments from other countries.

**Proposition 4:** A country’s image moderates the relationship between its level of economic development and its tourism, exports, and foreign direct investment.
Infrastructural development remains a cornerstone of economic development for the nations around the world. It is evident that the infrastructure of a country has a significant impact on its economic development and its competitiveness in the world market (Batten and Karlsson 1996; Blandford et al. 2008). For instance, advanced legal infrastructure could nurture economic growth and increase the attractiveness of a country to foreign investors, as in the case of the United States. Likewise, the development of technology infrastructure gives a country a competitive advantage in the global economy, increases the confidence of foreign investors, and stimulates its exports (Justman and Teubal 1998; Tassey 1998).

On the other hand, inferior infrastructure could inhibit a country’s economic growth and discourage foreign direct investment (Gamble 2007). The infrastructure condition of a nation such as Greece can pose a threat to its export performance (Vlachos and Patsis 2004). Limited infrastructure in African countries makes foreign companies or countries less willing to invest in these countries and impedes the region’s economic development (Oriaku and Oriaku 2007; Ridley et al. 2006). Specifically, the failure to maintain or improve port and transport infrastructure places exporters in sub-Saharan African countries at a serious competitive disadvantage (Yeats and Amjadi 1999). Thus, it is reasonable to argue that:

*Proposition 5: A country’s infrastructure is positively associated with the country’s (a) tourism from other countries; (b) exports to other countries; and (c) foreign direct investments from other countries.*

*Proposition 6: A country’s image moderates the relationship between its infrastructure and its tourism, exports and foreign direct investment.*

Extensive review of the COO literature reveals that consumers have stereotypical impressions about a product’s country of origin. For example, France has a good reputation in
perfume, Italy in leather and fashion, Japan in electronics, Germany in cars, and Switzerland in chocolate. These associations impact consumers’ evaluations of the product from a specific country (Chao 1993; Insch and McBride 1998; Krishnakumar 1974; Okechuku 1994; Papadopoulos et al. 1987; Smith 1993; Verlegh and Steenkamp 1999) and their purchase intentions (Baker and Michie 1995; Han 1990; Roth and Remeo 1992; Tse et al. 1996; Wang and Lamb 1983). In addition, customers who possess a favorable image of a country are likely to have positive attitudes toward other products from that country (Gurhan-Canli and Maheswaran 2000; Hong and Wyer 1990; Leclerc et al. 1994). As the number of favorable products associated with a specific country increases, the positive attitude held by consumers will be reinforced, which will strengthen the favorable country image they have. Consequently, it is logical to posit that:

*Proposition 7: A country’s current inventory of reputable products and brands has a positive impact on the country’s (a) tourism from other countries; (b) exports to other countries; and (c) foreign direct investments from other countries.*

*Proposition 8: A country’s image moderates the relationship between its inventory of reputable products/brands and its tourism, exports, and foreign direct investment.*

Since such products are delivered by a specific industry, it is reasonable to speculate that if the consumers have positive perception about a product, they will hold favorable attitudes toward the industry associated with that product. For instance, Japan manufactures high quality cameras, camcorders and televisions. Hence, consumers and investors are likely to hold favorable attitudes toward the Japanese electronics industry. Naturally, its image will become more positive if the country has even more reputable industries. As a result, it is argued that:
**Proposition 9:** A country’s inventory of reputable industries has a positive impact on the country’s (a) tourism from other countries; (b) exports to other countries; and (c) foreign direct investments from other countries.

**Proposition 10:** A country’s image moderates the relationship between its inventory of reputable industries and its tourism, exports, and foreign direct investment.

The geographical location of a country and the unique image associated with that location also has significant impact on nation branding strategies (Florek and Conejo 2006; Gudjonsson 2005). The favorable image of a place with which a product is associated with will give it a competitive advantage in the world market (Agrawal and Kamakura 1999; Johansson 1993). On the one hand, people from less developed countries are more likely to choose products from more developed countries (Ahmed and d’Astous 1995; Insch and McBride 1998; Khachaturian and Morganosky 1990; Krishnakumar 1974; Okechuku 1994; Wang and Lamb 1983). On the other hand, people in developed countries prefer the domestic products. For example, European customers like European products, while Japanese and Americans choose their own brands (O’Shaughnessy and O’Shaughnessy 2000).

In addition, a country’s geographical location is associated with certain unique resources and, consequently, leads to unique images associated with that country simply because of the location. For example, countries in the tropics are associated with warm climates and less with industrial development. Specifically, for agricultural products, the variations in climate and natural resources in different regions of the world influence consumers’ beliefs about the food products from different countries (Verlegh 2001). Therefore, it is reasonable to believe that to promote its tourism and exports and to attract foreign investors, a nation should take into consideration its geography and world perceptions about that country or region while designing
the nation branding strategies. However, the direction of this influence is unknown from the literature. Therefore, it is hypothesized that

**Proposition 11:** A country’s geography has an impact on the country’s (a) tourism from other countries; (b) exports to other countries; and (c) foreign direct investments from other countries, but the direction of the impact is uncertain.

**Proposition 12:** A country’s image moderates the relationship between its geography and its tourism, exports, and foreign direct investment.

The evolution of place branding and nation branding has turned governments into active participants in the global competitive market (Kotler and Gertner 2002). A country’s wealth and its political power also play a significant role in its nation banding efforts (Choate 1990; Fan 2006; Kotler et al. 1997; Rawson 2007). Active involvement of government agencies in nation branding activities politicizes these. A nation’s international political actions have a potential impact on the way that foreigners perceive it (Rawson 2007). However, a country’s overall political image could result in both positive and negative perceptions by people in different regions (Nye 2004). Therefore, countries have started to employ public diplomacy strategies to alleviate a negative image or boost positive associations with their international audiences (Melissen 2005). However, the literature fails to indicate the direction of this influence. Thus, it is reasonable to take the stance that:

**Proposition 13:** A country’s political policies have an impact on the country’s (a) tourism from other countries; (b) exports to other countries; and (c) foreign direct investments from other countries, but the direction of the impact is unknown.

**Proposition 14:** A country’s image moderates the relationship between its political policies and its tourism, exports, and foreign direct investment.
CHAPTER 3

METHODOLOGY

Introduction

Chapter 3 explains the factors included in the econometric model and describes the data sources in detail. In addition, it explains the reasons behind the selection of the countries chosen for the econometric model. Finally, a general description of the econometric model is provided.

Factors in the Model

This dissertation seeks to explain whether a nation’s culture, economic development, infrastructure, politics, reputable brands, reputable industries, and geography have significant impacts on its exports, foreign direct investment, and tourism. All of the dependent variables (including export, foreign direct investment, and tourism) and the seven independent variables are continuous. Detailed explanations of the dependent and independent variables are provided in this section.

Independent Variables

Cultural Factor—Individualism /Collectivism

Based on the literature in brand management, the cultural values of a nation constitute a significant factor when the country designs and implements its nation branding strategies (Anholt 1998; Dzenovska 2004; Fan 2006; Florek 2005; Gudjonsson 2005; Kotler and Gertner 2002; Nayir and Durmusoglu 2008; Papadopoulos 2004; Papadopoulos and Heslop 2002; Ryan 2008;
Wetzel 2006; Widler 2007). Hofstede’s (1980) cultural dimensions are among the most commonly used scales in the branding literature (Dawar and Parker 1994; Erdem et al. 2006; Gurhan-Canli and Maheswaran 2000; Trompenaars and Hampden-Turner 1997; Voich 1995). Among Hofstede’s cultural dimensions, individualism/collectivism is found to be a critical factor determining consumers’ brand evaluations and purchase decisions (Cray and Mallory 1998; Pharr 2005). For example, consumers in collectivistic cultures favor brands that stress group affiliation while those in individualistic cultures are more attracted to brands that reinforce independence and freedom (Roth 1995). Therefore, this study will use the variable CULTURE to identify the degree of individualism or collectivism of a country. CULTURE takes on a value from 1 to 100, as defined by Hofstede (2001). The closer the value is to 100, the more individualistic a country’s culture.

Economic Factor—Economic Development of a Country

The country of origin (COO) literature reveals that the economic development of a product’s COO has a significant influence on consumers’ brand evaluations and purchase behaviors. Consumers often show preferences for products from economically developed countries rather than those from less developed or developing countries (Agbonifoh and Elimimian 1999; Ahmed and d’Astous 1995; Insch and McBride 1998; Khachaturian and Morganosky 1990; Krishnakumar 1974; Okechuku 1994; Wang and Lamb 1983). In other words, economically developed countries have more favorable nation image than less developed countries. That is, the more economically developed a nation is, the better its nation image. This study uses gross domestic product per capita (GDPPC), measured in thousands U.S. dollars, as a measure of a country’s level of economic development. This is a standard measure of development in the economics literature.
Economic Factor— Reputable Brands Owned by a Country

Since consumers have stereotypical impressions about a product’s COO, their evaluations of and purchase intentions toward a product from a specific country will be impacted by the preexisting perceptions about the products (Chao 1993; Insch and McBride 1998; Krishnakumar 1974; Okechuku 1994; Papadopoulos et al. 1987; Smith 1993; Verlegh and Steenkamp 1999; Wang and Lamb 1983). As the number of favorable products associated with a specific country increases, any positive attitudes held by consumers toward that country will be reinforced, which will strengthen the favorable country image they have. Since marketers are more interested in consumers’ perceptions of a product or brand, studies have operationalized the number of reputable products/brands that a country has by measuring consumers’ perceptions and abilities to recall reputable brands from each country (Thakor 1996; Thakor and Lavack 2003; Koubaa 2008). As a consequence, this study defines the product factor using the variable BRAND, the number of reputable brands that consumers perceive/recall from a country.

Economic Factor— Reputable Industry in a Country

In line with the arguments presented regarding favorable images about the products/brands from a country, favorable attitudes toward the industries that produce those products can also be seen as a critical determinant of export performance. For example, since Japan has a reputation for manufacturing high quality cameras, camcorders and televisions, consumers and investors are likely to hold favorable attitudes toward the electronics industry of Japan. Thus country image is likely to become more positive if the country has more reputable industries. As with the BRAND variable, this study operationalizes the industry factor using the variable INDUSTRY, the number of perceived reputable industries within a country. The North
America Standard Industry Classification (NAICS) is used to classify perceived well-known industries for each country in this study.

Infrastructural Factor—Communication Infrastructure

The economics literature documents the significant impact of infrastructure on the economic development and the competitiveness of a country (Batten and Karlsson 1996; Blandford et al. 2008; Gamble 2007; Oriaku and Oriaku 2007; Ridley et al. 2006; Vlachos and Patsis 2004). On the one hand, advanced infrastructure could nurture economic growth, increase the attractiveness of a country to foreign investors, and stimulate its exports (Justman and Teubal 1998; Tassey 1998). Similarly, inferior infrastructure can inhibit a country’s economic growth and discourage foreign direct investment (Gamble 2007). Specifically, communication is identified as among the most important aspects of a country's infrastructure (Justman and Teubal 1998; Tassey 1998; Yeats and Amjadi 1999). As a result, this dissertation defines the infrastructure variable INFRA in terms of the communication infrastructure of a country, which includes the Internet, mobile phone, and line phone facilities.

Geographical Factor—Natural Resources of a Country

The nation branding literature emphasizes the importance of a country’s geographical location in nation branding strategies (Florek and Conejo 2006; Gudjonsson 2005). Since countries inherit heterogeneous natural resources, people have different perceptions of different regions of the world and their evaluations of different countries vary with the specific location of the countries (Gertner and Kotler 2004; Mort et al. 1996; Verlegh 2001). For agricultural products, the variations in climate and natural resources in different regions of the world influence consumers’ beliefs toward the food products from different countries (Verlegh 2001).
Therefore, this dissertation interprets the geographical location of a country in terms of the natural resources of that country. Each country is differentiated based on the number of its mineral, petroleum, hydropower, and other resources of commercial importance (www.NationMaster.com). This dissertation includes the variable NATRES, which is defined as the number of commercial natural resources each country has, in the model.

**Political Factor—Economic Freedom Index**

Political factors also are identified in the literature as having significant impact on a country’s image (Choate 1990; Fan 2006; Kotler and Gertner 2002; Kotler et al. 1997; Rawson 2007). A nation’s international political actions have potential impacts on the way that foreign individuals perceive it (Rawson 2007). A country’s overall political image could result in both positive and negative perceptions by people in different regions (Nye 2004). Therefore, countries start to employ public diplomacy strategies to alleviate negative images or boost positive associations of a nation with its international audiences (Melissen 2005). *The Wall Street Journal* and the Heritage Foundation created the Economic Freedom Index that incorporates 10 economic factors such as business freedom, trade freedom, monetary freedom, freedom from government, fiscal freedom, property rights, investment freedom, financial freedom, freedom from corruption, and labor freedom. The EFI uses data from the World Bank, the International Monetary Fund, and the Economist Intelligence Unit. The value of this index ranges from 0 to 100, where 0 represents the minimum level of freedom (www.heritage.org). The higher the index for a country, the more open it is. This dissertation includes the variable EFI in the model to denote political factors.
**Dependent Variables**

Economic Factor—Tourism, Exports and Foreign Direct Investment

The purpose of nation branding is not only to promote positive destination image in order to attract more visitors in general (Blain et al. 2005), and foreign tourists in particular, but also to increase exports and encourage foreign direct investment (Anholt 2003; Dzenovska 2004; Florek and Conejo 2006). Specifically, this dissertation defines tourism in terms of FVISITOR, the number of foreign visitors to a country in a calendar year; exports as EXP, the U.S. dollar value of a country’s total exports in a calendar year; and foreign direct investment as FDI, the U.S. dollar value of the foreign direct investment inflows to a country in a calendar year.

**Moderating Variable**

Nation Brand

Nation branding strategies intend to promote a positive nation image for a country and its people, to establish a nation’s brand identity, to attract tourists, to increase the exports of products, and to increase foreign direct investment (Anholt 2003; Dinnie 2008; Dzenovska 2004; Florek and Conejo 2006). However, a country’s geography, history, art and music, number of famous citizens, product brands, stereotypes, and other factors also have a strong impact on its national image (Kotler and Gertner 2002; Papadopoulos and Heslop 2002). Since each country has different historical and economic backgrounds, nation branding strategies vary among countries. In general, developed countries have better country images than developing countries and fare better in terms of investment and business. Developing countries usually face more challenges than developed countries, such as inadequacy of resources for an adequate branding...
program, a much smaller asset base, and lower international attention (Florek and Conejo 2006). Therefore, this dissertation takes nation brand as the moderating variable, which impacts the relationship between various independent variables and the economic outcomes.

Anholt-GfK Roper’s 2008 nation brands index$^{SM}$ (GfK 2008) is incorporated into the model as a moderating variable (nation brand) to test its impact on the relationship between the dependent variables and the independent variables. The nation brands index (NBI) is a composite score of “people’s perceptions of a country across the six areas of national competence,” which includes tourism, exports, people, governance, cultural heritage, investment, and immigration (Anholt 2005, p. 296). Anholt-GfK Roper’s 2008 nation brands index$^{SM}$ was collected for 50 countries using 20,000 adults in 20 countries from July 15, 2008 to August 4, 2008 (GfK 2008). The NBI score ranges from 0 to 100, where 100 represents the best image and reputation. The higher the score a country has, the higher its image and reputation. In this study’s model, the effect of nation brand is captured in two ways. First, in order to measure the direct effect of nation brand on exports, the “full model” includes the variable NBI. Second, in order to measure the indirect effect of nation brand on export, the “full model” also includes a complete set of interaction variables, which measure the influence that nation brand has on each factor’s marginal effect on the dependent variables. These interaction variables were created by multiplying NBI by each independent variable described above.

The Theoretical Model and Estimation Technique

This dissertation uses a panel data model to analyze the relationship between the independent variables and the dependent variables that measure the economic outcomes of nation branding. Panel data analysis is a type of longitudinal data analysis that studies a group of
subjects over time. The panel data model offers two main advantages over pure cross-sectional or pure time-series data alone. First, it is able to simultaneously analyze the factors that affect nation branding both over time and across countries. This also allows the capture of any cross-country effects that may exist over time. Second, the panel data model is able to explicitly capture non-measurable factors, or “unobserved effects,” that differentiate one country from another or one time period from another. The unobserved effects can be captured by using either a fixed-effects model, where unobserved effects are viewed as simple autonomous shifts of the regression function, or a random-effects model, where unobserved effects are viewed as random variables. This analysis makes use of the random effects model since the fixed effects model cannot include time-invariant regressors, which are present in this study. In particular, the variables that measure culture, reputable brands, reputable industries, and geography do not vary over time in the data set. This dissertation estimates both one-way random effects models, in which the unobserved effects are assumed to exist only in the cross-section dimension, and two-way random effects models, in which the unobserved effects are assumed to exist in both the cross-section dimension and the time dimension.

Since there are three variables that measure the economic outcomes of nation branding, this dissertation will build three models: one for which exports (EXP) is the dependent variable, one for which foreign direct investment (FDI) is the dependent variable, and one for which tourism (FVISITOR) is the dependent variable. The three one-way random effects panel data models are shown below, where all variables are as described in the section above.

\[
\text{(1)} \quad \text{EXP}_{it} = \alpha_{i} + \beta_{11}\text{CULTURE}_{i} + \beta_{12}\text{GDPPC}_{it} + \beta_{13}\text{BRAND}_{i} + \beta_{14}\text{INDUSTRY}_{i} + \\
\beta_{15}\text{INFRA}_{it} + \beta_{16}\text{NATRES}_{i} + \beta_{17}\text{EFI}_{it} + \mu_{i} + \epsilon_{it}
\]
The three two-way random effects panel data models are shown below, where all variables are as described in the section above.

(2) $\text{FDI}_{it} = \alpha_2 + \beta_{21}\text{CULTURE}_i + \beta_{22}\text{GDPPC}_{it} + \beta_{23}\text{BRAND}_i + \beta_{24}\text{INDUSTRY}_i + \beta_{25}\text{INFRA}_{it}$

$+ \beta_{26}\text{NATRES}_i + \beta_{27}\text{EIF}_{it} + \mu_{i2} + \epsilon_{it2}$

(3) $\text{FVISITOR}_{it} = \alpha_3 + \beta_{31}\text{CULTURE}_i + \beta_{32}\text{GDPPC}_{it} + \beta_{33}\text{BRAND}_i + \beta_{34}\text{INDUSTRY}_i +$

$\beta_{35}\text{INFRA}_{it} + \beta_{36}\text{NATRES}_i + \beta_{37}\text{EIF}_{it} + \mu_{i3} + \epsilon_{it3}$

(4) $\text{EXP}_{it} = \alpha_4 + \beta_{41}\text{CULTURE}_i + \beta_{42}\text{GDPPC}_{it} + \beta_{43}\text{BRAND}_i + \beta_{44}\text{INDUSTRY}_i +$

$\beta_{45}\text{INFRA}_{it} + \beta_{46}\text{NATRES}_i + \beta_{47}\text{EIF}_{it} + \mu_{i4} + \nu_{i4} + \epsilon_{it4}$

(5) $\text{FDI}_{it} = \alpha_5 + \beta_{51}\text{CULTURE}_i + \beta_{52}\text{GDPPC}_{it} + \beta_{53}\text{BRAND}_i + \beta_{54}\text{INDUSTRY}_i + \beta_{55}\text{INFRA}_{it}$

$+ \beta_{56}\text{NATRES}_i + \beta_{57}\text{EIF}_{it} + \mu_{i5} + \nu_{i5} + \epsilon_{it5}$

(6) $\text{FVISITOR}_{it} = \alpha_6 + \beta_{61}\text{CULTURE}_i + \beta_{62}\text{GDPPC}_{it} + \beta_{63}\text{BRAND}_i + \beta_{64}\text{INDUSTRY}_i +$

$\beta_{65}\text{INFRA}_i + \beta_{66}\text{NATRES}_{it} + \beta_{67}\text{EIF}_{it} + \mu_{i6} + \nu_{i6} + \epsilon_{it6}$

In these equations, the term $\mu_i$ is a random variable that captures the unobserved effect that differentiates each country “$i$” from each other, but are constant over time. For example, this variable might measure country-specific social norms, cultural mores, or customs that differ from country to country and enhance or detract from the “ability” of each country to establish or project a national brand. Similarly, the term $\nu_t$ is a random variable that captures the unobserved effects that differentiate one year from another but are the same for each country in a given year. For example, this variable might capture the “mood” that is created each year across the globe as a result of important world events or occurrences that shape world opinions.

There is one common intercept, $\alpha$, for all observations in both the one-way and two-way random effects panel data models. The variable $\epsilon_{it}$ is a randomly distributed error term. Since the three terms $\epsilon_{its}, \mu_{i},$ and $\nu_{t}$ all are unobservable random variables, it is conventional to combine
these three terms to create a “composite” error term in the random effects model. In the case of
the one-way random effects model, the composite error term is: $(e_{it} + \mu_i) \equiv \omega_{it}$. In the case of the
two-way random effects model, we have: $(e_{it} + \mu_i + \nu_t) \equiv \omega_{it}$. It is clear that this “composite” error
term is characterized by a non-ideal variance-covariance matrix and so the use of ordinary least
squares (OLS) would produce inefficient estimates in this case. Ideal estimates can be obtained
through the use of feasible generalized least squares (FGLS). FGLS is equivalent to performing
OLS on a weighted version of the regression model, where the weight is a consistent estimate of
the non-ideal portion of the original model’s variance-covariance matrix. The following chapter
explains the details of the data and the estimation procedure.
### Table 1: Variables in the Econometric Models

<table>
<thead>
<tr>
<th>Notations in the Model</th>
<th>Factors Denoted</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXP</td>
<td>Exports</td>
<td>Total exports (in billions of US$) from a specific country in a calendar year.</td>
</tr>
<tr>
<td>FVISITOR</td>
<td>Tourism</td>
<td>The number of foreign visitors (in millions) to a specific country in a calendar year.</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
<td>The total foreign investment (in billions of US$) to a specific country in a calendar year.</td>
</tr>
<tr>
<td>CULTURE</td>
<td>Culture</td>
<td>Hofstede’s (1980) individualism and collectivism dimension which ranges from 0 to 100. The closer the value is to 100, the more individualistic the country’s culture.</td>
</tr>
<tr>
<td>GDPPC</td>
<td>Economics</td>
<td>GDP Per Capita, in thousands of US$, denoting the level of economic development of a country.</td>
</tr>
<tr>
<td>BRAND</td>
<td>Economics</td>
<td>The number of perceived reputable brands from a country.</td>
</tr>
<tr>
<td>INDUSTRY</td>
<td>Economics</td>
<td>The number of perceived reputable industries from a country.</td>
</tr>
<tr>
<td>INFRA</td>
<td>Infrastructure</td>
<td>The communication infrastructure of a country.</td>
</tr>
<tr>
<td>NATRES</td>
<td>Geography</td>
<td>The number of commercial natural resources of a country.</td>
</tr>
<tr>
<td>EFI</td>
<td>Politics</td>
<td>The Economic Freedom Index, which ranges from 0 to 100, where 0 represents the minimum freedom.</td>
</tr>
<tr>
<td>α</td>
<td>Common Intercept</td>
<td>A measure of the autonomous value of the dependent variable for all observations in the sample (for both the one-way and two-way random-effects models).</td>
</tr>
<tr>
<td>µ&lt;sub&gt;i&lt;/sub&gt;</td>
<td>Random Variable</td>
<td>The unobserved effect that differentiates one country “i” from another, but are constant over time.</td>
</tr>
<tr>
<td>ν&lt;sub&gt;t&lt;/sub&gt;</td>
<td>Random Variable</td>
<td>The unobserved effects that differentiate one year from another, but are the same for each country in a given year.</td>
</tr>
<tr>
<td>ε&lt;sub&gt;it&lt;/sub&gt;</td>
<td>Error Term</td>
<td>The random component of the dependent variable in each model.</td>
</tr>
</tbody>
</table>
CHAPTER 4
MODEL DEVELOPMENT AND RESULTS

Introduction

Chapter 4 has two objectives. First, it explains the two studies that were involved in the development of the econometric models and their results. The first study is a pretest of the panel data model using 13 countries with the ensuing one-way random effect model shown to be the “best” model. The second study uses 24 countries to build the final panel data model with Anholt’s nation brand index (NBI) as the moderator. Second, the hypotheses proposed in Chapter 2 are tested, and the results are discussed.

Study I: Pretest of the Panel Data Model

Data Sources and the Countries

Archival data were used for the economic factors such as the levels of economic development, tourism, exports, and foreign direct investment of a country, as well as the infrastructural, geographical, political, and cultural factors. The data sources include databases from the World Development Indicators (WDI), The Wall Street Journal, and the Heritage Foundation. The 13 countries used in this analysis were those that were identified as having hosted one or more of the five major world events during the period 1995-2006, including the FIFA (e.g. Fédération Internationale de Football Association) World Cup, the Summer Olympic Games, the Winter Olympic Games, the World’s Fair, and the Commonwealth Games. Since
countries take advantage of these world events to promote their national images, this study argues that these world events serve as the implementation platform for nation branding strategies. Based on the above criteria, the countries selected were Australia, China, England, France, Germany, Greece, Italy, Japan, Malaysia, Portugal, South Korea, Thailand, and the United States. In addition, a survey was administered to collect data on consumers’ perceived reputable brands from each of these 13 countries.

**Pretest Model and the Results**

Three potential variables were proposed to measure communication infrastructure, including the number of Internet users, the number of mobile phone users, and the number of phone subscribers. After collecting data on these three variables, a correlation analysis was run to identify the single communication factor that was the most highly correlated with each of the three dependent variables of the analysis. The result of this correlation analysis (see Table 2) indicates that the variable “number of Internet users” (NetUsers) is most highly correlated with both exports \(r = 0.77\) and foreign direct investment \(r = 0.66\). The variable “number of phone subscribers” (PhoneSub) is most highly correlated with tourism \(r = 0.40\). As a result, NetUsers is used to represent the infrastructure factor in the model whose dependent variable is exports, as well as that whose dependent variable is foreign direct investment, whereas PhoneSub is used in the model whose dependent variable is tourism.

Table 3 reports the descriptive statistics over the 12 year period from 1995 to 2006 across the independent and dependent variables. A notable outlier is Australia: it had a minimum value of foreign direct investment inflows (FDI) in 2005 of negative $35.6 billion. This anomaly
warrants additional investigation. The United States had the maximum value of foreign direct investment inflow in 2000, which is $321.27 billion. Greece had the lowest value of total exports among the 13 countries in 1995 with $22.52 billion, whereas Germany had the largest value of total exports (EXP) in 2006 with $1,305 billion. In addition, France attracted 79.08 million foreign visitors (FVISITOR) in 2006, the maximum number for foreign travelers among the 13

Table 2: Correlation Analysis between Communication Factors and Dependent Variables

<table>
<thead>
<tr>
<th></th>
<th>Export</th>
<th>FDI</th>
<th>Tourism</th>
</tr>
</thead>
<tbody>
<tr>
<td>NetUsers</td>
<td>0.77*</td>
<td>0.61*</td>
<td>0.35*</td>
</tr>
<tr>
<td>Mphone</td>
<td>0.61*</td>
<td>0.42*</td>
<td>0.36*</td>
</tr>
<tr>
<td>PhoneSub</td>
<td>0.67*</td>
<td>0.50*</td>
<td>0.40*</td>
</tr>
</tbody>
</table>

* denotes the correlations are significant at p <.0001

among the 13 countries in 1995 with $22.52 billion, whereas Germany had the largest value of total exports (EXP) in 2006 with $1,305 billion. In addition, France attracted 79.08 million foreign visitors (FVISITOR) in 2006, the maximum number for foreign travelers among the 13

Table 3: Descriptive Statistics of Dependent and Independent Variables

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Sum</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports</td>
<td>154</td>
<td>343.03</td>
<td>310.43</td>
<td>52,827</td>
<td>22.52</td>
<td>1,305.00</td>
</tr>
<tr>
<td>FDI</td>
<td>155</td>
<td>31.29</td>
<td>52.07</td>
<td>4,850</td>
<td>(35.60)</td>
<td>321.27</td>
</tr>
<tr>
<td>Tourism</td>
<td>156</td>
<td>22.25</td>
<td>19.75</td>
<td>3,471</td>
<td>3.35</td>
<td>79.08</td>
</tr>
<tr>
<td>GDPPC</td>
<td>156</td>
<td>19.40</td>
<td>12.05</td>
<td>3,027</td>
<td>0.60</td>
<td>43.97</td>
</tr>
<tr>
<td>NATRES</td>
<td>156</td>
<td>12.85</td>
<td>5.01</td>
<td>2,004</td>
<td>2.00</td>
<td>19.00</td>
</tr>
<tr>
<td>EFI</td>
<td>156</td>
<td>67.05</td>
<td>7.48</td>
<td>10,460</td>
<td>51.32</td>
<td>81.14</td>
</tr>
<tr>
<td>NetUsers</td>
<td>156</td>
<td>24.47</td>
<td>40.17</td>
<td>3,793</td>
<td>0.03</td>
<td>210.20</td>
</tr>
<tr>
<td>PhoneSub</td>
<td>156</td>
<td>91.43</td>
<td>132.15</td>
<td>14,264</td>
<td>3.98</td>
<td>828.84</td>
</tr>
<tr>
<td>CULTURE</td>
<td>156</td>
<td>51.62</td>
<td>28.74</td>
<td>5,052</td>
<td>15.00</td>
<td>91.00</td>
</tr>
<tr>
<td>BRAND</td>
<td>156</td>
<td>10.62</td>
<td>8.16</td>
<td>1,656</td>
<td>1.00</td>
<td>27.00</td>
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<tr>
<td>INDUSTRY</td>
<td>156</td>
<td>5.54</td>
<td>4.46</td>
<td>864</td>
<td>1.00</td>
<td>16.00</td>
</tr>
</tbody>
</table>

Note: Exports and FDI are in billions US $; Tourism is in millions; GDPPC is in thousands; NATRES refers to the number of commercial natural resources that each country has; EFI refers to Economic Freedom Index and ranges from 0 to 100; NetUsers is the number of Internet users in each country, which is in millions; PhoneSub refers to the number of line phone subscribers, which is in millions; CULTURE ranges from 1 to 100, with 100 indicating the most individualistic country; BRAND is the number of reputable brands each country has; INDUSTRY is the number of reputable industries in a country.
countries. On the other hand, Japan had only 3.35 millions foreign visitors in 1995, which is the minimum number of foreign travelers among the 13 countries during the same period of time.

Among the 13 countries, China had the lowest per capita Gross Domestic Product (GDPPC) of $600 in 1995 whereas the United States had the highest value of $ 43,970 in 2006. Japan has only two kinds of commercial natural resources (NATRES) while France has 19, which is the highest among the 13 countries. China had the lowest score on the Economic Freedom Index (EFI) in 1996 (51.32), whereas the U.S. had the highest score (81.14) in 2006. Malaysia had the lowest number of Internet users (NetUsers) in 1995 (0.03 million), whereas the U.S. had the largest number of Internet users in 2006 (210.2 million). Portugal had the lowest number of phone subscribers (PhoneSub) in 1995 (3.98 million), whereas China had the largest number of phone subscribers in 2006 (828.84 million). China has the most collectivistic culture with a Hofstede score of 15, whereas the U.S. has the most individualistic culture with a score of 91. Both Portugal and Thailand had only one perceived reputable brand while the U.S. was perceived to have the highest number of reputable brands ($n = 27$). Malaysia, Portugal and Thailand were perceived to have only one reputable industry while the U.S. had the highest number of perceived reputable industries ($n = 16$).

The results of estimation of the one-way and two-way random effects models indicate that the one-way model fits better than the two-way model. For example, the R-square statistics of the one-way models are much higher than those of the two-way models. In the model with exports (EXP) as the dependent variable, the R-square statistic of the one-way model ($R^2 = 0.649$) is higher than that of the two-way model ($R^2 = 0.485$). In addition, the standard errors of the parameter estimates for per capita GDP ($SE_{GDPPC} = 0.90$) and the number of Internet users ($SE_{NetUsers} = 0.20$) in the one-way model are much less than those in two-way model ($SE_{GDPPC} =$

52
Table 4: One-Way and Two-Way Random Effects Panel Data Model Estimates for EXP

<table>
<thead>
<tr>
<th>Models</th>
<th>Variables</th>
<th>Estimates</th>
<th>Std.Error</th>
<th>t value</th>
<th>Sig.</th>
<th>R-square</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-way</td>
<td>Intercept</td>
<td>(81.92)</td>
<td>237.50</td>
<td>(0.34)</td>
<td>0.731</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GDPPC</td>
<td>8.82</td>
<td>1.77</td>
<td>4.98</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NATRES</td>
<td>5.62</td>
<td>12.27</td>
<td>0.46</td>
<td>0.647</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EFI</td>
<td>1.24</td>
<td>2.90</td>
<td>0.43</td>
<td>0.669</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NetUsers</td>
<td>3.49</td>
<td>0.30</td>
<td>11.70</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CULTURE</td>
<td>(1.66)</td>
<td>3.36</td>
<td>(0.49)</td>
<td>0.623</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BRAND</td>
<td>9.82</td>
<td>17.85</td>
<td>0.55</td>
<td>0.583</td>
<td></td>
</tr>
<tr>
<td></td>
<td>INDUSTRY</td>
<td>0.71</td>
<td>30.72</td>
<td>0.02</td>
<td>0.982</td>
<td>0.645</td>
</tr>
<tr>
<td>Two-way</td>
<td>Intercept</td>
<td>(344.00)</td>
<td>273.90</td>
<td>(1.26)</td>
<td>0.211</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GDPPC</td>
<td>(0.12)</td>
<td>2.28</td>
<td>(0.05)</td>
<td>0.959</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NATRES</td>
<td>4.35</td>
<td>17.41</td>
<td>0.25</td>
<td>0.803</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EFI</td>
<td>6.48</td>
<td>2.87</td>
<td>2.26</td>
<td>0.025</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NetUsers</td>
<td>3.28</td>
<td>0.31</td>
<td>10.61</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CULTURE</td>
<td>(0.98)</td>
<td>4.77</td>
<td>(0.21)</td>
<td>0.837</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BRAND</td>
<td>24.40</td>
<td>25.51</td>
<td>0.96</td>
<td>0.340</td>
<td></td>
</tr>
<tr>
<td></td>
<td>INDUSTRY</td>
<td>(14.26)</td>
<td>43.54</td>
<td>(0.33)</td>
<td>0.744</td>
<td>0.485</td>
</tr>
</tbody>
</table>

Table 5: One-Way and Two-Way Random Effects Panel Data Model Estimates for FDI

<table>
<thead>
<tr>
<th>Models</th>
<th>Variables</th>
<th>Estimates</th>
<th>Std.Error</th>
<th>t value</th>
<th>Sig.</th>
<th>R-square</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-way</td>
<td>Intercept</td>
<td>23.85</td>
<td>78.54</td>
<td>0.30</td>
<td>0.762</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GDPPC</td>
<td>0.70</td>
<td>0.70</td>
<td>1.00</td>
<td>0.320</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NATRES</td>
<td>2.11</td>
<td>2.65</td>
<td>0.79</td>
<td>0.428</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EFI</td>
<td>(0.86)</td>
<td>1.10</td>
<td>(0.78)</td>
<td>0.439</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NetUsers</td>
<td>0.24</td>
<td>0.12</td>
<td>2.02</td>
<td>0.045</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CULTURE</td>
<td>(0.46)</td>
<td>0.73</td>
<td>(0.62)</td>
<td>0.536</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BRAND</td>
<td>(0.83)</td>
<td>3.84</td>
<td>(0.21)</td>
<td>0.830</td>
<td></td>
</tr>
<tr>
<td></td>
<td>INDUSTRY</td>
<td>9.10</td>
<td>6.70</td>
<td>1.36</td>
<td>0.176</td>
<td>0.135</td>
</tr>
<tr>
<td>Two-way</td>
<td>Intercept</td>
<td>34.13</td>
<td>77.37</td>
<td>0.44</td>
<td>0.660</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GDPPC</td>
<td>1.10</td>
<td>0.79</td>
<td>1.40</td>
<td>0.165</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NATRES</td>
<td>2.17</td>
<td>2.59</td>
<td>0.84</td>
<td>0.403</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EFI</td>
<td>(1.06)</td>
<td>1.10</td>
<td>(0.97)</td>
<td>0.335</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NetUsers</td>
<td>0.22</td>
<td>0.12</td>
<td>(0.72)</td>
<td>0.068</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CULTURE</td>
<td>(0.52)</td>
<td>0.72</td>
<td>(0.72)</td>
<td>0.471</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BRAND</td>
<td>(1.36)</td>
<td>3.80</td>
<td>(0.36)</td>
<td>0.721</td>
<td></td>
</tr>
<tr>
<td></td>
<td>INDUSTRY</td>
<td>9.84</td>
<td>6.54</td>
<td>1.50</td>
<td>0.135</td>
<td>0.131</td>
</tr>
</tbody>
</table>
1.02 and $SE_{NetUsers} = 0.22$), indicating greater accuracy in the one-way model (Table 4). More, the parameter estimate for per capita GDP (GDPPC) in the one-way model is positive, which is consistent with the literature. However, the parameter estimate for GDPPC in two-way model is negative, which is not consistent with the literature (Table 4).

In the model for which foreign direct investment (FDI) is the dependent variable, the R-square statistic of the one-way model ($R^2 = 0.135$) is much higher than that of the two-way model ($R^2 = 0.131$). The variable the number of Internet users (NetUsers) in the one-way model is significant at the 95% level of confidence, while that in two-way model is only significant at the 93% level of confidence (Table 5).

In the model for which tourism (FVISITOR) is the dependent variable, the R-square statistic of the one-way model ($R^2 = 0.637$) is also much higher than that of the two-way model ($R^2 = 0.555$). In addition, in the one-way model, the standard errors of the parameter estimates for
per capita GDP ($SE_{GDPPC} = 0.05$), the number of commercial natural resources ($SE_{NATRES} = 0.78$), the number of reputable brands a country has ($SE_{BRAND} = 1.14$), and the number of reputable industries in a country ($SE_{INDUSTRY} = 1.95$) are much less than those in two-way model ($SE_{GDPPC} = 0.07$, $SE_{NATRES} = 0.81$, $SE_{BRAND} = 1.18$, and $SE_{INDUSTRY} = 2.02$), indicating greater accuracy in the one-way model (see Table 6). The variable Gross Domestic Products Per Capita (GDPPC) in the one-way model is significant at the 99% confidence level while that in the two-way model is not significant, which is not consistent with the literature (Table 6).

As a result of the above findings, subsequent analysis is restricted to the one-way random-effects model. The feasible generalized least squares (FGLS) estimates for these models are presented below. Further estimation details are provided in Table 7.

\begin{equation}
(7) \quad \hat{\text{EXP}}_{it} = -81.92 - 1.66 \text{CULTURE}_i + 8.82 \text{GDPPC}_{it} + 9.82 \text{BRAND}_i + 0.71 \text{INDUSTRY}_i + 3.49 \text{NetUsers}_{it} + 5.62 \text{NATRES}_i + 1.24 \text{EFI}_{it}
\end{equation}

\begin{equation}
(8) \quad \hat{\text{FDI}}_{it} = 23.85 - 0.46 \text{CULTURE}_i + 0.70 \text{GDPPC}_{it} - 0.83 \text{BRAND}_i + 9.10 \text{INDUSTRY}_i + 0.24 \text{NetUsers}_{it} + 2.11 \text{NATRES}_i - 0.86 \text{EFI}_{it}
\end{equation}

\begin{equation}
(9) \quad \hat{\text{FVISITOR}}_{it} = 5.28 - 0.23 \text{CULTURE}_i + 0.16 \text{GDPPC}_{it} + 3.50 \text{BRAND}_i - 4.54 \text{INDUSTRY}_i + 0.03 \text{PhoneSub}_{it} + 2.92 \text{NATRES}_i - 0.40 \text{EFI}_{it}
\end{equation}

It is notable that in the model for which exports (EXP) is the dependent variable, only GDPPC and NetUsers are significant at the 99% level of confidence, while the other variables are not statistically significant. In the model for which foreign direct investment (FDI) is the dependent variable, only NetUsers is significant at the 95% level of confidence, while the other variables are not statistically significant. On the other hand, in the model for which tourism (FVISITOR) is the dependent variable, all variables are significant at the 95% level of confidence except the variable culture (CULTURE), which is not statistically significant ($p = \ldots$
0.29). The details of the implications of the estimated results will be discussed in the next section.

Table 7: One-Way Random Effects Panel Data Model Estimates for All Dependent Variables

<table>
<thead>
<tr>
<th>Models</th>
<th>Variables</th>
<th>Estimates</th>
<th>Std.Error</th>
<th>t value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXP</td>
<td>Intercept</td>
<td>(81.92)</td>
<td>237.50</td>
<td>(0.34)</td>
<td>0.731</td>
</tr>
<tr>
<td></td>
<td>GDPPC</td>
<td>8.82</td>
<td>1.77</td>
<td>4.98</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>NATRES</td>
<td>5.62</td>
<td>12.27</td>
<td>0.46</td>
<td>0.647</td>
</tr>
<tr>
<td></td>
<td>EFI</td>
<td>1.24</td>
<td>2.90</td>
<td>0.43</td>
<td>0.669</td>
</tr>
<tr>
<td></td>
<td>NetUsers</td>
<td>3.49</td>
<td>0.30</td>
<td>11.70</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>CULTURE</td>
<td>(1.66)</td>
<td>3.36</td>
<td>(0.49)</td>
<td>0.623</td>
</tr>
<tr>
<td></td>
<td>BRAND</td>
<td>9.82</td>
<td>17.85</td>
<td>0.55</td>
<td>0.583</td>
</tr>
<tr>
<td></td>
<td>INDUSTRY</td>
<td>0.71</td>
<td>30.72</td>
<td>0.02</td>
<td>0.982</td>
</tr>
<tr>
<td>FDI</td>
<td>Intercept</td>
<td>23.85</td>
<td>78.54</td>
<td>0.30</td>
<td>0.762</td>
</tr>
<tr>
<td></td>
<td>GDPPC</td>
<td>0.70</td>
<td>0.70</td>
<td>1.00</td>
<td>0.320</td>
</tr>
<tr>
<td></td>
<td>NATRES</td>
<td>2.11</td>
<td>2.65</td>
<td>0.79</td>
<td>0.428</td>
</tr>
<tr>
<td></td>
<td>EFI</td>
<td>(0.86)</td>
<td>1.10</td>
<td>(0.78)</td>
<td>0.439</td>
</tr>
<tr>
<td></td>
<td>NetUsers</td>
<td>0.24</td>
<td>0.12</td>
<td>2.02</td>
<td>0.045</td>
</tr>
<tr>
<td></td>
<td>CULTURE</td>
<td>(0.46)</td>
<td>0.73</td>
<td>(0.62)</td>
<td>0.536</td>
</tr>
<tr>
<td></td>
<td>BRAND</td>
<td>(0.83)</td>
<td>3.84</td>
<td>(0.21)</td>
<td>0.830</td>
</tr>
<tr>
<td></td>
<td>INDUSTRY</td>
<td>9.10</td>
<td>6.70</td>
<td>1.36</td>
<td>0.176</td>
</tr>
<tr>
<td>FVISOR</td>
<td>Intercept</td>
<td>5.28</td>
<td>10.93</td>
<td>0.48</td>
<td>0.629</td>
</tr>
<tr>
<td></td>
<td>GDPPC</td>
<td>0.16</td>
<td>0.05</td>
<td>3.10</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>NATRES</td>
<td>2.92</td>
<td>0.78</td>
<td>3.73</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>EFI</td>
<td>(0.40)</td>
<td>0.09</td>
<td>(4.40)</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>NetUsers</td>
<td>0.03</td>
<td>0.00</td>
<td>13.55</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>CULTURE</td>
<td>(0.23)</td>
<td>0.21</td>
<td>(1.07)</td>
<td>0.286</td>
</tr>
<tr>
<td></td>
<td>BRAND</td>
<td>3.50</td>
<td>1.14</td>
<td>3.07</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>INDUSTRY</td>
<td>(4.54)</td>
<td>1.95</td>
<td>(2.32)</td>
<td>0.022</td>
</tr>
</tbody>
</table>

Study II: The Final Panel Data Model

Data Sources and Countries

In study II, consistent with the study I, archival data were used for economic factors such as the levels of economic development, tourism, exports, and foreign direct investment of a
country, as well as the infrastructural, geographical, political, and cultural factors. The same data sources were used (e.g. World Development Indicators (WDI), International Monetary Fund, The Wall Street Journal and The Heritage Foundation). The same survey was used to collect data for the number of reputable brands and reputable industries. However, the Anholt-GfK Roper nation brands indexSM (GfK 2008) was incorporated into the model as a moderating variable to test its impact on the relationship between the dependent variables and the independent variables.

More countries were included in this analysis. A total of 24 nations were analyzed to build, develop, and validate the panel data model. The economic, political, and infrastructural data for each country were collected for the period of 1995-2006. To be consistent with Anholt-GfK Roper nation brands indexSM, this dissertation tries to achieve a regional balance as well as a balance between developed and developing countries (GfK 2008). The 24 countries shown in Table 8 were selected from six regions: North America, South America, Asia, Europe, Africa, and Australia. Countries were selected so as to include a collection of different classification types (advanced economy, emerging economy, and developing economy) as defined by the International Monetary Fund (www.imf.org). Table 9 lists the countries in each type of classifications. Based on this criterion and the data availability of all factors for each country, the countries selected were Australia, Brazil, Canada, China, Denmark, England, France, Germany, India, Italy, Japan, Mexico, Malaysia, New Zealand, Norway, Peru, Russia, Singapore, South Africa, South Korea, Spain, Thailand, Turkey, and the United States.
Table 8: 24 Countries Listed by Regions

<table>
<thead>
<tr>
<th>Region</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>Canada, Mexico, United States</td>
</tr>
<tr>
<td>South America</td>
<td>Brazil, Peru</td>
</tr>
<tr>
<td>Asia</td>
<td>China, India, Japan, Malaysia, Singapore, South Korea, Thailand</td>
</tr>
<tr>
<td>Europe</td>
<td>Denmark, England, France, Germany, Italy, Norway, Russia, Spain, Turkey</td>
</tr>
<tr>
<td>Africa</td>
<td>South Africa</td>
</tr>
<tr>
<td>Australia</td>
<td>Australia, New Zealand</td>
</tr>
</tbody>
</table>

Table 9: 24 Countries Listed in Terms of IMF’s Classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Economies</td>
<td>Australia, Canada, Denmark, England, France, Germany, Italy, Japan, New Zealand, Norway, Singapore, South Korea, Spain, United States</td>
</tr>
<tr>
<td>Emerging and Developing Economies</td>
<td>Brazil, China, India, Mexico, Malaysia, Peru, Russia, South Africa, Thailand, Turkey</td>
</tr>
</tbody>
</table>

Final Model Development and the Results

As in the first study, correlation analysis was used to identify the single communication factor that was the most highly correlated with each of the three dependent variables of the analysis. Consistent with the pretest analysis, the results of this correlation analysis indicate that, among the three possible communication infrastructure variables, the variable “number of Internet users” (NetUsers) is the most highly correlated with both exports ($r = 0.75$) and foreign direct investment ($r = 0.61$), while the variable “number of phone subscribers” (PhoneSub) is the most highly correlated with tourism ($r = 0.42$). The Table 10 illustrates the correlation analysis results. Accordingly, as previously done in study one, NetUsers is used to represent the factor infrastructure in the model whose dependent variable is exports (EXP) as well as that whose
dependent variable is foreign direct investment (FDI), whereas PhoneSub is used in the model whose dependent variable is tourism (FVISITOR).

The descriptive statistics (see Table 11) show the general information on each variable for the 12 year period 1995-2006. It is noticeable that among the 24 countries, Australia still had the minimum value of foreign direct investment inflows (FDI) in 2005, which is negative $35.6 billion. This is unusual, and additional investigation is needed to see what happened in Australia in that year. The United States had the maximum value of foreign direct investment inflow in 2000, a value of $321.27 billion. In addition, Peru had the lowest value of total exports among 24 countries in 1995 with $6.76 billion. Germany had the largest value of total exports (EXP) in 2006 with $1,305 billion. France attracted 79.08 million foreign visitors (FVISITOR) in 2006, the maximum number among the 24 countries for the period of 1995-2006, while Peru had only 0.48 million, the minimum number among these countries.

Among the 24 countries, India had the lowest per capita Gross Domestic Product (GDPPC) of $382 in 1995. Norway had the highest per capita Gross Domestic Product of $71,876 in 2006. Japan and Singapore have only two kinds of commercial natural resources (NATRES); whereas France has 19 types of commercial natural resources, which is the highest of the 24 countries. India had the lowest score on the Economic Freedom Index (EFI) in 1996.

Table 10: Correlation Analysis between Communication Factors and Dependent Variables

<table>
<thead>
<tr>
<th></th>
<th>Export</th>
<th>FDI</th>
<th>Tourism</th>
</tr>
</thead>
<tbody>
<tr>
<td>NetUsers</td>
<td>0.75*</td>
<td>0.61*</td>
<td>0.36*</td>
</tr>
<tr>
<td>Mphone</td>
<td>0.61*</td>
<td>0.44*</td>
<td>0.38*</td>
</tr>
<tr>
<td>PhoneSub</td>
<td>0.68*</td>
<td>0.53*</td>
<td>0.42*</td>
</tr>
</tbody>
</table>

* denotes the correlations are significant at p <.0001

countries in 1995 with $6.76 billion. Germany had the largest value of total exports (EXP) in 2006 with $1,305 billion. France attracted 79.08 million foreign visitors (FVISITOR) in 2006, the maximum number among the 24 countries for the period of 1995-2006, while Peru had only 0.48 million, the minimum number among these countries.

Among the 24 countries, India had the lowest per capita Gross Domestic Product (GDPPC) of $382 in 1995. Norway had the highest per capita Gross Domestic Product of $71,876 in 2006. Japan and Singapore have only two kinds of commercial natural resources (NATRES); whereas France has 19 types of commercial natural resources, which is the highest of the 24 countries. India had the lowest score on the Economic Freedom Index (EFI) in 1996.
(45.10), and Singapore had the highest score (88.90) in 2004. Peru had the lowest number of Internet users (NetUsers) in 1995 (0.01 million), and the U.S. had the largest number of Internet users in 2006 (210.2 million). Peru also had the lowest number of phone line subscribers (PhoneSub) in 1995 (1.18 million); whereas China had the largest number of phone line subscribers in 2006 (828.84 million).

China has the most collectivistic culture with a Hofstede score of 15, while the U.S. has the most individualistic culture with a score of 91. Denmark, India, Norway, Peru, Singapore, South Africa, Spain, Thailand, and Turkey had only one perceived reputable brand whereas the US was perceived to have the highest number of reputable brands \( n = 27 \).

Table 11: Descriptive Statistics of Dependent and Independent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Sum</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports</td>
<td>275</td>
<td>248.66</td>
<td>262.52</td>
<td>68,380</td>
<td>6.76</td>
<td>1,305.00</td>
</tr>
<tr>
<td>FDI</td>
<td>288</td>
<td>22.08</td>
<td>40.25</td>
<td>6,359</td>
<td>(35.60)</td>
<td>321.27</td>
</tr>
<tr>
<td>Tourism</td>
<td>287</td>
<td>17.15</td>
<td>18.15</td>
<td>4,923</td>
<td>0.48</td>
<td>79.08</td>
</tr>
<tr>
<td>GDPPC</td>
<td>288</td>
<td>17.24</td>
<td>14.19</td>
<td>4,966</td>
<td>0.38</td>
<td>71.88</td>
</tr>
<tr>
<td>NATRES</td>
<td>288</td>
<td>12.13</td>
<td>5.30</td>
<td>3,492</td>
<td>2.00</td>
<td>21.00</td>
</tr>
<tr>
<td>EFI</td>
<td>285</td>
<td>66.46</td>
<td>9.55</td>
<td>18,942</td>
<td>45.10</td>
<td>88.90</td>
</tr>
<tr>
<td>NetUsers</td>
<td>287</td>
<td>16.71</td>
<td>32.01</td>
<td>4,795</td>
<td>0.01</td>
<td>210.20</td>
</tr>
<tr>
<td>PhoneSub</td>
<td>288</td>
<td>64.40</td>
<td>104.66</td>
<td>18,548</td>
<td>1.18</td>
<td>828.84</td>
</tr>
<tr>
<td>CULTURE</td>
<td>288</td>
<td>52.29</td>
<td>25.56</td>
<td>15,060</td>
<td>15.00</td>
<td>91.00</td>
</tr>
<tr>
<td>BRAND</td>
<td>288</td>
<td>6.46</td>
<td>7.40</td>
<td>1,860</td>
<td>1.00</td>
<td>27.00</td>
</tr>
<tr>
<td>INDUSTRY</td>
<td>288</td>
<td>3.54</td>
<td>3.79</td>
<td>1,020</td>
<td>1.00</td>
<td>16.00</td>
</tr>
<tr>
<td>NBI</td>
<td>288</td>
<td>58.33</td>
<td>6.68</td>
<td>16,800</td>
<td>49.10</td>
<td>67.40</td>
</tr>
</tbody>
</table>

Note: Exports and FDI are in billions US $; Tourism is in millions; GDPPC is in thousands; NATRES refers to the number of commercial natural resources that each country has; EFI refers to Economic Freedom Index and ranges from 0 to 100; NetUsers is the number of Internet users in each country, which is in millions; PhoneSub refers to the number of line phone subscribers, which is in millions; CULTURE ranges from 1 to 100, with 100 indicating the most individualistic country; BRAND is the number of reputable brands each country has; INDUSTRY is the number of reputable industries in a country; NBI represents Anholt's overall Nation Brand Index in 2008.
Malaysia, Norway, Peru, Singapore, South Africa, Spain, Thailand, and Turkey had only one perceived reputable industry. The U.S. had the highest number of perceived reputable industries \((n = 16)\). Finally, when compared on Anholt’s overall Nation Brand Index (NBI) for 2008, Germany had the highest score of 67.40, corresponding to the most positive image, while Peru had the lowest score of 49.10.

The basic model without the moderator NBI was estimated first. The results of estimation of the one-way and two-way random effects models indicate that, consistent with the pretest results, the one-way model fits better than the two-way model. For example, the R-square statistics of the one-way models are much higher than those of the two-way models. In the model for which exports (EXP) is the dependent variable, the R-square statistic for the one-way model is 0.6259, while that for two-way model is 0.4573. In addition, the standard errors (SE) for the parameter estimate of per capita GDP \(SE_{GDPPC} = 0.8956\) and the number of Internet users \(SE_{NetUsers} = 0.2047\) in one-way model is much less than those in two-way model \(SE_{GDPPC} = 1.0249\) and \(SE_{NetUsers} = 0.2248\), indicating greater accuracy in the one-way model (Table 12).

In the model for which foreign direct investment (FDI) is the dependent variable, the R-square statistic of the one-way model \(R^2 =0.130\) is much higher than that of the two-way model \(R^2 =0.115\). Moreover, the standard errors for the variable NetUsers \(SE_{NetUsers} = 0.076\) and the number of well-known industries \(SE_{Industry} = 4.119\) are much less than those in two-way model \(SE_{NetUsers} = 0.081\) and \(SE_{Industry} = 4.229\), indicating greater accuracy in the one-way model (Table 13).

In the model for which tourism (FVISITOR) is the dependent variable, the R-square statistic of the one-way model \(R^2 =0.472\) is much higher than that of the two-way model \(R^2 =0.347\). Moreover, the standard errors of the parameter estimates for per capita GDP \(SE_{GDPPC}\)
= 0.036), the number of commercial natural resources ($SE_{NATRES} = 0.720$), the number of reputable brands a country has ($SE_{BRAND} = 1.258$), and the number of line phone subscribers ($SE_{PhoneSub} = 0.00246$) in the one-way model are much less than those in two-way model ($SE_{GDPPC} = 0.042$, $SE_{NATRES} = 0.747$, $SE_{BRAND} = 1.305$, and $SE_{PhoneSub} = 0.0025$), indicating greater accuracy in the one-way model. In addition, the variable GDP Per Capita (GDPPC) in the one-way model is significant at the 99% confidence level while that in the two-way model is not significant, which is not consistent with the literature (Table 14).

Table 12: One-Way and Two-Way Random Effects Panel Data Model Estimates for EXP

<table>
<thead>
<tr>
<th>Models</th>
<th>Variables</th>
<th>Estimates</th>
<th>Std.Error</th>
<th>t value</th>
<th>Sig.</th>
<th>R-square</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-way</td>
<td>Intercept</td>
<td>26.40</td>
<td>130.60</td>
<td>0.20</td>
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</tr>
<tr>
<td></td>
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<td>0.90</td>
<td>6.92</td>
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</tr>
<tr>
<td></td>
<td>NATRES</td>
<td>5.34</td>
<td>7.21</td>
<td>0.74</td>
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</tr>
<tr>
<td></td>
<td>EFI</td>
<td>0.39</td>
<td>1.38</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>NetUsers</td>
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<td>0.20</td>
<td>16.25</td>
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</tr>
<tr>
<td></td>
<td>CULTURE</td>
<td>(2.57)</td>
<td>1.67</td>
<td>(1.54)</td>
<td>0.125</td>
<td>0.626</td>
</tr>
<tr>
<td></td>
<td>BRAND</td>
<td>16.38</td>
<td>12.45</td>
<td>1.32</td>
<td>0.189</td>
<td></td>
</tr>
<tr>
<td></td>
<td>INDUSTRY</td>
<td>0.20</td>
<td>24.90</td>
<td>0.01</td>
<td>0.994</td>
<td>0.457</td>
</tr>
<tr>
<td>Two-way</td>
<td>Intercept</td>
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<td>138.8</td>
<td>0.02</td>
<td>0.988</td>
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</tr>
<tr>
<td></td>
<td>GDPPC</td>
<td>3.55</td>
<td>1.02</td>
<td>3.47</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NATRES</td>
<td>3.63</td>
<td>8.16</td>
<td>0.45</td>
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<tr>
<td></td>
<td>EFI</td>
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<td>1.35</td>
<td>0.75</td>
<td>0.453</td>
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</tr>
<tr>
<td></td>
<td>NetUsers</td>
<td>3.03</td>
<td>0.22</td>
<td>13.46</td>
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<tr>
<td></td>
<td>CULTURE</td>
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<td>1.89</td>
<td>(0.92)</td>
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<td>BRAND</td>
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<td>INDUSTRY</td>
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<td>28.23</td>
<td>(0.02)</td>
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Table 13: One-Way and Two-Way Random Effects Panel Data Model Estimates for FDI

<table>
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<tr>
<th>Models</th>
<th>Variables</th>
<th>Estimates</th>
<th>Std.Error</th>
<th>t value</th>
<th>Sig.</th>
<th>R-square</th>
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<tbody>
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<td>33.54</td>
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<td>0.939</td>
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</tr>
<tr>
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<tr>
<td></td>
<td>NATRES</td>
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<td>1.21</td>
<td>0.97</td>
<td>0.335</td>
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<td>(0.47)</td>
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<tr>
<td></td>
<td>NetUsers</td>
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<td>0.08</td>
<td>3.26</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CULTURE</td>
<td>(0.20)</td>
<td>0.29</td>
<td>(0.69)</td>
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</tr>
<tr>
<td></td>
<td>BRAND</td>
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<td>(0.50)</td>
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<td>33.49</td>
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<tr>
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<td>NATRES</td>
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<td>1.24</td>
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<td>0.45</td>
<td>(0.93)</td>
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<td>NetUsers</td>
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<td>(2.74)</td>
<td>0.007</td>
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<td>4.23</td>
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</table>

Table 14: One-Way and Two-Way Random Effects Panel Data Model Estimates for FVISITOR

<table>
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<tr>
<th>Models</th>
<th>Variables</th>
<th>Estimates</th>
<th>Std.Error</th>
<th>t value</th>
<th>Sig.</th>
<th>R-square</th>
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<tbody>
<tr>
<td>One-way</td>
<td>Intercept</td>
<td>1.79</td>
<td>10.23</td>
<td>0.18</td>
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</tr>
<tr>
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<td>GDPPC</td>
<td>0.13</td>
<td>0.04</td>
<td>3.60</td>
<td>0.000</td>
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<td>NATRES</td>
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<td>0.72</td>
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<td>0.017</td>
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</tr>
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<td>EFI</td>
<td>(0.13)</td>
<td>0.06</td>
<td>(2.27)</td>
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</tr>
<tr>
<td></td>
<td>PhoneSub</td>
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<td>0.00</td>
<td>14.11</td>
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</tr>
<tr>
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<td>0.17</td>
<td>(0.71)</td>
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<tr>
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<td>BRAND</td>
<td>2.69</td>
<td>1.26</td>
<td>2.14</td>
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<tr>
<td></td>
<td>INDUSTRY</td>
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<td>2.51</td>
<td>(1.43)</td>
<td>0.154</td>
<td>0.472</td>
</tr>
<tr>
<td>Two-way</td>
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<td>10.46</td>
<td>0.49</td>
<td>0.627</td>
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</tr>
<tr>
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<td>0.04</td>
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<tr>
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<td>0.75</td>
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<tr>
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<td>0.05</td>
<td>(3.14)</td>
<td>0.002</td>
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<tr>
<td></td>
<td>PhoneSub</td>
<td>0.03</td>
<td>0.00</td>
<td>11.18</td>
<td>0.000</td>
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<td>0.17</td>
<td>(0.55)</td>
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<tr>
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<td>(3.40)</td>
<td>2.60</td>
<td>(1.31)</td>
<td>0.192</td>
<td>0.347</td>
</tr>
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</table>
The Feasible generalized least squares (FGLS) parameter estimates for the one-way random-effects models are shown below. Further estimation details are provided in Table 15.

\[
\hat{\text{EXP}}_{it} = 26.40 - 2.60 \text{CULTURE}_{i} + 6.20 \text{GDPPC}_{it} + 16.38 \text{BRAND}_{i} \\
+ 0.20 \text{INDUSTRY}_{i} + 3.33 \text{NetUsers}_{it} + 5.34 \text{NATRES}_{i} + 0.39 \text{EFI}_{it}
\]

\[
\hat{\text{FDI}}_{it} = 2.56 - 0.20 \text{CULTURE}_{i} + 0.37 \text{GDPPC}_{it} - 1.02 \text{BRAND}_{i} \\
+ 7.41 \text{INDUSTRY}_{i} + 0.25 \text{NetUsers}_{it} + 1.17 \text{NATRES}_{i} - 0.22 \text{EFI}_{it}
\]

\[
\hat{\text{FVISITOR}}_{it} = 1.79 - 0.11 \text{CULTURE}_{i} + 0.13 \text{GDPPC}_{it} + 2.69 \text{BRAND}_{i} \\
- 3.59 \text{INDUSTRY}_{i} + 0.03 \text{PhoneSub}_{it} + 1.74 \text{NATRES}_{i} - 0.13 \text{EFI}_{it}
\]

Note that in the model for which exports (EXP) is the dependent variable, only GDPPC and NetUsers are significant at the 99% level of confidence. In the model for which foreign direct investment (FDI) is the dependent variable, only NetUsers is significant at the 99% level of confidence, and Industry is significant at the 93% confidence level. On the other hand, in the model for which tourism (FVISITOR) is the dependent variable, all variables are significant at the 95% level of confidence except the variables culture (\(p = 0.48\)) and industry (\(p = 0.15\)).

From the results of the panel data models below (Table 15), the estimated impacts of the identified factors on the dependent variables of exports, foreign direct investment and tourism can be observed. In the basic model for which export is the dependent variable, GDP per capita \((\hat{\beta}_{\text{GDPPC}} = 6.20)\), geography NATRES, the number of commercial natural resources \((\hat{\beta}_{\text{NATRES}} = 5.34)\), Economic Freedom Index \((\hat{\beta}_{\text{EFI}} = 0.39)\), communication infrastructure NetUsers, the number of Internet users \((\hat{\beta}_{\text{INF}} = 3.33)\), perceived reputable brands \((\hat{\beta}_{\text{BRAND}} = 16.38)\), and perceived reputable industry \((\hat{\beta}_{\text{IND}} = 0.20)\) were found to have positive relationships with the
dependent variable (Table 15), while culture had a negative relationship with export ($\hat{\beta}_{\text{CULTURE}} = -2.57$).

In the basic model for which foreign direct investment is the dependent variable, GDP per capita ($\hat{\beta}_{\text{GDPPC}} = 0.37$), NATRES ($\hat{\beta}_{\text{NATRES}} = 1.17$), NetUsers ($\hat{\beta}_{\text{INF}} = 0.25$), and perceived reputable industry ($\hat{\beta}_{\text{IND}} = 7.41$) were found to have positive relationships with the dependent variable (Table 15). Economic Freedom Index ($\hat{\beta}_{\text{EFI}} = -0.22$), culture ($\hat{\beta}_{\text{CULTURE}} = -0.20$), and perceived reputable brands ($\hat{\beta}_{\text{BRAND}} = -1.02$) had a negative relationship with foreign direct investment.

In the basic model for which tourism is the dependent variable, GDP per capita ($\hat{\beta}_{\text{GDPPC}} = 0.13$), NATRES ($\hat{\beta}_{\text{NATRES}} = 1.74$), PhoneSub, the number of line phone subscribers ($\hat{\beta}_{\text{INF}} = 0.03$), and perceived reputable brand ($\hat{\beta}_{\text{BRAND}} = 2.69$) were found to have positive relationships with the dependent variable (Table 15). Economic Freedom Index ($\hat{\beta}_{\text{EFI}} = -0.13$), culture ($\hat{\beta}_{\text{CULTURE}} = -0.11$), and perceived reputable industry ($\hat{\beta}_{\text{IND}} = -3.59$) had a negative relationship with tourism.

The parameter estimates of the basic model indicate the changes that occur in the dependent variables (exports, foreign direct investment, and tourism) as a result of changes in the independent variables. For example, in the model for which exports is the dependent variable, the positive parameter estimate of 5.34 for the geography factor NATRES means that one unit increase in the number of commercial natural resources will increase exports by 5.34 units (5.34 billion U.S. dollars), all else constant. Similarly, in the model for which foreign direct investment is the dependent variable, the parameter estimate of 0.37 for GDP per capita indicates that one unit (one-thousand U.S. dollars) increase in GDP per capita will increase foreign direct investment by 0.37 units (0.37 billion U.S. dollars), other factors equal. In the model for which
foreign visitors is the dependent variable, the parameter estimate of 2.69 for Brand indicates that one unit increase in the number of perceived reputable brands will increase the number of the foreign visitors by 2.69 units (2.69 million foreign visitors), all else constant.

Table 15: One-Way Random Effects Panel Data Model Estimates for All Dependent Variables

<table>
<thead>
<tr>
<th>Models</th>
<th>Variables</th>
<th>Estimates</th>
<th>Std.Error</th>
<th>t value</th>
<th>Sig.</th>
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</thead>
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<tr>
<td>EXP</td>
<td>Intercept</td>
<td>26.40</td>
<td>130.60</td>
<td>0.20</td>
<td>0.840</td>
</tr>
<tr>
<td></td>
<td>GDPPC</td>
<td>6.20</td>
<td>0.90</td>
<td>6.92</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>NATRES</td>
<td>5.34</td>
<td>7.21</td>
<td>0.74</td>
<td>0.460</td>
</tr>
<tr>
<td></td>
<td>EFI</td>
<td>0.39</td>
<td>1.38</td>
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<td>0.780</td>
</tr>
<tr>
<td></td>
<td>NetUsers</td>
<td>3.33</td>
<td>0.20</td>
<td>16.25</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>CULTURE</td>
<td>(2.57)</td>
<td>1.67</td>
<td>(1.54)</td>
<td>0.125</td>
</tr>
<tr>
<td></td>
<td>BRAND</td>
<td>16.38</td>
<td>12.45</td>
<td>1.32</td>
<td>0.189</td>
</tr>
<tr>
<td></td>
<td>INDUSTRY</td>
<td>0.20</td>
<td>24.90</td>
<td>0.01</td>
<td>0.994</td>
</tr>
<tr>
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<td>Intercept</td>
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<td>33.54</td>
<td>0.08</td>
<td>0.939</td>
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<td>GDPPC</td>
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<td>0.31</td>
<td>1.16</td>
<td>0.246</td>
</tr>
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<td>0.46</td>
<td>(0.47)</td>
<td>0.638</td>
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<tr>
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<td>0.08</td>
<td>3.26</td>
<td>0.001</td>
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<td>BRAND</td>
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<td>10.23</td>
<td>0.18</td>
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<td>0.04</td>
<td>3.60</td>
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<td>NATRES</td>
<td>1.74</td>
<td>0.72</td>
<td>2.41</td>
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<td>EFI</td>
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<td>0.06</td>
<td>(2.27)</td>
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<td>14.11</td>
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<tr>
<td></td>
<td>CULTURE</td>
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<td>0.17</td>
<td>(0.71)</td>
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<tr>
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<td>BRAND</td>
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<td>1.26</td>
<td>2.14</td>
<td>0.034</td>
</tr>
<tr>
<td></td>
<td>INDUSTRY</td>
<td>(3.59)</td>
<td>2.51</td>
<td>(1.43)</td>
<td>0.154</td>
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</tbody>
</table>

On the other hand, in the case of the model for which foreign direct investment is the dependent variable, the negative parameter estimate of -0.22 for the Economic Freedom Index (EFI) shows that one unit (1 point) increase in EFI will decrease foreign direct investment by 0.22 units (0.22 billion U.S. dollars), other factors equal. From the Table 15, in the model for
exports, it is noteworthy to see that an increase in the factors GDPPC, NATRES, EFI, NetUsers, Brand, and Industry will lead to an increase in exports, while an increase in the culture score will decrease exports. In the model for foreign direct investment, we can see that an increase in the factors GDPPC, NATRES, NetUsers, and Industry will increase foreign direct investment, while an increase in EFI, the culture score, and the variable Brand will decrease foreign direct investment. Moreover, in the mode for foreign visitors, an increase in the factors in GDPPC, NATRES, PhoneSub and Brand will increase the number of foreign visitors while an increase in EFI, the culture score, and the number of reputable industries will decrease the number of foreign travelers.

Next, the “full model”, which includes the moderator variable NBI and all interaction variables, was developed based on the basic model. Following the example of the basic model, a one-way specification for the full model was used. The results of estimation of the one-way random effects panel data models show interesting findings (Table 16). For example, the model with foreign direct investment (FDI) as the dependent variable has no statistically significant factors after adding the moderator into the model. That is, the previously significant factors NetUsers and Industry in the basic model became insignificant in the final full model. Moreover, in the model for which tourism (FVISITOR) is the dependent variable, the previously significant factors GDPPC, PhoneSub, and Brand in the basic model became insignificant in the full model.

The FGLS parameter estimates for the one-way random-effects models of this data analysis are shown below. Further estimation details are provided in Table 16.

\[
\hat{E}XP_{it} = 1306.45 + 7.60 \text{CULTURE}_{it} - 51.46 \text{GDPPC}_{it} + 6.86 \text{BRAND}_{it} - 43.71 \text{INDUSTRY}_{it} + 12.69 \text{NetUsers}_{it} - 53.09 \text{NATRES}_{it} - 17.90 \text{EFI}_{it} - 18.646 \text{NBI}_{it} + 0.93 \text{NBI}_{it} \times \text{GDPPC}_{it} + 0.93 \text{NBI}_{it} \times \text{NATRES}_{it} + 0.31 \text{NBI}_{it} \times \text{EFI}_{it}
\]

(13)
− 0.16 NBI \_i *\text{NetUsers}_{it} – 0.21 NBI \_i *\text{CULTURE}_{i} – 0.03 NBI \_i *\text{BRAND}_{i} \\
+ 0.94 NBI \_i *\text{INDUSTRY}_{i} \tag{14}

\begin{align*}
\hat{FDI}_{it} &= −242.34 + 0.64 \text{CULTURE}_{i} − 6.26 \text{GDPPC}_{it} + 14.81 \text{BRAND}_{i} \\
+ 29.17 \text{INDUSTRY}_{i} + 0.10 \text{NetUsers}_{it} − 9.15 \text{NATRES}_{i} + 5.85 \text{EIF}_{it} \\
+ 4.85 NBI \_i + 0.11 NBI \_i *\text{GDPPC}_{it} + 0.17 NBI \_i *\text{NATRES}_{i} − 0.11 NBI \_i *\text{EIF}_{it} \\
+ 0.002 NBI \_i *\text{NetUsers}_{it} − 0.01 NBI \_i *\text{CULTURE}_{i} − 0.28 NBI \_i *\text{BRAND}_{i} \\
+ 0.63 NBI \_i *\text{INDUSTRY}_{i} 
\end{align*} 

\begin{align*}
\hat{FVISITOR}_{it} &= 114.61 + 3.20 \text{CULTURE}_{i} + 0.71 \text{GDPPC}_{it} − 9.50 \text{BRAND}_{i} \\
+ 15.19 \text{INDUSTRY}_{i} − 0.01 \text{PhoneSub}_{it} − 16.91 \text{NATRES}_{i} − 1.65 \text{EIF}_{it} \\
− 1.75 NBI \_i − 0.01 NBI \_i *\text{GDPPC}_{it} + 0.33 NBI \_i *\text{NATRES}_{i} + 0.03 NBI \_i *\text{EIF}_{it} \\
+ 0.00 NBI \_i *\text{NetUsers}_{it} − 0.06 NBI \_i *\text{CULTURE}_{i} + 0.19 NBI \_i *\text{BRAND}_{i} \\
− 0.29 NBI \_i *\text{INDUSTRY}_{i} 
\end{align*} \tag{15}

It is notable that the factors measuring the degree of economic development and the level of communication infrastructure are the only statistically significant variables in both the basic and the full models with the dependent variable exports (EXP). For example, in the basic model, only GDPPC and NetUsers are significant at the 95% level of confidence. In the full model, the only significant variables are GDPPC, NetUsers, NBI*GDPPC and NBI*NetUsers; the variable NBI by itself is not statistically significant. These results indicate that the moderator nation brand (NBI) has no direct impact, but does have an indirect impact, on exports. However, in the basic model for which foreign direct investment (FDI) is the dependent variable, the number of Internet users (NetUsers) and the number of reputable industries in a country are the only significant variables, while in the final model, none of the factors are significant at the 95% level.
of confidence. These results indicate that the moderator nation brand (NBI) has neither a direct nor an indirect impact on FDI.

At the same time, the factors measuring the number of commercial natural resources (NATRES) and the Economic Freedom Index (EFI) are the only statistically significant variables in both the basic and the full models with the dependent variable tourism (FVISITOR). For example, in the basic model, only NATRES and EFI are significant at the 95% level of confidence. In the full model, the only significant variables are NATRES, EFI, NBI* NATRES and NBI*EFI; the variable NBI by itself is not statistically significant. These results indicate that the moderator nation brand (NBI) has no direct, but an indirect, impact on tourism. In addition, the significant factors in the basic model GDPPC, PhoneSub, and Brand became insignificant in the full model.

It also is interesting that, in the full model with the dependent variable export (EXP), we found positive signs on the parameter estimates for the interaction terms for GDPPC, NATRES, EFI, and INDUSTRY. Conversely, we found negative signs on the parameter estimates for the interaction terms for NetUsers, CULTURE, and BRAND. In the final full model for which foreign direct investment (FDI) is the dependent variable, we found positive signs on the parameter estimates for the interaction terms for GDPPC, NATRES, NetUsers, and INDUSTRY. Conversely, we found negative signs on the parameter estimates for the interaction terms for EFI, CULTURE, and BRAND.

In the final full model for which tourism is the dependent variable, we found positive signs on the parameter estimates for the interaction terms for NATRES, PhoneSub, EFI, and BRAND. Conversely, we found negative signs on the parameter estimates for the interaction terms for GDPPC, CULTURE, and INDUSTRY. A positive coefficient on an interaction
Table 16: One-way random effects panel data full model estimates for all dependent variables

<table>
<thead>
<tr>
<th>Models</th>
<th>Variables</th>
<th>Estimates</th>
<th>Std. Error</th>
<th>t value</th>
<th>Sig.</th>
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<td>1511.20</td>
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<td></td>
<td>GDPPC</td>
<td>(51.46)</td>
<td>14.96</td>
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<tr>
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<td>NATRES</td>
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<td>75.01</td>
<td>(0.71)</td>
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</tr>
<tr>
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<td>EFI</td>
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<td>0.147</td>
</tr>
<tr>
<td></td>
<td>NetUsers</td>
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<tr>
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<td>CULTURE</td>
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<tr>
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<td>BRAND</td>
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<td>INDUSTRY</td>
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<td>NBI*CULTURE</td>
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<tr>
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</tr>
<tr>
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<td>NBI*NATRES</td>
<td>0.17</td>
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<td>0.49</td>
<td>0.624</td>
</tr>
<tr>
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<td>(0.11)</td>
<td>0.09</td>
<td>(1.26)</td>
<td>0.208</td>
</tr>
<tr>
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<td>NBI*NetUsers</td>
<td>0.00</td>
<td>0.01</td>
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</tr>
<tr>
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<td>NBI*CULTURE</td>
<td>(0.01)</td>
<td>0.12</td>
<td>(0.12)</td>
<td>0.901</td>
</tr>
<tr>
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<td>(0.36)</td>
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<td>Intercept</td>
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<td>PhoneSub</td>
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</tr>
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<tr>
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<td>(0.99)</td>
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<td>0.00</td>
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</tr>
<tr>
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<tr>
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<td>(0.29)</td>
<td>0.51</td>
<td>(0.57)</td>
<td>0.568</td>
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</table>
variable indicates that the higher the value of the nation brand index, the larger (in absolute value) the impact that the given factor has on the dependent variables, all else constant. On the other hand, a negative coefficient on an interaction variable indicates that the higher the value of the nation brand index, the smaller (in absolute value) the impact that the given factor has on the dependent variables, all else constant. The following paragraphs explain the implications of the negative/positive parameter coefficients for the significant interaction terms in Table 16.

In the model for which exports is the dependent variable, the parameter estimate for the interaction term between NBI and GDP per capita is 0.93. The positive sign on this coefficient indicates that the higher a country's nation brand index is, the more its exports will change (in absolute value) in response to a change in its GDP per capita, all else constant. The magnitude of this coefficient indicates that countries with a nation brand index less than approximately 55.33 (the turning point) will see their exports decrease in response to an increase in per capita GDP. Alternatively, countries with a nation brand index in excess of approximately 55.33 will see their exports increase in response to an increase in per capita GDP.

For example, China with a nation brand index of 52.8 will see its exports fall by approximately 2.356 billion U.S. dollars after a one-thousand dollar increase in per capita GDP, all other factors constant. However, the United Kingdom with a nation brand index of 66.8 will see its exports increase by approximately 10.664 billion U.S. dollars after a one-thousand dollar increase in per capita GDP, all else constant. Thus, the impact that nation brand has on exports may be thought of as an “indirect effect” rather than a “direct effect.” That is, if a country has higher per capita GDP (e.g. its economy is growing), the country with a better perceived national image will export more than that with a poorer perceived national image. This finding indicates that a country’s image plays a significant role in its efforts to promote its exports. Therefore, it is
important for a country to establish a favorable national image (or reduce its unfavorable national image) among its stakeholders.

Again, in the model for which exports is the dependent variable, the parameter estimate for the interaction term between NBI and NetUsers is $-0.16$. The negative sign on this coefficient indicates that the higher a country’s nation brand index is, the less its exports will change (in absolute value) in response to a change in the number of Internet users, all else constant. The magnitude of this coefficient indicates that countries with a nation brand index less than approximately 79.3 (the turning point) will see their exports increase in response to an increase in the number of Internet users. Alternatively, countries with a nation brand index in excess of approximately 79.3 will see their exports decrease in response to an increase in Internet users.

For example, Malaysia with a nation brand index of 49.4 will see its exports rise by approximately 4.786 billion U.S. dollars after a one million increase in the number of Internet users, all other factors constant. However, a country with a nation brand index of, say, 95 will see their exports fall by approximately 2.5 billion U.S. dollars after a one million increase in the number of Internet users, all else constant. Thus, once again, the impact that nation brand has on exports may be thought of as an “indirect effect” rather than a “direct effect.” That is, if a country improves its communication infrastructure, especially with regard to its Internet and broadband facilities (e.g. more people can access the Internet), the country with a poorer perceived country image is likely to have a greater change in exports than a country with a better perceived image. This finding should be encouraging to countries with poor national images since they can improve their exports through improving their infrastructure.
In the model for which foreign visitors is the dependent variable, the parameter estimate for the interaction term between NBI and NATRES is 0.33. The positive sign on this coefficient indicates that the higher a country's nation brand index is, the more its tourism will change (in absolute value) in response to a change in its NATRES (the number of commercial natural resources), all else constant. The magnitude of this coefficient indicates that countries with a nation brand index less than approximately 51.24 (the turning point) will see the number of their foreign visitors *decrease* in response to an increase in NATRES. Alternatively, countries with a nation brand index in excess of approximately 51.24 will see the number of their foreign visitors *increase* in response to an increase in NATRES.

For example, Peru with a nation brand index of 49.1 will see the number of its foreign visitors *fall* by approximately 0.707 million if its number of commercial natural resources increases by one, all other factors constant. However, Germany with a nation brand index of 67.4 will see the number of its foreign visitors *increase* by approximately 5.332 million after a one-unit increase in NATRES, all else constant. Thus, the impact that nation brand has on tourism may be thought of as an “indirect effect” rather than a “direct effect.” That is, if a country has more commercial natural resources, the country with a better perceived national image will attract more foreign visitors than that with a poorer perceived national image. This finding indicates that a country’s image plays a significant role in its efforts to promote its tourism. Therefore, the result substantiate the previous finding that it is important for a country to establish a favorable national image (or reduce its unfavorable national image) among its stakeholders.

Again, in the model for which tourism is the dependent variable, the parameter estimate for the interaction term between NBI and EFI is 0.03. The positive sign on this coefficient
indicates that the higher a country's nation brand index is, the more its tourism will change (in absolute value) in response to a change in its EFI (the openness of a country’s political policies), all else constant. The magnitude of this coefficient indicates that countries with a nation brand index less than approximately 55 (the turning point) will see the number of their foreign visitors decrease in response to an increase in their EFI scores. Alternatively, countries with a nation brand index in excess of approximately 55 will see the number of their foreign visitors increase in response to an increase in their EFI scores.

For example, South Korea with a nation brand index of 51.6 will see the number of its foreign visitors fall by approximately 0.102 million after its EFI score increases by 1 point, all other factors constant. However, Italy with a nation brand index of 65.9 will see the number of its foreign visitors increase by approximately 0.327 million after a one-unit increase in EFI, all else constant. Thus, this finding also confirms nation brand has an “indirect effect” rather than a “direct effect” on tourism. That is, if a country has higher EFI score (that is, the country is relatively opener), the country with a better perceived national image will attract more foreign visitors than that with a poorer perceived national image. This finding also substantiates the notion that a country’s image plays a significant role in its efforts to promote its tourism.

Hypothesis Testing

From the model results in the previous section, the propositions offered in chapter two can be evaluated. Propositions 1 and 2 hypothesize the relationships between culture factor, moderator, and the dependent variables as follows:
Proposition 1: A country’s culture will be positively associated with the country’s (a) tourism from the countries having similar cultural orientation; (b) exports to the countries having similar cultural orientation; and (c) foreign direct investments from the countries having similar cultural orientation.

Proposition 2: A country’s image moderates the relationship between its culture and its tourism, export, and foreign direct investment.

Based on the model results, the cultural factor (Hofstede’s cultural score) was not statistically significant ($p > 0.10$). The negative parameter estimate on this variable for each model indicates that a country’s culture was negatively associated with its exports, foreign direct investment, and tourism (Table 15). Therefore, P1 is not supported. The interaction between Anholt’s Nation Brand Index (NBI) and culture for all three models also was not significant ($p > 0.10$ in Table 16), rejecting P2.

Propositions 3 and 4 hypothesize the relationships between economics factors, moderators, and the dependent variables as follows:

Proposition 3: A country’s level of economic development is positively associated with the country’s (a) tourism from other countries; (b) exports to other countries; and (c) foreign direct investments from other countries.

Proposition 4: A country’s image moderates the relationship between its level of economic development and its tourism, exports, and foreign direct investment.

The economic factor GDP per capita represents the level of economic development of a country, and the results in Table 15 show that GDP per capita was positively related to both tourism and exports ($p = 0.000$). However, GDP per capita was not significantly related to foreign direct investment ($p = 0.246$). Therefore, P3 has mixed support. Since the parameter
estimate of GDP per capita is 6.20 for the model with the dependent variable *exports*, this result implies that when a country experiences a one unit (one-thousand U.S. dollars) increase in GDP per capita, the level of exports to other countries will increase by 6.20 units (6.20 billion U.S. dollars), all else constant. The parameter estimate of GDP per capita is 0.13 for the model with the dependent variable *tourism*, which means that when a country has one-thousand dollar increase in GDP per capita, the number of foreign visitors will increase by 0.13 unit (0.13 million), other things equal.

In the final full models (Table 16), GDP per capita and its interaction with NBI were only significant determinants of exports (*p* = 0.000) and not significant determinants of either foreign direct investment (*p* = 0.243) or tourism (*p* = 0.324). Consequently, P4 also has mixed support. The parameter estimate of the interaction term is positive (\( \hat{\alpha}_{NBI*GDPPC} = 0.93 \)), implying that if a country has higher per capita GDP (e.g. its economy is growing), the country with a better perceived national image will export more products and services than that with a poorer perceived national image. This finding indicates that a country’s image plays some role in its efforts to promote its exports.

Propositions 5 and 6 hypothesize the relationships between the infrastructure factor, moderators, and the dependent variables as follows.

*Proposition 5: A country’s infrastructure is positively associated with the country’s (a) tourism from other countries; (b) exports to other countries; and (c) foreign direct investments from other countries.*

*Proposition 6: A country’s image moderates the relationship between its infrastructure and its tourism, exports, and foreign direct investment.*
The communication infrastructure factor was significant for all three models (Table 15). That is, the number of Internet users was significant for the models for which exports \((p < 0.00)\) and foreign direct investment \((p = 0.00)\) are the dependent variables. The number of phone line subscribers was significant in the model for which tourism is the dependent variable \((p < 0.00)\). As a result, P5 is fully supported. The parameter estimate of NetUsers is 3.33 for the model with the dependent variable exports \((EXP)\), implying that when the country has a one unit (1 million) increase in the number of NetUsers, the amount of exports into other country will increase by 3.33 units (3.33 billion U.S. dollars) all else constant. The parameter estimate of NetUsers is 0.25 for the model with the dependent variable foreign direct investment \((FDI)\). This means that when a country has a one million increase in NetUsers, the amount of foreign direct investment into that country will increase by 0.25 billion U.S. dollars, all else constant. The parameter estimate of PhoneSub is 0.03 for the model with the dependent variable tourism \((FVISITOR)\). This means that when the country experiences one million more line phone subscribers (PhoneSub), the number of foreign visitors will increase by 0.03 million, all else constant.

However, based on the final full model results (see Table 16), NetUsers and its interaction with NBI were statistically significant for only the model for which exports is the dependent variable \((p < 0.00)\). Therefore, P6 received mixed support. The parameter estimate of the interaction term is negative \((\hat{\alpha}_{NBI*INF} = -0.16)\), implying that if a country improves its communication infrastructure, especially with regard to its Internet and broadband facilities (e.g. more people can access the Internet), the country with a poorer perceived country image is likely to have a greater change in export than a country with a better perceived image.

Propositions 7 and 8 hypothesize the relationships between the brand factor, moderators, and the dependent variables as follows.
Proposition 7: A country’s current reputable products and brands have positive impact on the country’s (a) tourism from other countries; (b) exports to other countries; and (c) foreign direct investments from other countries.

Proposition 8: A country’s image moderates the relationship between its reputable products/brands and its tourism, exports, and foreign direct investment.

In terms of the basic model results in Table 15, the brand factor (BRAND) was only significant for the model for which tourism was the dependent variable ($p = 0.03$), which only gave partial support to P7. Because the parameter estimate of BRAND is positive ($\hat{\beta}_{BRAND} = 2.69$), the number of perceived reputable brands was positively related to the tourism. That is, when the country has one more unit of perceived reputable brands, the number of foreign visitors will increase by 2.69 units (2.69 million), other factors equal. However, based on the final model results in Table 16, none of the interactions between Brand and NBI are significant for all three dependent variables ($p > 0.10$), rejecting P8.

Propositions 9 and 10 hypothesize the relationships between industry factor, moderators, and the dependent variables as follows:

Proposition 9: A country’s reputable industries have positive impact on the country's (a) tourism from other countries; (b) exports to other countries; and (c) foreign direct investments from other countries.

Proposition 10: A country’s image moderates the relationship between its reputable industries and its tourism, exports, and foreign direct investment.

Based on the basic model results in Table 15, the industry factor perceived reputable industries was statistically significant for only foreign direct investment ($p = 0.07$) but not for exports ($p = 0.99$) or tourism ($p = 0.15$). Since the parameter estimate of Industry is positive
(\beta_{\text{INDUSTRY}} = 7.41), the number of perceived reputable industries is positively related to foreign direct investment. That is, when the country has one more perceived reputable industry, the amount of foreign direct investment will increase by 7.41 units (7.41 billion U.S. dollars), all else equal. Therefore, P9 was partially supported. Nonetheless, based on the final model results in Table 16, the interactions between Industry and NBI are not significant for all three dependent variables (p > 0.10), rejecting P10.

Propositions 11 and 12 hypothesize the relationships between the geography factor, moderators, and the dependent variables as follows:

**Proposition 11:** A country’s geography has an impact on the country’s (a) tourism from other countries; (b) exports to other countries; and (c) foreign direct investments from other countries, but the direction of the impact is unknown.

**Proposition 12:** A country’s image moderates the relationship between its geography and its tourism, exports, and foreign direct investment.

Based on the basic model results in Table 15, the geography factor number of commercial natural resources was only significant in the model for which tourism is the dependent variable (p = 0.02), while it was not significant in the models with exports (p = 0.46) and foreign direct investments (p = 0.34) as the dependent variables. As a result, P11 was partially supported. Since the parameter estimate of NATRES is positive (\beta_{\text{NATRES}} = 1.74), the number of commercial natural resources is positively related to the tourism. That is, when a country has one more unit of commercial natural resources, the number of foreign visitors will increase by 1.74 units (1.74 million), other factors constant.

In addition, the final model results in Table 16 indicate that the interaction between NATRES and NBI is only significant in the model for which tourism is the dependent variable (p
= 0.00), which gave P12 mixed support. The parameter estimate of the interaction term is positive ($\hat{\alpha}_{NBI*NATRES} = 0.33$), implying that if the number of commercial natural resources increases by one unit, the country that has better country image will have better performance with regard to tourism (e.g. attracting more foreign visitors to the country) than the one that has poorer country image, all other things being equal.

Propositions 13 and 14 hypothesize the relationships between the political factor, moderators, and the dependent variables as follows:

**Proposition 13:** A country’s political policies have an impact on the country’s (a) tourism from other countries; (b) exports to other countries; and (c) foreign direct investments from other countries, but the direction of the impact is unknown.

**Proposition 14:** A country’s image moderates the relationship between its political policies and its tourism, exports, and foreign direct investment.

The basic model results in Table 15 show that the political factor Economic Freedom Index was only significant in the model for which tourism is the dependent variable ($p = 0.02$), while it was not significant in the models with exports ($p = 0.78$) or foreign direct investment ($p = 0.64$) as the dependent variable. As a result, P13 received mixed support. Since the parameter estimate of EFI is negative ($\hat{\beta}_{EFI} = -0.13$), the Economic Freedom Index is negatively related to the tourism. That is, when a country increases its score of Economic Freedom by 1 unit (1 point), the number of foreign visitors will decrease by 0.13 units (0.13 million), all else equal. That is, the more open the country’s trade and economic policies, the fewer foreigners will travel to that country.

In addition, based on the final model results in Table 16, the interaction between EFI and NBI was only significant in the model for which tourism is the dependent variable ($p = 0.00$),
which gave P14 partial support. The parameter estimate of the interaction term is positive
($\hat{\alpha_{NBI\timesEFI}} = 0.03$), implying that if a country has higher EFI score (that is, the country is relatively
more open), the country with a better perceived national image will attract more foreign visitors
than that with a poorer perceived national image. This finding also substantiates the idea that a
country’s image plays a significant role in its efforts to promote its tourism.
CHAPTER 5
DISCUSSION AND CONCLUSION

This chapter is organized as follows. The first section of the chapter presents and reviews the research questions and goals identified in Chapter 1. The second section provides answers to each of these questions through discussion of the findings generated from study I and study II. The third section explores managerial implications from the findings. The fourth section demarcates the limitations of the two studies. The last section explores directions for future study.

The Research Goals

Specifically, this dissertation sought to achieve four main goals. The first goal was to clarify the definition of nation branding drawing from the constructs of product and corporate branding. Second, this dissertation sought to identify the relevant determining and outcome factors associated with nation branding. The third goal was to build a model to illustrate the underlying relationships among the various determinant and outcome factors of nation branding. The fourth goal was to discuss managerial and public policy implications on nation branding strategy. To achieve the first goal, the literature on product branding, corporate branding and nation branding was explored to gain a more comprehensive perspective on the complex construct of nation branding. In addition, an extensive review of the literature in the country-of-origin, nation branding, destination branding, economics, organizational behavior, and international business facilitated the attainment of these research objectives.
Research Questions

In this section, this dissertation presents the three research questions proposed in Chapter One and strives to answer the first two questions based on the model results in Chapter Four. The third research question will be answered in the managerial and public policy implications section. Specifically, this dissertation addresses the underlying mechanism of nation branding and poses three research questions that build upon and extend previous work:

1) Which factors identified in the existing literature are critical to the development of a nation brand?

2) How can these factors be connected (either as a determinant, a moderator, or an outcome) to illustrate the mechanism underlying nation branding?

3) How can the proposed model be applied in the practice of nation branding?

Question 1: Which factors identified in the existing literature are critical to the development of a nation brand?

First, the meanings of nation brand and nation branding were redefined. In this study, the nation brand is defined as the design, symbol, sign, color, or any combination of these that are used to deliver a symbolic meaning to the nation’s stakeholders. At the same time, nation branding is defined as the procedure of designing, implementing, evaluating, and monitoring the marketing activities for delivering a symbolic meaning of the nation to its stakeholders. The definitions provide the theoretical basis to identify the critical factors closely related to nation branding practices.

Next, eleven critical factors related to the development of nation brand were identified based on the literature review in country-of-origin, place branding, and nation branding. The economic outcome factors of nation branding are exports, foreign direct investment and tourism.
The determinant variables include cultural orientation of a country (collectivism/individualism),
the economic development of a country in terms of GDP per capita, the communication
infrastructure of the country, the commercial natural resources of a country, the political policy
orientation of a country, the perceived reputable brands of a country, and perceived reputable
industries of a country. The Anholt-GfK Roper’s nation brands indexSM (NBI) was incorporated
as a moderator into the basic model to develop the final model. These identified factors were
used to build panel data models to illustrate the dynamic features of nation branding.

*Question 2: How can these factors be connected (either as a determinant, a moderator, or an outcome) to illustrate the mechanism underlying nation branding?*

Two studies were conducted to build the panel data models. First, a pretest study was
built to estimate what kind of models can be used to connect the determinant and outcome
variables of nation branding, utilizing thirteen countries who hosted either Summer or Winter
Olympic Games during the period of 1995-2006. The results showed that one-way random
effects models are preferable. Next, thirteen countries were expanded to 24 countries across six
regions, and three one-way random effects panel data models were developed to explore the
relationships among the determinant factors, the moderator, and the economic outcome factors of
nation branding. In study two, three basic models were developed, first without the moderator
(NBI) to investigate the relationship between the determinant and outcome variables of nation
branding. Then the moderator NBI was added into the basic model, and three final full models
were built to examine the potential impact of country image (NBI) on the relationship between
determinant and outcome variables of nation branding.
Managerial and Public Policy Implications

In this section, research question three as proposed in Chapter One will be answered: *How can the proposed model be applied in the practice of nation branding?* Based on the results of the basic and final full models, the discussion will focus on the significant factors to explain the potential practical and managerial implications. Hunt and Morgan’s (1995, 1996) resource advantage theory will be utilized to guide both managerial and theoretical discussions.

Based on the results of basic models, not all factors are statistically significant in each model. For example, in the model for which export is the dependent variable, only GDPPC and NetUsers are significant. These relationships between GDPPC, NetUsers, and export show that countries with higher levels of economic development and better communication infrastructure, as measured by the number of Internet Users, exported more products and services than those with lower economic development and inferior communication infrastructure. The results provide additional support to the previous findings in the COO literature that says consumers more often prefer foreign products from developed countries than from less developed countries (Agbonifoh and Elimimian 1999; Ahmed and d’Astous 1995; Insch and McBride 1998; Tassey 1998; Wang and Lamb 1983). As a result, developing or emerging countries should take actions to stimulate their economic development and improve their communication infrastructure in order to enhance their export performance.

In the model with FDI as dependent variable, only communication infrastructure and industry factors are statistically significant. The positive relationship between communication infrastructure and FDI indicates that countries with better communication infrastructure attracted more foreign direct investments than those with inferior communication infrastructure. This
finding confirmed the previous arguments that advanced infrastructure could increase the attractiveness of a country to foreign investors (Justman and Teubal 1998; Tassey 1998). In addition, the positive relationship between perceived reputable industries and FDI shows that the country having more reputable industries attracted more foreign direct investments than those with fewer reputable industries. Thus, building world class product brands and enhancing communication infrastructure are two critical issues facing developing countries that want to attract foreign investors.

On the other hand, in the model for which tourism (FVISITOR) is the dependent variable, all variables are significant except the variables culture and industry. This result is mostly consistent with the place branding and tourism literature. For the 24 countries included in the model, economic development will have positive impact on their tourism industries. That is, if a country has higher per capita GDP, more foreign visitors will travel to the country. Therefore, if a country wants to attract more foreign visitors, improving its economic condition could be a viable way to achieve this goal. Since tourism is an outcome factor of nation branding strategies, a country could attract more foreign visitors to the country by pursuing effective and efficient nation branding strategies that would improve its nation-brand image. When a country designs its nation branding strategies, the level of its economic development should be taken into consideration.

In addition, the natural resources of a country, its communication infrastructure and its perceived reputable brand have significant positive impacts on the country’s tourism. As a result, enhancing the communication infrastructure and building more reputable brands will boost a country’s tourism industry. When a country designs its nation branding strategies, it is a wise idea to showcase its advanced communication infrastructure and reputable brands if it has such
advantages. On the other hand, if a country has inferior communication infrastructure and less or no well-known brands, it will have a disadvantage when attempting to attract foreign visitors. In this case, its nation branding strategies could focus on other significant factors, such as a historical legacy to compensate for these disadvantages. The positive relationship between the natural resource of a country and its tourism illustrates that the more commercial natural resources a country has, the more foreigners will come to the country for travel. However, the natural resources of a country are endowed by the nature; countries have no control over this factor.

The Economic Freedom Index is found to have a negative relationship with the number of foreign travelers to a country. That is, the more open a country is, the less foreign visitors will come to the country for travel. Since there is no empirical study in the nation branding and tourism literature to investigate this issue, this finding opens a new direction for further investigation this issue. Culture is not found to have significant relationship with the countries’ tourism, which is not consistent with the literature. Since we used aggregate data to build the panel data model, the specific cultural difference of each country was not considered. This may explain the reason why culture is not significant here.

There is also a surprising finding from the basic model for tourism. The number of perceived reputable industries in a country was found to have no significant relationship with a country’s tourism. This is contradictory to the literature. The reason for this might be attributable to the method used to classify these industries. The North America Standard Industry Classification (NAICS) was used to classify perceived well-known industries for each of 13 countries, and this may not be an appropriate classification method. An alternative industry classification standard may be needed to clarify this issue.
The final model with the moderator Anholt-GfK Roper’s nation brands index\textsuperscript{SM} (NBI) gives us additional insights into the moderating influences of country image on the relationship between determinant and outcome factors of nation branding. The resulting one-way random effects panel data models indicate that country image (NBI) has no direct influence but does have indirect influence on these relationships—except in the case of foreign direct investment (FDI). In the model for exports, NBI has significantly positive impact on the relationship between economic development and exports, thus indicating that if a country’s per capita GDP increases, the country that has a better country image will have better export performance than one that has a poorer country image, all other things being equal. That is, if two countries have the same increase in per capita GDP (e.g. their economy was growing), the country with the better perceived nation image will export more domestic products than the one with the poorer perceived nation image. This finding substantiates the existing understanding that country image plays a significant role in a country’s efforts to promote its exports. Therefore, to promote a country’s exports, country brand managers or policy makers should design nation branding strategies to establish favorable nation images among its stakeholders or to reduce unfavorable nation images.

On the other hand, NBI also has a negative impact on the relationship between communication infrastructure (e.g. the number of Internet users) and the exports of a country. This indicates that if the number of Internet users in a country increases, the country that has a poorer country image will have better export performance than one that has a better country image, all other things being equal. In other words, if two countries improved their communication infrastructure by one unit, in particular, their Internet broadband facilities (e.g. more people can access the Internet), the country with a poorer country image will export more
products than that the one with a better country image. This finding is encouraging to countries with a poor nation image since these countries could improve their exports through improving their infrastructure.

The results of the final model with tourism as dependent variable show that country image had significantly positive impact on the relationships between variables the number of commercial natural resources (NATRES), Economic Freedom Index (EFI), and tourism (FVISITOR). Alternatively speaking, if the number of commercial resources in a country increases, the country that has better country image will attract more foreign visitors than the one that has poorer country image, all other things being equal. That is, when two countries had the same commercial natural resources, the country with better image attracted more foreign travelers than the one with poorer country image. This finding extends the COO and tourism literature in that country image influences foreign customers’ purchase intentions toward service products. In addition, if a country adopted more open trade or fiscal policies (e.g. its economy is freer), the country with a better country image will be more attractive to foreign visitors than that with a poorer image. These findings indicate that a favorable country image also plays a crucial role in a country’s tourism industry. Therefore, country brand managers or policy makers should first understand what kind of country image is held by stakeholders and then design appropriate nation branding strategies or public policies to utilize their resources.

Country image had varying degrees of influence on the relationship between the determinant and outcome factors of nation branding. For instance, the moderating impact of nation brand image is higher in the relationship between NATRES and tourism than that between EFI and tourism. Thus, nation brand managers or government policy makers could do well to
allocate more resources toward preserving their natural resources and less toward revising their trade and fiscal policies.

However, the results of the model with *foreign direct investment* as the dependent variable show that none of the factors is significant. This is not surprising since foreign direct investment has long-term orientation and incurs much a higher risk than both exports and tourism. Therefore, foreign investors are more conscientious of the potential risks of a specific country and, as a result, nation branding strategies may have a lower impact on their decisions. It is also noticeable that not all independent variables identified in the literature had statistically significant influences on the dependent variables of this analysis. Further research is needed to investigate the potential reasons.

Since archival data was used to estimate the models of this study, the models’ results illustrate the past performance or “reality” of the countries selected in this study. As Gilmore (2002) advocates, reality provides the foundation for the nation brand, and nation branding should be based on the realistic situations of each country such as its physical infrastructure, its culture, or people (Tatevossian 2008). As a result, the findings of this study could provide a new starting point for country branding practices. Nation brand managers or policy makers could learn lessons from the past (the reality) to predict the future, as well as to take proactive actions to change negative outcomes and promote positive results.

Following resource advantage theory (Hunt and Morgan 1995, 1996), a company needs to have or work towards comparative advantage in its resources to be able to gain competitive advantage in its market positions and, therefore, superior financial performance. Therefore, it is critical that, in the first place, a company develops a good understanding of its resources. Like a company, a country should also focus on its resources to create and sustain its competitive
advantages in the world marketplace. The seven determining factors of nation branding strategies could be regarded as the resources of a country. How to employ these resources effectively and efficiently is a crucial question posed to each country, especially in today’s much fiercer competitive global market.

The results in this study could provide important insights on this emergent issue. In general, the countries’ nation brand managers or policy makers should first evaluate the resources they have in comparison with their “competitors,” and then pay more attention to the factors that were found to be important in this study. They need to evaluate and understand the positive or negative impact of these resources on a country’s “financial performance”, that is, exports, foreign direct investment, and tourism. In this way, country brand managers and policy makers would do well to design and implement nation branding strategies that will effectively and efficiently allocate and employ their resources, and thus improve their exports, foreign direct investment, and tourism.

For example, for those countries that want to increase their exports, their nation brand managers or policy makers need to pay more attention to communication infrastructure and economic development since these two factors/resources are significant contributors to export performance for the 24 countries of this study during the period of 1995-2006. For the countries who want to attract more foreign direct investment, nation brand managers or policy makers need to pay additional attention to their communication infrastructure and number of reputable industries since these two factors/resources are significant contributors to the foreign direct investment performance of the same group of countries during the same period. For the countries who want to attract foreign visitors, nation brand managers or policy makers need to pay more attention to economic development, natural resources, political policies, communication
infrastructure and reputable brands since these factors/resources are significant contributors to tourism performance. However, this is not to say that country brand managers or policy makers should not pay attention to other factors or resources. They certainly should consider all the factors or resources before pursuing any strategies to promote their countries. They need to pay more attention to the significant factors than to insignificant ones after understanding why the former were more relevant and/or important. Further investigation could provide more insight into the future employment of these resources.

The findings of this study also help explain the influence of existing country image on the countries’ nation branding strategies. Country image, defined as the perceptions of foreign consumers or people about the focal country, has a significant indirect impact on a country’s exports and tourism. A country’s existing nation image could interact with individual factors or resources to either positively or negatively influence the country’s exports and tourism. For example, improving a country's image could help to improve its export performance if the country develops its economy since nation image has positive moderating impact on the relationship between economic factors and exports. At the same time, a favorable nation image helps a country’s tourism industry since it has a positive moderating impact on the significant determinant factors of tourism. On the other hand, an existing poor image of a country may not inhibit the improvement of the country’s export performance contrary to accumulated literature. If a country develops its communication infrastructure, a country with poorer country image will perform better since nation image negatively moderates the relationship between infrastructure and exports.

Thus, managing a country’s image is a critical issue for nation brand managers and policy makers. As the findings of this study show, favorable country image helps boost the country’s
exports and tourism. However, an unfavorable country image could also improve the export in some cases. Although a country image is “long lasting and difficult to change” and multidimensional in nature due to a country's history, geographical location, culture, and other heritage, it still can be measured and influenced (Kotler and Gertner 2002, p. 251). Therefore, nation brand managers or policy makers need to take into consideration the existing country image and design appropriate nation branding strategies to work towards and sustain a favorable country image. On the other hand, an unfavorable nation image can be offset by the improvement of some key resources. In this case, nation brand managers or policy makers should identify the key resources, evaluate nation brand strengths and weaknesses, assess the environmental opportunities and threats, and employ the resources effectively and efficiently to achieve competitive advantage in the global marketplace.

As Anholt (2006) pointed out, since the stakeholders of a country are too broad and diverse, the country’s government may not be able to simultaneously control and manage all of them as well as its nation image. While the nation brand image is the image perceived by the stakeholders, the nation brand identity represents the “intended perception” a country brand managers or policy makers “would like the brand to have” (Veloutsou 2008, p. 299). Although nation brand managers or policy makers cannot control how its stakeholders perceive the country, they can establish a clear or favorable nation brand identity as their target, and promote it to influence its stakeholders and therefore its existing nation image. No matter if the country intends to either present a new “brand promise” or “re-brand” itself, the reality of the past performance of its society should be taken into account to lend credibility to its nation branding initiatives (Anholt 2006; Gilmore 2002; Tatevossian 2008).
Based on the findings of this study, country brand managers or policy makers should evaluate the current state of the country, including its strengths and weaknesses in its resources as well as their impacts on its key “financial” performance, that is, exports, foreign direct inward investment, and tourism. Next, they should establish a clear and feasible vision to plan for the long term, provide guidance as to where the country should go, and identify how to move forward (Anholt 2005, 2008). Further, they should prepare detailed nation branding strategies by taking into consideration the environmental opportunities and threats to lay out the steps to achieve the vision. Just like a corporate brand, the nation brand can be assessed, evaluated, and strengthened through SWOT (Strength, Weakness, Opportunity, and Threat) analysis (Kotler and Gertner 2002).

Limitations

A major limitation of this study lies on the selection of the countries. Twenty-four countries were used for the model development. The relatively non-randomization of the country selection could bias the findings of the models. There is a strong need to expand the country selection to include more countries in the model, especially under-developed or developing countries. For example, more countries from Africa and South America are necessary. However, the current lack of adequate data for the countries from these regions could impede the further development of the models.

In addition, the time period could also be expanded to include more years. For example, it is better to collect the data for the period of 1980-2007, instead of 1995-2006. The relatively short period of time could be a potential reason why all the factors were not statistically significant in the final full model for which foreign direct investment is the dependent variable.
Since the foreign direct investment has a long-term orientation, a longer span of the time may need to be taken into consideration to explain the variance of its performance over time.

Moreover, the critical factors identified in this study are not an exhaustive list of all relevant factors of nation branding. Omission of some important factors that could change the picture illustrated by the models built here may well have occurred. Educational factors such as the number of doctoral graduates in each country, and other factors like per capita annual expenditure on infrastructure, the political freedom index, the human development index, the growth rate of GDP, and entrepreneurial activities could be important variables that should be included in the models.

Another major flaw of this study could be that some of the qualitative variables included in the model do not vary over time, such as the geography, culture, the number of perceived reputable brands, the number of perceived reputable industries and the country image. The time-invariant nature of these factors makes them incapable of explaining things that change over time. If all the factors varied over time, the models developed in this study would provide a fuller picture of and better insight into nation branding practices.

Future Research Directions

This preliminary study intended to provide the impetus for research on the factors that are clearly important to the nation branding strategies. Examining the determinant and outcome factors of nation branding is in and of itself intriguing. Continued research in this field would provide invaluable insights for not only researchers, but also the practitioners and government agencies, especially those from emerging countries. The identified significant factors for each
dependent variable could serve as the starting point for countries to promote exports and tourism and to attract foreign direct investment. On the other hand, insignificant factors should be investigated qualitatively or historically to further explore the intrinsic dynamics of nation-brand. Future research could proceed in any number of directions. The findings from this study can be used to guide the development of our expanded understanding and knowledge of nation branding.

One specific future investigation could develop a model for each of the 24 countries and then compare and classify the different models along with Miles et al’s (1978) organizational strategic typology. Addition research could be directed at the regional cultural differences, as exemplified by some events, such as Oktoberfest in Germany, the Carnaval in Brazil, and the Wimbledon Tennis Tournament in England (Kotler and Gertner 2002). There is also an opportunity to use the Chow Test to investigate the influence of world events, such as the Olympic Games, on nation branding strategies and practices. Additional research could be directed at each outcome variable of nation branding to provide strategic implications for those countries that have focal interests in exports, foreign direct investment, or tourism.

Future research could also explore the possibility of clustering the countries based on different criteria, such as the level of economic development, and then building separate economic models for each of these clusters. Craig, Douglas and Grein’s (1992) work suggests that this might reveal the patterns of convergences and divergences among these clusters of countries (e.g. industrialized countries vs. emerging and developing countries). Clustering by other factors such as national image, geographic locations, or political policies are also worthy further investigations.
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