Country-of-Origin Effects on Consumers' Willingness To Buy Foreign Products: An Experiment in Consumer Decision Making

An experiment was employed to investigate the effect of foreign products' countries of origin on consumers' buying intentions. Participants viewed tangible products and were provided different levels of information to test the effect of country of origin on their decisions. The “made-in” effect was significant in a multiple-attribute scenario. Also, the size of the country-of-origin effect was examined through price manipulations. In addition, consumer responses to price changes for products from a less-developed country were investigated through elasticity computations. A durable good from a country was found to be less own-price elastic than a non-durable good from the same country.

Yi Cai, University of Georgia
Brenda Cude, University of Georgia
Roger Swagler, University of Georgia

Introduction

During the decade of the 1990s, the percentage of global production moving in world trade increased by half, so that by 2000, the ratio of world trade to world gross domestic production reached about 30% (WTO, 2001). As the world's leading trader, the United States imported over $1.5 trillion worth of goods and services in 2003 (U.S. Census Bureau, 2004). The lives of American consumers are therefore linked to foreign products more closely than ever before.

Today foreign products are typically designated as such, but country-of-origin marks were not a major issue until after World War I. The victors in the war imposed country-of-origin marks on German products to enable consumers in other countries to avoid products from the former enemy (Morello, 1984). Thus, the introduction of systematic country-of-origin labeling could hardly have carried a more negative connotation. The stigma, however, proved to be neither universal nor lasting. As the Made-in label raised consumers' awareness of sourcing, it also came to stand for attractive features of products from certain countries. Even Made in Germany became a sign of high quality not long after World War I, and in today's marketplace, Japanese workmanship, Swedish design and French fashion have become world famous.

Marketers and researchers have been drawn to the question of how consumers respond to products from other countries. Past research has shown that the image associated with country of origin plays a significant role in consumers' perceptions of products (Heslop & Popadopoulos, 1993). However, with increased globalization, foreign-produced goods have become an integral part of the typical consumer's life. Thus, the question is: does country of origin still influence consumers' buying decisions?

The first objective of the study was to investigate the effect of products' country of origin on consumers' purchase intentions in an experimental setting, using tangible products and giving subjects related product information in addition to country of origin. The second objective was to examine how the price of a product influences the country-of-origin effect on consumers' buying decisions.

Recognizing the country-of-origin effect on consumers' buying intentions and quantifying the effect not only will help consumers understand the rationality of their purchase behavior, but also will help international producers and marketers. Previous researchers found that country-of-origin image is one of the most important influences on decision making for products which are marketed in a country other than the one in which they are produced (Papadopoulos, 1993).

The research questions addressed in this study were: (1) Are consumers more likely to buy products from some countries than to buy the same products from other countries? (2) Are consumers willing to pay more for products with a certain country of origin than for the same products from other countries? If so, what is the level of
price difference at which consumers will change their buying decisions? and (3) Do consumers respond differently to price changes for durable versus non-durable goods with a certain country of origin?

**Literature Review**

Schooler (1965) and Schooler and Wildt (1968) reported the first research in the 1960s, investigating the country-of-origin image effect through an experimental design. During the following two decades, consumers' use of country-of-origin images became a widely studied phenomenon. Research has shown that country of origin serves as a signal for product quality and performance. Erickson, Johansson and Chao (1984) found a “halo effect” of country of origin: that is, country image affects consumers’ beliefs about tangible product attributes, and in turn affects their overall evaluation.

On the other hand, some studies have shown that country of origin is not merely a cognitive cue. Instead it can be an affective image attribute which has a direct influence on consumers’ decision making. Hong and Wyer (1989) demonstrated that the effect of country of origin could not be explained entirely by the quality signaling process. They found that country of origin also had symbolic and emotional meaning to consumers, and it played an important role along with other attributes such as quality and reliability in shaping consumers' attitudes toward products.

In some cases, consumers’ attitudes toward a country as a producer could have a strong effect on their preference for that country’s products. Past country-of-origin studies demonstrated a positive relationship between product evaluation and the degree of economic development of the country (Liefeld, 1993; Wall & Liefeld, 1991). Papadopoulos and Heslop (2000) suggested that buyers evaluate the country of origin using multiple criteria that include the country’s level of advancement, the buyers’ feelings about the people of the country and the buyers’ desire to be more closely aligned with the country.

Gurhan-Canli and Maheswaran (2000) examined the psychological processes that underlie country-of-origin evaluations using undergraduate students and an experimental design in which electronic products were the focus. They found that consumers were more likely to focus on the country of origin when their motivation to buy the product was low or if their processing goal directed their attention away from the country-of-origin information.

Some researchers have investigated different aspects of consumers’ reactions to country-of-origin information, including its influence on other product attribute information, product evaluation and buying intention. Hong and Wyer (1989) conducted an experiment to test hypotheses concerning the cognitive process underlying the effect of country of origin and other specific attribute information on product evaluation. Both the direct influence of country of origin on product evaluation and simulating the influence of country of origin on other product attribute information were significant.

Unlike consumers’ attitudes, which were commonly used in previous studies, consumers’ buying intentions have seldom been measured by researchers examining the country-of-origin effect. Ulgado and Lee (1998) focused on consumers’ buying behaviors in their experiment using electronic products. They found that consumers considered country-of-origin information to be equally as important as other specific product attributes evaluating the products. However, when consumers made purchase decisions, country of origin was insignificant. Nevertheless, no tangible good was used in the study, limiting the validity of their conclusions.

Also, the role of price in consumers’ decision making has not been widely studied in previous country-of-origin studies. Among the few researchers who investigated price, Schooler and Wildt (1968) and Nebenzahl and Jaffe (1993) concluded that consumers' biases about products from certain countries could be offset by price concessions of varying amounts. However, some have argued that pricing policies cannot improve a negative country-of-origin effect (Heslop, Liefeld & Wall, 1987). Okechuku and Onyemah (1999) also demonstrated that country of origin was significantly more important than price and other product attributes, such as reliability and safety, in Nigerian consumers' preference.

In addition, few researchers have examined the extent to which the country of origin for hybrid products (with unique countries of origin for parts, assembly and/or design) moderates country-of-origin effects on attitudes and purchase intentions. Chao (2001) showed students advertisements for a television and a stereo system. The country of origin for the assembly, design and parts of the products was manipulated in the 2x2x2 between-subjects design. Consumer attitudes toward the products were moderated by the country of origin for the design, parts and assembly of the products.

In both experimental and survey studies conducted before the 1990’s, intangible descriptions of product cues, such as photos and verbal attribute descriptions, were commonly employed. For example, White and Cundiff (1978) used a mailed questionnaire containing instructions and descriptions of a machine tool, a lift truck and a
dictation system. When subjects were not shown tangible goods, one cannot be sure what they actually had in mind when they expressed attitudes and/or evaluated products.

Thus, some recent studies that employed an experimental design to investigate country-of-origin effects used tangible goods, ranging from computers and VCRs to wallets and T-shirts. Using tangible goods facilitates researchers’ examinations of consumers’ information processing regarding both product evaluation and purchase intentions. Also, to avoid the hypothetical purchase environment, some researchers even have put the experiment in a shopping mall (Wall & Liefeld, 1991).

Another limitation in previous research is that most early studies used only a single cue. Respondents were given only information about country of origin and then made their evaluations accordingly. Using only a single cue enhances the artificiality of the study since consumers’ consumption behaviors in the real world are related to more than a single item of information.

Although overlooked by previous researchers, different product categories, such as durable versus non-durable goods, may interact with price and country of origin to influence consumers’ decision making. Ceteris paribus, consumers may respond to a price change for a product more intensely if they believe the product category has more and better substitutes from other countries than if they believe the product has fewer and inferior substitutes from other countries. Specifically, if consumers believe there are more and better substitutes for non-durable goods than for durable goods, they may respond differently to price changes for the two types of goods.

Thus, this research makes a unique contribution to the literature in that tangible products were used to examine country-of-origin effects of different products when prices were manipulated. In addition, this study investigated differences in price elasticities between demand for a durable and a non-durable good. Thus, the research will shed light on how consumers view substitutes from other countries and make decisions when they have choices.

**Methodology**

**Research design**

To answer the research question regarding the effect of a product’s country of origin on consumers’ willingness-to-buy, an experiment was conducted. The experiment tested the relation between the products’ country of origin and consumers’ purchase decisions when other attribute information was available. Also, the price factor was introduced in the study by experimentally assigning different prices to the products in question. The hypotheses, then, were:

H1: (a) Ceteris paribus, consumers are less willing to buy products from less-developed countries than from developed countries, but (b) as the price of products from less-developed countries decreases, consumers will increase their willingness to buy those products.

H2: Consumers’ demand for non-durable goods from a less-developed country is more price elastic than for durable goods from the same country of origin.

In the study, two levels of products’ country-of-origin (developed country versus less-developed country) were crossed with two product categories (a durable versus a non-durable). An experiment combining within-subject and between-subject design with a pre-test was employed. The product's country of origin was a within-subject treatment while product category was a between-subject variable. However, the between-subject variable was not used in the analysis of the Hypothesis 1. Instead, it was included in the analysis of the second research hypothesis in which price elasticities of the product from the less-developed country were computed. Analysis of part (b) of the first hypothesis and the second hypothesis was based on the experimental manipulation of prices. Respondents’ willingness to buy the products served as the dependent variable for the analysis. Two shirts were chosen as the non-durable goods and two telephones were chosen as the durable goods.

**Sample, Country Names, and Product Selection**

A convenience sampling plan was used. The subjects of the experiment were 145 undergraduate students from two large introductory consumer economics classes at a major southern university. Extra credit was given to the students for participation.

Previous researchers employed real countries’ names and used the results to make comparisons between developed countries and less-developed countries (Liefeld, 1993; Wall & Liefeld, 1991). However, the researchers did not indicate how they chose the countries or how they categorized them as developed or less-developed. In addition, they did not mention whether the research subjects shared their views of whether a country was developed or less-developed.
The subjects' knowledge about a country plays an important role in explaining the effect of country of origin on their information processing and decision making. Thus, a pilot study was conducted to test students’ familiarity with various countries and their opinion on how developed the selected countries were. Also, students' images of various countries’ names were tested to avoid selecting countries about which students had extreme emotional feelings that might affect their information search and decision making.

Seventy-five students from an introductory consumer economics class were asked to answer a two-page questionnaire listing 42 countries’ names. Using these data, Japan and Indonesia were chosen for the experiment, with Japan representing developed countries and Indonesia representing less-developed countries.

A group of four undergraduate students was chosen from the sample pool to select two shirts and two telephones that they believed to be very similar in terms of color, style, design and features. The students agreed that without the brand and made-in information, the two shirts and the two telephones would be viewed as identical.

Experimental Procedure

Participants were randomly assigned to one of two groups with one group examining two shirts and the other examining two telephones. Each participant was given a folder which contained a four-page questionnaire. There were four stages in the experiment. In Stage 1, participants were given information about the products, including model, features and functions, as well as price, but not country of origin. Note that brand information was not provided at any stage in the experiment to avoid confounding or interaction with the country of origin. In Stage 2, one of the two shirts (telephones) was labeled as made in Japan; the other was labeled as made in Indonesia. In the third and fourth stages, prices were manipulated. In Stage 3, participants in each group were told that the price of the product labeled as made in Indonesia was lower than in Stages 1 and 2, while the price of the product made in Japan was unchanged. In Stage 3, the price of the product labeled as made in Indonesia was 10% lower than the price in Stages 1 and 2; it was 20% lower in Stage 4. The research subjects were given the specific dollar amount of the reduced price instead of the percent of the price reduction.

During each stage of the experiment, only the relevant page of the questionnaire was viewed and completed by the subjects. For each stage of the research, each participant answered two four-point Likert-type willingness-to-buy questions for a total of six questions about participants’ willingness to buy 1) the product made in Indonesia and 2) the product made in Japan without country-of-origin information; 3) the product made in Indonesia and 4) the product made in Japan with knowledge of country of origin; 5) the product made in Indonesia with an approximately 10% reduction in its price; and 6) the product made in Indonesia with an approximately 20% price reduction.

Data Analysis

Country-of-Origin (COO) Effect

A 2 (COO: Japan vs. Indonesia/within) X 2 (Product: shirt vs. telephone/between) repeated measurement (pre vs. post COO information) ANOVA was used to test Hypothesis 1(a). The results revealed a significant interaction effect of country of origin and pre vs. post COO information (F(1,286)=79.89, p<.0001), indicating that the country-of-origin information influenced subjects’ willingness to buy the products. (See Figure 1.) Also, the main effect of country of origin was significant (F(1,286)=39.89, p<.0001). A planned comparison between the two countries of origin revealed that the subjects were less willing to buy products from Indonesia than products from Japan (F(1, 144)=101.19, p<.0001). The means and standard deviations of the dependent measures as a function of the experimental manipulations are presented in Table 1.

Figure 1. Subjects’ mean willingness to buy with and without country-of-origin information.
Table 1. Means (standard deviations) of subjects’ willingness to buy in Stages 1 and 2.

<table>
<thead>
<tr>
<th></th>
<th>Shirts</th>
<th>Telephones</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Made in Japan</td>
<td>Made in Indonesia</td>
</tr>
<tr>
<td>No COO</td>
<td>2.84 (.08)</td>
<td>2.74 (.08)</td>
</tr>
<tr>
<td>With COO</td>
<td>3.18 (.07)</td>
<td>2.55 (.07)</td>
</tr>
</tbody>
</table>

Note: No COO = Without information about country of origin; With COO = Country-of-origin information was provided.

Price Manipulation

A 2 (Product: shirt vs. telephone from Indonesia) X 3 (repeated measurement: no price reduction; 10% reduction; and 20% reduction) ANOVA was used to test Hypothesis 1(b). The main effect of the price reduction was significant (F(2,286)=194.28, p<.0001). The planned separate comparisons were both significant (F(1,144)=19.53, p<.0001 for the 10% reduction, and F(1,144)=92.63, p<.0001 for the 20% reduction), indicating that the subjects were more willing to buy the products from Indonesia as the price decreased. Means and standard deviations of the willingness-to-buy as a function of the price reductions was presented in Table 2.

Table 2: Means (standard deviations) of subjects’ willingness to buy the products from Indonesia at different price levels.

<table>
<thead>
<tr>
<th></th>
<th>Shirt</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original price</td>
<td>2.55 (.07)</td>
<td>2.74 (.07)</td>
</tr>
<tr>
<td>10% price reduction</td>
<td>2.85 (.07)</td>
<td>3.00 (.07)</td>
</tr>
<tr>
<td>20% price reduction</td>
<td>3.53 (.07)</td>
<td>3.68 (.07)</td>
</tr>
</tbody>
</table>

Thus, the results were consistent with the first hypothesis: ceteris paribus, consumers are less willing to buy products from less-developed countries than from developed countries, but (b) as the price of products from less-developed country decreases, consumers will increase their willingness to buy those products. The hypothesis was confirmed for both products used in the experiment. There was no significant interaction effect of price reduction and product category in the testing of Hypothesis 1(b). However, for the second research hypothesis, another approach was used to investigate consumer response to price reductions.

The own-price elasticity of demand was computed to test the second research hypothesis. The willingness-to-buy measurement was collapsed to two categories: either willing to buy or not willing to buy. The number of participants who were willing to buy was a proxy for the quantity demanded. The number of participants who were willing to buy the less-developed country-made product in each group was counted, and the own-price elasticity of demand for each of the two products at the two levels of price reductions was calculated and compared.

Among the 76 subjects who examined the shirts, 42 were willing to buy the shirt made in Indonesia before the price was reduced. These 42 subjects were used as a proxy for the quantity of the product demanded at $22. With knowledge that the price of the shirt decreased from $22 to $20, 55 participants were willing to buy it. Seventy-two participants were willing to buy the shirt after the price decreased to $17.50. The absolute values of the price elasticities of demand computed for the two successive price reductions were 3.10 and 2.47, respectively.

Among the 69 subjects who examined the telephones, 48 were willing to buy the telephone made in Indonesia at the original price. After the price decreased from $25 to $22.50, 58 participants were willing to buy the
telephone. This number increased to 67 after the price decreased to $20. The absolute values of the price elasticities of demand computed accordingly were 2.08 and 1.40, respectively. The number of subjects who were willing to buy the product at different price levels was presented in the Figure 2.

While both products were own-price elastic in the first and the second price reductions, the own-price elasticities for the shirt made in Indonesia were greater than those for the telephone made in Indonesia. Thus, participants were more responsive to price changes for the shirt than to price changes for the telephone. This result was consistent with the second research hypothesis: consumers’ demand for non-durable goods from a less-developed country is more price elastic than for durable goods from the same country of origin.

Figure 2: Subjects willing to buy the products at different price levels.

Discussion and Implications

A limitation of this study is that a convenience sample of students was used in the experiment, reducing the generalizability of the results. Also, some would argue that a student sample would respond differently to product images than would a sample of consumers drawn from the general population. However, Liefeld (1993) conducted a meta-analysis on 22 country-of-origin studies, among which 8 used student subjects and 14 used consumer subjects. The results of the analysis revealed no statistically significant difference in the estimation of country-of-origin effect between the two types of subjects.

Another limitation of this research is that a single country of origin was assumed. Given the increasingly complex nature of global products today, Chao (2000) suggested that future research should explore consumer perceptions of products with varying percentages of parts from different countries.

Also, it is possible that the subjects may have assigned attributes other than developed and less-developed to the two countries chosen for the experiment. While students indicated in the pilot study that they considered Japan to be a developed country and Indonesia to be a less-developed country, we do not know what other positive or negative perceptions they may have about the countries, their products or their people or how those perceptions may have influenced the outcomes. In addition, while we assumed the subjects responded differently to price changes for the two products because only one was a durable good, we cannot confirm that.

The findings of the study lead to three main conclusions. First, the “made-in” effect was significant in a multiple-attribute scenario. This suggests that the degree of economic development of the producing country does affect consumers’ buying intentions when other information is also present. Second, the country-of-origin effect does not totally prohibit consumers from considering products from a country against which they have a bias. Decreases in the prices of products from less-developed countries will induce consumers to increase their willingness to buy these products. Third, the hypothesized difference between the own-price elasticities of demand for different products was confirmed: a durable good from a less-developed country is less own-price elastic than a non-durable good from the same country.

The findings of this study provide some implications for marketing strategy and research. First and most basically, the country-of-origin effect should be a component of international marketing strategy. A challenge foreign marketers face is to ascertain the effects of their origin countries on consumers’ demand for their products. Armed with this knowledge, marketers can decide whether any relevant action is indicated. Such actions may include promotion of the origin images, suppression of the images or using price strategy to enhance the competitiveness of products with unfavorable origin images.
This study also sheds some light on the question of whether the importance of origin images on consumer behavior will diminish as markets become more globalized. While most previous researchers reported their findings of significant country-of-origin effects before the late 1990s, the globalization of business in the new century has brought intense concern about the merits and continuing relevance, or lack of, national origin identifiers. Some have argued that origins are no longer relevant in global markets where hybrid products, i.e., products with components from several countries, and global branding are increasingly the norm (Teas & Agarwal, 2000).

However, in many cases brands have difficulty shedding their national images. For example, Ford, General Electric and Coca-Cola are clearly viewed as “American” by consumers. Therefore the brand itself asserts a country-image effect on consumer demand. Also, the presence of hybrid products may offer producers even greater market opportunities through origin promotional campaigns.

As international trade and global competition increase and universal standardization of production minimizes product-based competitive advantages, manufacturers are not likely to abandon powerful promotional methods such as country image identifiers. In fact, governments are becoming more proactive and systematic in promoting their image abroad. Examples range from campaigns organized by embassies (e.g., “Italian Week at Bloomingdale’s”) to support for national appearances at trade fairs (Papadopoulos, 1993).

The results of the own-price elasticity comparison in this study imply that consumers tend to respond more intensely to price changes for non-durable goods from a less-developed country than to price changes for durable goods from the same country. Substitutes from different countries of origin are a major determinant of consumers’ responsiveness to price changes. Thus, price discounting as a market penetration strategy may not work as well for easily made, non-durable products as for sophisticated, technological durable goods from less-developed countries. Even for low technology non-durable goods, if all developing countries try to take advantage of consumers’ price sensitivities by cutting prices on those goods, the price concession strategy may not work well for any of them. Japan, South Korea and several other countries have been successful by gradually moving away from producing penetration-priced and low value-added products to producing high-quality and higher-priced products involving greater degrees of technological sophistication.

From the consumers’ perspective, increased exposure to foreign countries and their products through traveling and media and the growing presence of foreign products in domestic markets bring about greater awareness and acceptance of these products and the related country-of-origin image. Also, as the market and products become more complex, consumers are likely to increasingly seek means of simplifying information processing through use of some specific product cues, including a product’s country of origin, in their decision making.

The results of this study suggest that when the price of a product decreases, consumers are more likely to buy the product even if they have a bias against the product’s country of origin. In contrast, Heslop, Liefeld and Wall (1987) found that pricing policies and well-known brand names could not improve a negative country-of-origin effect. Clearly more research is needed to investigate whether the differences in the findings can be explained by changes in the global marketplace since 1987. Today’s global market is more integrated than the market of the 1980s. Thus, the country of origin may not be as influential on consumers’ purchase behaviors, especially when other important product cues such as price are present.

The results of this study suggest interaction between the country-of-origin effect and other product information as a focus in future studies on consumers’ buying behavior. The country-of-origin effect is better understood under a multi-cue environment. The multi-cue scenario is especially important in today’s marketplace where consumers have access to a variety of product-related information. While several studies have used a multi-cue environment they have not consistently included economic factors such as price.

Indeed, the interactions of product cues are characteristic of actual market situations in the real world. One could misunderstand consumers’ rationality of purchase behaviors by just focusing on any single piece of information. In a real purchase environment, a consumer who pays attention to the country-of-origin information will no doubt do so in the context of other information such as price and quality assessment. Research on whether consumers pay attention to and understand and use information, including country-of-origin information, is important to understand consumers’ decision making processes in the marketplace. With greater understanding of consumers’ purchase behaviors, consumer educators will be better prepared to teach consumers efficient and effective strategies to use in shopping.
References


Endnotes

1 Ph.D student, Department of Housing and Consumer Economics, University of Georgia, Athens, GA.
2 Professor, Department of Housing and Consumer Economics, University of Georgia, Athens, GA.
3 Associate Professor, Department of Housing and Consumer Economics, University of Georgia, Athens, GA.