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AN INVESTIGATION OF THE FOREIGN PRODUCT BIAS PHENOMENON IN THE UNITED STATES AND THE IMPLICATIONS FOR MARKETING STRATEGIES OF IMPORTED PRODUCTS

The Ohio State University

Ph.D. 1983

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AN INVESTIGATION OF THE FOREIGN PRODUCT BIAS PHENOMENON IN THE
UNITED STATES AND THE IMPLICATIONS FOR MARKETING STRATEGIES
OF IMPORTED PRODUCTS

Submitted in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

by
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1983

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ACKNOWLEDGMENTS

As is the case with any major milestone reached during an individual's lifetime it is important to realize that nothing of significance is accomplished alone; so it is with this project.

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# TABLE OF CONTENTS

**ACKNOWLEDGMENTS** ................................................................. iii

**VITA.** .......................................................................................... v

**LIST OF TABLES.** ................................................................. ix

**LIST OF FIGURES.** ................................................................. xii

**Chapter**

I. **INTRODUCTION** ................................................................. 1

*Overview.* ........................................................................................ 1
*Statement of the Research Issue* .................................................... 6
*Research Questions and Hypotheses* ............................................. 10
*Methodology* .................................................................................. 22
*Limitations of the Study* ............................................................... 24
*Potential Contributions* ............................................................... 27
*Organization of this Study* ........................................................... 28

II. **LITERATURE REVIEW.** ......................................................... 33

*Introduction.* .................................................................................. 33
*The Basic Problem Solving Model* ................................................. 33
*The Howard Model* ........................................................................ 35
*The Engel, Kollat, and Blackwell Model* ........................................ 38
*Factors Associated with Product Quality* ...................................... 42
*Early Foreign Product Bias Research* ............................................. 43
*Schooler's Dissertation* ................................................................ 44
*Reierson's Early Research* ............................................................ 44
*Nagashima's Early Research* ......................................................... 46
*Schooler Early Research* ............................................................... 49
*Schooler's 1971 Landmark Study* ................................................... 50
*Anderson and Cunningham's Research* ......................................... 51
*Ralph Gaedeke's Research* ............................................................ 53
*Lillis and Narayana's Research* ..................................................... 54
*Dornoff, Tankersley, and White's Research* ................................... 54
*Ethel and Walker's Research* ......................................................... 55
*Akira Nagashima's Research* ........................................................ 56
*Current Cross-Cultural Consumer Research* .................................. 57
*Cattin and Jollibert's Research* ....................................................... 57
*Attila Yaprak's Dissertation* ........................................................ 58
*Jollibert and Peterson's Research* ................................................ 59
### Chapter

<table>
<thead>
<tr>
<th>Research</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damanpour and Hallaq's Research</td>
<td>60</td>
</tr>
<tr>
<td>Johansson, Douglas, and Nonaka's Research</td>
<td>61</td>
</tr>
<tr>
<td>Catlin, Jolibert and Lohnes' Research</td>
<td>62</td>
</tr>
<tr>
<td>Current Non-U.S. Consumer Perception Research</td>
<td>62</td>
</tr>
<tr>
<td>Baumgartner and Jolibert's Research</td>
<td>63</td>
</tr>
<tr>
<td>John R. Darling and Frederic B. Kraft's Research</td>
<td>64</td>
</tr>
<tr>
<td>Current U.S. Foreign Product Bias Research</td>
<td>65</td>
</tr>
<tr>
<td>Seaton and Vogel's Research</td>
<td>66</td>
</tr>
<tr>
<td>Khera and Anderson's Research</td>
<td>66</td>
</tr>
<tr>
<td>Kenneth White's Research</td>
<td>67</td>
</tr>
<tr>
<td>Summary</td>
<td>68</td>
</tr>
</tbody>
</table>

### III. RESEARCH DESIGN

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>76</td>
</tr>
<tr>
<td>Defining Foreign Product Bias</td>
<td>77</td>
</tr>
<tr>
<td>Methodological Considerations</td>
<td>78</td>
</tr>
<tr>
<td>The Self-explicated Measure of Foreign Product Bias</td>
<td>81</td>
</tr>
<tr>
<td>The Multi-Attribute Measure of Foreign Product Bias</td>
<td>83</td>
</tr>
<tr>
<td>The Questionnaire</td>
<td>90</td>
</tr>
<tr>
<td>Initial Questionnaire Development</td>
<td>90</td>
</tr>
<tr>
<td>The Pre-test of the Questionnaire</td>
<td>95</td>
</tr>
<tr>
<td>Pre-test Results of Part I</td>
<td>98</td>
</tr>
<tr>
<td>Pre-test Results of Part II</td>
<td>99</td>
</tr>
<tr>
<td>Pre-test Results of Parts III and VII</td>
<td>101</td>
</tr>
<tr>
<td>Pre-test Results of Parts IV and VII</td>
<td>101</td>
</tr>
<tr>
<td>Retest Results of the Finalized Questionnaire</td>
<td>102</td>
</tr>
<tr>
<td>Basic Fractional Factorial Design: $3^4$</td>
<td>104</td>
</tr>
<tr>
<td>Sample Selection</td>
<td>104</td>
</tr>
<tr>
<td>The Data Base</td>
<td>107</td>
</tr>
<tr>
<td>Hypotheses Tested</td>
<td>108</td>
</tr>
<tr>
<td>Demographic Factors Associated with Foreign Produced Bias</td>
<td>115</td>
</tr>
<tr>
<td>Testing the Association of Attitudinal Variables with Foreign Product Bias</td>
<td>116</td>
</tr>
<tr>
<td>Measuring the Extent to Which Foreign Product Bias is Product Specific</td>
<td>118</td>
</tr>
<tr>
<td>Testing the Overall Importance of Marketing Mix Elements in Determining Consumers' Ranking of Product Quality</td>
<td>120</td>
</tr>
<tr>
<td>Grouping Respondents According to Degree of Foreign Product Bias</td>
<td>122</td>
</tr>
<tr>
<td>Developing Measures of Marketing Strategy Effectiveness</td>
<td>127</td>
</tr>
<tr>
<td>Demographic Factors Associated with the Responsiveness of Foreign Product Bias to Change Due to Marketing Strategies</td>
<td>129</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>IV. ANALYSIS OF DATA AND FINDINGS</td>
<td>137</td>
</tr>
<tr>
<td>Overview</td>
<td>137</td>
</tr>
<tr>
<td>Ratings of Product Quality</td>
<td>137</td>
</tr>
<tr>
<td>Tests to Establish the Existence of Foreign Product Bias</td>
<td>139</td>
</tr>
<tr>
<td>Tests of Overall Value Offered by Foreign Products</td>
<td>141</td>
</tr>
<tr>
<td>Testing the Association of Demographic Variables with Foreign Product Bias</td>
<td>150</td>
</tr>
<tr>
<td>Testing the Association Demographic Variables with Product Value Ratings</td>
<td>165</td>
</tr>
<tr>
<td>Results of Responses to Questions About Issues Which Affect Foreign Product Bias</td>
<td>171</td>
</tr>
<tr>
<td>Testing the Association of Attitudinal Variables with Foreign Product Bias</td>
<td>181</td>
</tr>
<tr>
<td>Measuring Attitudes Toward Foreign Products in Specific Product Categories</td>
<td>190</td>
</tr>
<tr>
<td>The Effect of Marketing Mix Elements in Determining Rankings of Product Quality in a Multi-Attribute Setting</td>
<td>204</td>
</tr>
<tr>
<td>Testing Respondents' Responsiveness to Marketing Strategies</td>
<td>208</td>
</tr>
<tr>
<td>Testing the Effectiveness of Marketing Strategies in Overcoming Foreign Product Bias</td>
<td>224</td>
</tr>
<tr>
<td>Testing the Association of Market Strategy Responsiveness with Selected Demographic Variables</td>
<td>228</td>
</tr>
<tr>
<td>Other Findings</td>
<td>237</td>
</tr>
<tr>
<td>V. SUMMARY FINDINGS, IMPLICATIONS AND CONCLUSIONS</td>
<td>243</td>
</tr>
<tr>
<td>Introduction</td>
<td>243</td>
</tr>
<tr>
<td>Measuring Foreign Product Bias</td>
<td>244</td>
</tr>
<tr>
<td>Demographic and Attitudinal Variables Associated with Foreign Product Bias</td>
<td>247</td>
</tr>
<tr>
<td>An Evaluation of the Effectiveness of Selected Marketing Strategies in Overcoming Foreign Product Bias</td>
<td>249</td>
</tr>
<tr>
<td>Implications of the Research</td>
<td>252</td>
</tr>
<tr>
<td>Implications for Future Research</td>
<td>257</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>258</td>
</tr>
<tr>
<td>APPENDIXES</td>
<td></td>
</tr>
</tbody>
</table>
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-1.</td>
<td>Questionnaire Pre-test Results</td>
<td>97</td>
</tr>
<tr>
<td>3-2.</td>
<td>Summary of Sample Data</td>
<td>107</td>
</tr>
<tr>
<td>4-1.</td>
<td>Ratings of Overall Product Quality</td>
<td>138</td>
</tr>
<tr>
<td>4-2.</td>
<td>Analysis of Variance in Product Quality Ratings</td>
<td>139</td>
</tr>
<tr>
<td>4-3.</td>
<td>Quality Rating of Domestic Vs. Foreign Product</td>
<td>142</td>
</tr>
<tr>
<td>4-4.</td>
<td>Respondents' Ratings of Overall Product Quality</td>
<td>143</td>
</tr>
<tr>
<td>4-5.</td>
<td>Ratings of Overall Value Offered</td>
<td>144</td>
</tr>
<tr>
<td>4-6.</td>
<td>Analysis of Variance in Product Value Ratings</td>
<td>145</td>
</tr>
<tr>
<td>4-7.</td>
<td>Value Ratings of Domestic Vs. Foreign Products</td>
<td>146</td>
</tr>
<tr>
<td>4-8.</td>
<td>Respondents' Ratings of Overall Value Offered</td>
<td>147</td>
</tr>
<tr>
<td>4-9.</td>
<td>Quality Vs. Value Ratings for Each Country</td>
<td>149</td>
</tr>
<tr>
<td>4-10.</td>
<td>Summary of Demographic Variables with Quality Rating</td>
<td>151</td>
</tr>
<tr>
<td>4-11.</td>
<td>Sex as a Determinant of Quality Ratings: Hypothesis Tested ( H_{4.1} )</td>
<td>153</td>
</tr>
<tr>
<td>4-12.</td>
<td>Age as a Determinant of Quality Rating: Hypothesis Tested ( H_{4.2} )</td>
<td>154</td>
</tr>
<tr>
<td>4-13.</td>
<td>Education as a Determinant of Quality Rating: Hypothesis Tested ( H_{4.3} )</td>
<td>156</td>
</tr>
<tr>
<td>4-14.</td>
<td>Income as a Determinant of Quality Rating: Hypothesis ( H_{4.6} )</td>
<td>157</td>
</tr>
<tr>
<td>4-15.</td>
<td>Change in Expected Income as a Determinant of Quality Rating: Hypothesis Tested ( H_{4.7} )</td>
<td>158</td>
</tr>
<tr>
<td>4-16.</td>
<td>Union Membership as a Determinant of Quality Rating: Hypothesis Tested ( H_{4.9} )</td>
<td>160</td>
</tr>
<tr>
<td>Table</td>
<td>Geographic Residence of Respondent as a Determinant of Quality Rating Hypothesis Tested $H_{4.11}$</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>4-17</td>
<td></td>
<td>161</td>
</tr>
<tr>
<td>4-18</td>
<td>Automobile Owned as a Determinant of Quality Rating: Hypothesis Tested $H_{4.8}$</td>
<td>162</td>
</tr>
<tr>
<td>4-19</td>
<td>Occupation as a Determinant of Quality Rating: Hypothesis Tested $H_{4.4}$</td>
<td>163</td>
</tr>
<tr>
<td>4-20</td>
<td>Hypothesis Tested $H_{4.5}$</td>
<td>164</td>
</tr>
<tr>
<td>4-21</td>
<td>Summary of Demographic Variables Association with Value Rating</td>
<td>166</td>
</tr>
<tr>
<td>4-22</td>
<td>Regression Analysis - Bias Toward Products from Developed Countries Using Only Attitudinal Variables</td>
<td>183</td>
</tr>
<tr>
<td>4-23</td>
<td>Regression Analysis - Bias Toward Products from Less Developed Countries Using Only Attitudinal Variables</td>
<td>184</td>
</tr>
<tr>
<td>4-24</td>
<td>Regression Analysis - Bias Toward Products from Developed Countries Using Both Attitudinal Variables and Demographic Variables</td>
<td>187</td>
</tr>
<tr>
<td>4-25</td>
<td>Regression Analysis - Bias Toward Products From Developed Countries Using Only Demographic Variables</td>
<td>189</td>
</tr>
<tr>
<td>4-26</td>
<td>Automobile/Automotive Parts Quality Rankings</td>
<td>191</td>
</tr>
<tr>
<td>4-27</td>
<td>Television/Radio Quality Rankings</td>
<td>192</td>
</tr>
<tr>
<td>4-28</td>
<td>Clothing Quality Rankings</td>
<td>193</td>
</tr>
<tr>
<td>4-29</td>
<td>Food Quality Rankings</td>
<td>194</td>
</tr>
<tr>
<td>4-30</td>
<td>Household Appliances Quality Rankings</td>
<td>195</td>
</tr>
<tr>
<td>4-31</td>
<td>Toy Quality Rankings</td>
<td>196</td>
</tr>
<tr>
<td>4-32</td>
<td>Friedman Two-Way Analysis of Product Rankings by Country: Hypothesis $6.1$</td>
<td>200</td>
</tr>
<tr>
<td>4-33</td>
<td>Comparison of Product Class Rankings to General Product Quality Ratings by Product: Hypothesis $6.2-6.7$</td>
<td>202</td>
</tr>
<tr>
<td>4-34</td>
<td>The Effect of Country of Origin Information and Marketing Mix Element on Product Quality Rankings</td>
<td>205</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>4-35</td>
<td>Percentage of Variance Explained by Country of Origin and Marketing Mix Elements by Product Risk Classification</td>
<td>207</td>
</tr>
<tr>
<td>4-36</td>
<td>Comparison of Means by Marketing Strategy Response Group to High Risk Products from Developed Countries</td>
<td>210</td>
</tr>
<tr>
<td>4-37</td>
<td>Comparison of Means by Marketing Strategy Response Group Low Risk Products from Developed Countries</td>
<td>211</td>
</tr>
<tr>
<td>4-38</td>
<td>Comparison of Means by Marketing Strategy Response Group to High Risk Products from Less Developed Countries</td>
<td>212</td>
</tr>
<tr>
<td>4-39</td>
<td>Comparison of Means by Marketing Strategy Response Group to Low Risk Products from Less Developed Countries</td>
<td>213</td>
</tr>
<tr>
<td>4-40</td>
<td>Comparison of Means by Marketing Strategy Response Group to Products from Developed Countries (D.C.) and Less Developed Countries (L.D.C.) for High Risk Products</td>
<td>215</td>
</tr>
<tr>
<td>4-41</td>
<td>Comparison of Means by Marketing Strategy Response Group to Products from Developed Countries (D.C.) and Less Developed Countries (L.D.C.) for Low Risk Products</td>
<td>217</td>
</tr>
<tr>
<td>4-42</td>
<td>Comparison of Means by Marketing Strategy Response Group to Products from Less Developed Countries by Risk Classification of the Product</td>
<td>220</td>
</tr>
<tr>
<td>4-43</td>
<td>Comparison of Means by Marketing Strategy Response Group to Products from Developed Countries by Risk Classification of the Product</td>
<td>222</td>
</tr>
<tr>
<td>4-44</td>
<td>A Comparison of Means of Consumers Who Responded Favorably to Marketing Strategies for Imported Products</td>
<td>226</td>
</tr>
<tr>
<td>4-45</td>
<td>Discriminate Analysis: F-Values for Marketing Variables</td>
<td>229</td>
</tr>
<tr>
<td>4-46</td>
<td>Demographic Variables as a Determinant of Market Strategy Response Group Membership</td>
<td>231</td>
</tr>
<tr>
<td>4-47</td>
<td>T-Tests of Student Vs. Non-Student Attitudes Toward the Quality and Value Offered of Foreign Products</td>
<td>240</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>Imported Products Share of U.S. Market</td>
<td>3</td>
</tr>
<tr>
<td>2-1</td>
<td>The Basic Problem Solving Model</td>
<td>34</td>
</tr>
<tr>
<td>2-2</td>
<td>The Engel, Kollat, Blackwell Consumer Behavior Model</td>
<td>36</td>
</tr>
<tr>
<td>2-3</td>
<td>The Howard Model of Buyer Behavior, 1974 Version</td>
<td>38</td>
</tr>
<tr>
<td>2-4</td>
<td>Nagashima's 1970 Study</td>
<td>48</td>
</tr>
<tr>
<td>3-1</td>
<td>Monotonically Increasing Vector Model</td>
<td>87</td>
</tr>
<tr>
<td>3-2</td>
<td>Monotonically Decreasing Vector Model</td>
<td>87</td>
</tr>
<tr>
<td>3-3</td>
<td>Ideal Point Model</td>
<td>88</td>
</tr>
<tr>
<td>3-4</td>
<td>Part-Worth Function Model</td>
<td>88</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

Overview

The purpose of this first chapter is to indicate the reasons for the research effort, to provide an overview of the methodology, and to suggest potential contributions of the research. The motivation for this study has historical, practical, and theoretical bases.

When entering a foreign market, every international marketer is faced with numerous obstacles. Some of these obstacles are the result of both home and host government actions which result in tangible barriers between the marketer and the consumer. These tangible barriers may take many forms including the following: licensing requirements, tariffs, quotas, and product standards. Additionally, the international marketer is faced with intangible barriers not encountered by domestic firms, and the most important of these intangible barriers is a consumer bias against or for foreign products. Several studies have established that this foreign product bias exists among U.S. consumers. Therefore, it is very important for a foreign firm considering entering the U.S. market to understand how consumers view products from their country and to consider alternative strategies to overcome this foreign product bias.

This research is aimed at the evaluation of different marketing strategies which can be used by the marketer of foreign products to
overcome foreign product bias. There are several alternative strategies which appear to hold promise. First, the marketer could attempt to change consumer attitudes about products from his country. However, this is an expensive time-consuming process which may produce few positive results. Secondly, the foreign marketer might conduct a market research study to identify specific market segments which exhibit little or no foreign product bias, and then direct their marketing effort towards those particular market segments. However, this approach has the disadvantage of greatly limiting the size of the potential marketer and it makes future market expansion difficult. Finally, the foreign market can explore the possibility of using various marketing strategies to reduce or eliminate the negative effects of foreign product bias. For example, by selecting the right combination of pricing, channel, promotional and branding strategies, it may be possible to overcome foreign product bias.

Determining ways to overcome foreign product bias is also important to U.S. exports seeking to expand into new markets. This research attempts to develop a sound, yet parsimonious, methodology to allow exporters of U.S. products to determine consumer attitudes towards their products and competitors' products and to identify the best marketing strategy to use this information.

The past decade has found U.S. firms facing increasingly stiff competition in both export markets and domestic markets and with both Western European and Japanese products. This success is evidenced by the tremendous market share gains made by foreign products (see Figure 1-1). The success experienced by these competitors has led
international businessmen, academicians and government officials to ask several questions about U.S. products—"Are U.S. products still competitive with products produced by foreign firms?", "What can U.S. firms do to increase their competitive position against foreign imports?" and "How do American consumers rate the quality and value offered by domestically produced products versus that offered by foreign products?" The answers to these questions are important because the American marketer must understand how his product is viewed by his consumers in order to meet the challenges offered by imported products.

![Figure 1-1. Imported Products Share of U.S. Market Percent of Total Sales](image-url)
In order to successfully compete with foreign imports and improve the United States' balance of trade position, marketers may employ a number of different strategies to meet overseas challenges: 1) they can emphasize the unique advantages and value offered by their particular product over all other products; 2) they can urge American consumers to buy American products because Americans, as a nation, build the best products; or 3) they can encourage consumers to buy American products whether or not they're the best ones on the market because it's the morally correct thing to do.

Each of these strategies assume specific consumer attitudes about the overall quality and value of American and foreign products. For the marketer of a specific product it is important to know whether general attitudes about American and foreign product quality are product specific and, if so, what is the prevailing attitude towards their particular product line. However, for the balance of trade problems faced by the United States, it is more important to know what attitudes are held by American consumers about U.S. products and foreign products in general. Do people feel that American products are generally superior or inferior to foreign products? Can these feelings be overcome using different marketing strategies?

Research has shown that different nations and societies have reacted very differently to foreigners and the products produced and traded by foreigners. Sometimes the knowledge that a product has been produced in a foreign country has enhanced the image of that product. At other times foreign imports have been labeled as inferior and unwelcome just because they were produced outside the
home country. However, this reaction is not constant for all foreign products from all countries. Perhaps products from a particular country or group of countries are felt to be inferior or superior to locally produced products. Some of the questions this research seeks to answer are "How do American consumers feel about foreign products versus domestic products?," and "Has there been a recent shift in these attitudes?"

Additionally, past studies have indicated that the feelings towards foreign products are not the same for all sub-groups within a society. Therefore, it is important to measure the foreign product attitudes of several groups within the country. These groups can be defined both in terms of demographic characteristics and in terms of psychographic characteristics. This study will seek to identify useful sub-groups within American society defined by demographic and attitudinal variables which allow them to be grouped together based on similar beliefs toward foreign products. Successful grouping on these variables will allow the marketer to identify market segments which can be useful when planning a foreign product introduction strategy.

Having measured foreign product bias for various well defined market segments, the next problem facing the marketer is developing a marketing strategy which either enhances positive foreign product bias or overcomes negative foreign product bias. Research suggests that consumers use many cues when selecting a product. Price has been shown to be used as a surrogate indicator of product quality when making purchase decisions. Brand name has also been identified
as an important factor in the purchase decision. Similarly, the type of retail outlet the product was distributed through and types of advertising campaigns employed have also been shown to be important influences in the consumer purchase decision.

Since the international marketer is faced with a foreign product bias which may be very difficult to change directly, it may be more effective to use different marketing strategies to overcome these attitudes. This study examines the effectiveness of using different pricing, promotion, distribution, and branding strategies to overcome the foreign product bias phenomenon.

Statement of the Research Issue

This research study measures U.S. consumer attitudes towards both domestic and foreign products based on the knowledge of country of origin, and determines how these attitudes affect perceptions of product quality and value. This study builds on the other studies in this general area by attempting to validate previous findings, to measure recent shifts in consumers' attitudes, and to address methodological shortcomings of these studies. In addition, this study investigates several areas which have not been addressed in previous studies including the following: 1) What effect does the combination of different pricing strategies, promotional strategies, distribution strategies and branding strategies have on perceptions of product quality of products produced in the United States, other developed countries, and less developed countries? 2) Can demographic data such as age, sex, education, income, occupation and ethnic background
be used to identify consumer segments who exhibit strong foreign product biases? 3) Can attitudinal variables such as patriotism, attitude toward U.S. workers' attitudes towards big business, and economic self-interest be used? 4) Can a methodology be developed which will allow an accurate yet parsimonious identification of market segments defined on the basis of the factors mentioned above? 5) Have products produced in the United States lost their long held position as perceived by American consumers as being the best produced products in the world?

The premise of this research is that consumers' perceptions of a specific product's quality are in part determined by stereotypes based on the country of origin of that product. Additionally, this study examines the effect of different marketing strategies on these perceptions of product quality. Finally, an attempt is made to identify specific market segments which identify either very positive or very negative bias toward foreign products. This identification is based on both demographic and attitudinal variables.

Several studies have suggested that U.S. consumers use country of origin information as surrogate cues to judge overall product quality when additional cues are not available. Similar studies have shown that foreign product bias also exists in numerous other countries including the following: Guatemala, Japan, Finland, England, France, and Turkey. Of particular interest to this research is the finding, of all the studies analyzing country of origin bias for U.S. consumers, that products produced in the United States were consistently rated highest in terms of overall quality.
This finding seems to be contradicted by what is happening in the American marketplace today as evidenced by a merchandise trade balance deficit expected to reach $60 billion in 1983. Numerous U.S. industries are facing increasing competition from foreign produced products. Many experts feel that a large part of the success of these foreign products is due to a shift in U.S. consumer attitudes away from the general acceptance of the idea that U.S. products represent the highest quality products produced in the world.

Indeed, this research is the direct result of an experience of this author during a recent visit to a new car dealership. While considering the purchase of a new Volkswagen Rabbit Diesel, I was advised by the salesman that I had better buy soon because next year's models were all going to be produced in Volkswagen's U.S. plant. He claimed that the demand for German made VW's was much higher than the demand would be when the car was produced by American workers. A small, statistically invalid sample of several younger friends and associates tended to confirm this hypothesis. Therefore, the first part of this study is a measurement of current attitudes toward the overall quality of U.S. and foreign produced goods in an effort to detect recent shifts in these attitudes.

This study also examines the effects of country of origin, price, promotional strategy and channel selection in order to provide guidance in the marketing strategy of foreign products introduced into the U.S. marketplace.

Marketing research studies have established a solid link between a product's price and the consumer's perception of product quality.
Additionally, there has been an attempt to establish an elasticity of product bias.23

Establishing the existence of an interaction between price and country of origin is important in establishing an effective pricing policy for imports. For example, if it is known that a strong interaction exists between products from less developed countries and lower prices, then the policy of many less developed countries, of trying to enter the U.S. market by offering very low cost products, may actually decrease the American consumers' perception of the quality of these products. In such a case, a different pricing policy might be more effective.

Similarly, if this research is able to identify market segments which display a strong foreign product bias but which are very sensitive to other marketing mix variables besides price, then the marketer could use these results to formulate an effective marketing strategy. For example, if the results of this study identify a market segment which has a very strong bias against products produced in less developed countries but which use the prestige of the retailer as a strong surrogate indicator of product quality, then an appropriate marketing strategy for third world products aimed at this segment would be to emphasize distribution primarily through high prestige retailers.
Research Questions and Hypotheses

The principle question addressed in this dissertation is "what effect does country of origin information have on consumers' perception of product quality?" Focusing first on the effect of country of origin information, the first hypothesis expressed in the null form becomes:

\[ H_{1,1}: \text{Country of Origin Knowledge has no Effect on Perceptions of Overall Product Quality Ratings.} \]

The literature review suggests that this hypothesis will be rejected and that products from developed countries are perceived as being superior to products from less developed countries. Therefore, rejection of \( H_{1,1} \) suggests a second group hypothesis which must be tested; these hypotheses are designed to clarify the relationship between domestic products and products from several of our important trading partners. In addition to the United States, eight countries were selected to be included in the study: Japan, England, West Germany, France, Taiwan, South Korea, Brazil, and Mexico. These countries were selected to allow the study of products from both developed and less developed countries. The second group of hypotheses are designed to establish the direction of bias toward products from these eight countries. The hypotheses to be tested, expressed in their null form become:

\[ H_{1,2}: \text{There is no Difference in the Overall Quality Ratings of Products Produced in South Korea and Products Produced in the United States.} \]
H\textsubscript{1.3}: There is no Difference in the Overall Quality Ratings of Products Produced in France and Products Produced in the United States.

H\textsubscript{1.4}: There is no Difference in the Overall Quality Ratings of Products Produced in Taiwan and Products Produced in the United States.

H\textsubscript{1.5}: There is no Difference in the Overall Quality Ratings of Products Produced in West Germany and Products Produced in the United States.

H\textsubscript{1.6}: There is no Difference in the Overall Quality Ratings of Products Produced in Japan and Products Produced in the United States.

H\textsubscript{1.7}: There is no Difference in the Overall Quality Ratings of Products Produced in Brazil and Products Produced in the United States.

H\textsubscript{1.8}: There is no Difference in the Overall Quality Ratings of Products Produced in Mexico and Products Produced in the United States.

H\textsubscript{1.9}: There is no Difference in the Overall Quality Ratings of Products Produced in England and Products Produced in the United States.

In addition to the importance of perceptions of product quality to the overall success of a marketing effect, the concept of value offered for one's money is also a very important determinant of how successful a product will be. A product which was rated as only average in quality may be rated as an excellent value if it is priced well below competing products and the rater is price conscience. As the literature review in Chapter II will reveal, previous studies have not focused on the concept of value offered
so whether or not value ratings will vary by country is uncertain.

One might argue that it is unlikely to find significant differences in value rating based on country of origin information because exchange rates and pricing policies will adjust to make products from each country relatively equal to products from any other country in order to maintain a competitive position in the marketplace. On the other hand, one might expect products from the less developed countries to offer much higher value than products from developed countries by using a low price strategy to compensate for their lower quality products. Therefore, the next hypothesis tested will investigate the overall effect of country of origin information on value ratings and the accompanying hypotheses will establish the direction and magnitude of value ratings of foreign products versus value ratings of domestic products. Expressed in their null form these hypotheses become:

\[ H_{2.1}: \text{Country of Origin Knowledge has no Effect on Perceptions of Overall Product Value Ratings.} \]

\[ H_{2.2}: \text{There is no Difference in the Value Ratings of Products Produced in South Korea and Products Produced in the United States.} \]

\[ H_{2.3}: \text{There is no Difference in the Value Ratings of Products Produced in France and Products Produced in the United States.} \]

\[ H_{2.4}: \text{There is no Difference in the Value Ratings of Products Produced in Taiwan and Products Produced in the United States.} \]

\[ H_{2.5}: \text{There is no Difference in the Value Ratings of Products Produced in West Germany and Products Produced in the United States.} \]
There is no difference in the Value Ratings of Products Produced in Japan and Products Produced in the United States.

There is no difference in the Value Ratings of Products Produced in Brazil and Products Produced in the United States.

There is no difference in the Value Ratings of Products Produced in Mexico and Products Produced in the United States.

There is no difference in the Value Ratings of Products Produced in England and Products Produced in the United States.

Having established the importance of country of origin information on ratings of product quality and value for each of the eight countries under study versus domestic products, the next step is to investigate how these ratings vary within a country. Therefore, each country's rating of product quality will be compared to that country's rating of product value to determine whether these ratings are significantly different and the direction of any differences. Adjustments to the scales may be necessary if the mean ratings of all countries in terms of product quality is significantly different from their ratings of product value. Expressed in their null form these hypotheses become:

There is no Difference in the Overall Quality Rating and the Overall Value Rating for Products Produced in South Korea.

There is no Difference in the Overall Quality Rating and the Overall Value Rating for Products Produced in France.

There is no Difference in the Overall Quality Rating and the Overall Value Rating for Products Produced in Taiwan.
$H_{3.4}$: There is no Difference in the Overall Quality Rating and the Overall Value Rating for Products Produced in West Germany.

$H_{3.5}$: There is no Difference in the Overall Quality Rating and the Overall Value Rating for Products Produced in Japan.

$H_{3.6}$: There is no Difference in the Overall Quality Rating and the Overall Value Rating for Products Produced in Brazil.

$H_{3.7}$: There is no Difference in the Overall Quality Rating and the Overall Value Rating for Products Produced in the United States.

$H_{3.8}$: There is no Difference in the Overall Quality Rating and the Overall Value Rating for Products Produced in Mexico.

$H_{3.9}$: There is no Difference in the Overall Quality Rating and the Overall Value Rating for Products Produced in England.

Having examined the issues of foreign product bias from both the standpoint of product quality and product value, the next question is whether or not certain demographic groups respond differently to foreign products than other groups. For example, do younger consumers respond differently to foreign products than older consumers? Identifying different response patterns becomes more difficult when the possibility that these group responses may not be consistent across all countries; therefore each country/demographic grouping must be examined for significant response patterns. For example young consumers may respond much more favorably to products from France than older consumers but much less favorably to products from Brazil than older consumers. Therefore, each country/demographic variable will
be tested to determine if a significant association exits. Expressed in their null form these hypotheses become:

$H_{4.1}$: There is no Association Between Sex and the Degree of Foreign Product Bias Displayed.

$H_{4.2}$: There is no Association Between Age and the Degree of Foreign Product Bias Displayed.

$H_{4.3}$: There is no Association Between Educational Level and the Degree of Foreign Product Bias Displayed.

$H_{4.4}$: There is no Association Between Occupation and the Degree of Foreign Product Bias Displayed.

$H_{4.5}$: There is no Association Between Ethnic Background and the Degree of Foreign Product Bias Displayed.

$H_{4.6}$: There is no Association Between Income Level and the Degree of Foreign Product Bias Displayed.

$H_{4.7}$: There is no Association Between Expected Change in Income Level and the Degree of Foreign Product Bias Displayed.

$H_{4.8}$: There is no Association Between Type of Automobile Owned and the Degree of Foreign Product Bias Displayed.

$H_{4.9}$: There is no Association Between Union Membership and the Degree of Foreign Product Bias Displayed.

$H_{4.10}$: There is no Association Between Spouse's Union Membership and the Degree of Foreign Product Bias Displayed.

$H_{4.11}$: There is no Association Between Geographic Region the Respondent is a Native of and the Degree of Foreign Product Bias Displayed.
Since foreign product bias in this study is expressed both in terms of product quality and product value offered by foreign product each of these hypotheses will be tested for both quality and value.

Related to the question of determining which demographic variables may be related to foreign product bias this study also looked at attitudinal variables which might be related to foreign product bias. Based on previous studies and suggested by experts in the field, six attitudinal variables were selected to be examined in this exploratory phase of the study. The six variables under consideration were "the consumer's attitude toward the importance of patriotism when considering the purchase of a foreign product, their attitude toward the pride American workers take in their work, their attitude concerning whether members of large unions are overpaid, their attitude toward big business, their attitude concerning the economic consequences to themselves when purchasing foreign products, the importance of determining country of origin when making a purchase. Expressed in their null form the hypotheses which represent these issues are the following:

\[
\begin{align*}
H_{5.1}: \text{Consumers' Attitudes Toward the Importance of Patriotism when considering the Purchase of a Foreign Product is not Associated with the Degree of Foreign Product Bias Displayed.} \\
H_{5.2}: \text{Consumers' Attitudes Toward the Pride American Workers take in their Work is not Associated with the Degree of Foreign Product Bias Displayed.} \\
H_{5.3}: \text{Consumers' Attitudes Concerning Whether Members of Large Unions are Overpaid is not Associated with the Degree of Foreign Product Bias Displayed.} \\
H_{5.4}: \text{Consumers' Attitudes Toward Big Business are not Associated with the Degree of Foreign Product Bias Displayed.}
\end{align*}
\]
H₅.₅: Consumers' Attitudes Concerning the Economic Consequences to Themselves of Purchasing Foreign Products is not Associated with the Degree of Foreign Product Bias Displayed.

H₅.₆: Consumers' Attitudes Toward the Importance of Determining Country of Origin when making a Purchase is not Associated with the Degree of Foreign Product Bias Displayed.

Another issue addressed by this study is the extent to which foreign product bias is common to all product lines produced in a particular country. Closely related is the question of which product or group of products have the greatest influence on consumers' attitudes toward products in general from that country. The product categories considered in this study were selected based on the results of previous studies and on an analysis of current U.S. trade patterns. The six product groups under study are automobiles/automotive parts, televisions or stereos, clothing/shoes, food products, home appliances, and toys/games. Expressed in their null form the hypotheses dealing with the issue of whether foreign product bias is product specific become:

H₆.₁: Overall Rankings of a Country's Product Quality are Independent of the Product Class Being Ranked.

H₆.₂: The Quality Rating of the Product Class, Automobiles/Automotive Parts is not Associated with the Rating of Overall Product Quality.

H₆.₃: The Quality Rating of the Product Class, Televisions/Stereos is not Associated with the Rating of Overall Product Quality.

H₆.₄: The Quality Rating of the Product Class, Clothing/Shoes is not Associated with the Rating of Overall Product Quality.
$H_{6.5}$: The Quality Rating of the Product Class, Food Products is not Associated with the Rating of Overall Product Quality.

$H_{6.6}$: The Quality Rating of the Product Class, Home Appliances is not Associated with the Rating of Overall Product Quality.

$H_{6.7}$: The Quality Rating of the Product Class, Toys/Games is not Associated with the Rating of Overall Product Quality.

The second part of this study is devoted to examining alternative marketing strategies available to the international marketer to overcome the foreign product bias phenomenon. The marketing mix variables considered in this study are price, promotion, and channel. Each of these provides a direct analysis of their effect on consumers' evaluations of product quality. Additionally, each of these variables has the possibility of significant interactions with country of origin information. If such interactions exist they would have a significant impact on appropriate marketing strategies when entering foreign markets. Therefore, for each of these variables there are several hypotheses which must be tested.

The second factor considered by this study is price. A review of previous studies suggests that price is used by consumers to infer overall product quality in situations where other cues are not available. Therefore other testable hypotheses are:

$H_{7.1}$: The Price of The Product has no Effect on Perceptions of Overall Product Quality.

$H_{7.2}$: There is not a Significant Interaction Between the Price of a Product, its Country of Origin, and Consumers' Perceptions of Product Quality.
The third factor considered is promotion. Previous research suggests that the promotional policy used by a firm may have an influence on consumers' perceptions of product quality. This leads to several testable hypotheses:

\( H_{8.1} \): Promotional Policy Employed does not have an Effect on Perceptions of Overall Product Quality.

\( H_{8.2} \): There is not a Significant Interaction Between the Promotional Policy of a Product, its Country of Origin, and Consumers' Perceptions of Product Quality.

The fourth factor studied is the retail channel of distribution selected by the marketer. Again previous research suggests that the image of the retailer has an influence on the consumers' perceptions of product quality; therefore, these hypotheses must be tested:

\( H_{9.1} \): The Channel of Retail Distribution Employed does not have an Effect on Perceptions of Overall Product Quality.

\( H_{9.2} \): There is not a Significant Interaction Between the Retail Distribution Channel Policy of a Product, its Country of Origin, and Consumers' Perceptions of Product Quality.

The next phase of this study addresses the issue of how the marketing manager can best choose among the marketing mix strategies available to him or her in an effort to negate negative foreign product biases or to enhance positive foreign product biases. In order to accomplish this each respondent was classified as being either positively biased toward foreign products, negatively biased toward foreign products or neutral toward foreign products based on their responses to the self-explicated ratings of product quality. Then
each respondent was classified using the same typology but based on their utility values for country of origin information derived using conjoint analysis rankings of various product, country, price, channel, and promotional configurations. Each respondent was then classified as responding more favorably toward foreign products than would be expected based on their self-explicated classification scores, less favorably than would be expected or responding as expected. Having made these classifications the next step was to examine the marketing mix strategies used to determine which of the marketing mix elements were associated with favorable responses to foreign products. Expressed in their null form the hypotheses which were tested became:

\[ H_{10.1}: \] The Price of the Product has no Association with the Effectiveness of the Marketing Strategy in Overcoming Foreign Product Bias.

\[ H_{10.2}: \] The Place of Purchase of the Product has no Association with the Effectiveness of the Marketing Strategy in Overcoming Foreign Product Bias.

\[ H_{10.3}: \] The Promotion Method of the Product has no Association with the Effectiveness of the Marketing Strategy in Overcoming Foreign Product Bias.

Having developed these marketing strategy response groups the next question was whether it is possible to define these groups using the demographic variables used to describe the foreign product bias groups. Expressed in their null form these hypotheses are the following:
There is no Association Between Sex and Responsiveness to Marketing Strategies.

There is no Association Between Age and Responsiveness to Marketing Strategies.

There is no Association Between Education Level and Responsiveness to Marketing Strategies.

There is no Association Between Occupation and Responsiveness to Marketing Strategies.

There is no Association Between Ethnic Background and Responsiveness to Marketing Strategies.

There is no Association Between Income Level and Responsiveness to Marketing Strategies.

There is no Association Between Expected Change in Income Level and Responsiveness to Marketing Strategies.

There is no Association Between Type of Automobile Owned and Responsiveness to Marketing Strategies.

There is no Association Between Union Membership and Responsiveness to Marketing Strategies.

There is no Association Between Spouse's Union Membership and Responsiveness to Marketing Strategies.

There is no Association Between Geographic Region One is a Nature of and Responsiveness to Marketing Strategies.
Methodology

These research questions were investigated using primary data collected through a survey questionnaire designed specifically for this study. The data was collected primarily from consumers collected in the State of Ohio; however, data was also collected from New England, Texas, and California in order to provide a more representative sampling of U.S. consumers. The respondents represent a wide variety of socio-economic backgrounds; therefore, the generalizability of these results is greatly improved over those of many of the earlier studies in this area.

This study was conducted in several sequential stages. First, a questionnaire was designed. This questionnaire was reviewed by members of the Ohio State University faculty of business, and their suggestions and recommendations were used to revise the initial questionnaire. This questionnaire was pretested on a group of 25 consumers in the Central Ohio area. The results of this pretest provided the basis of the final questionnaire used to collect the data for this study.

The first part of this questionnaire involved measuring a respondent's self-explicated ratings of the importance of each attribute in determining product quality. In this phase each respondent was asked to rate the nine countries previously mentioned in terms of overall product quality of products from that country and on overall product value offered by products from that country.

Next, the respondent was required to answer several questions of a demographic and an attitudinal nature. The demographic factors
of interest have been previously discussed and the questions used to measure them will be very straightforward. However, the attitudes of questions previously discussed had to be developed by this researcher and must be considered exploratory in nature.

To complete the data collection procedure the respondent was shown a specific set of stimulus profiles for each of the two products. These stimulus profiles represent a unique combination of the different levels of the four attributes of interest. The respondent was required to rank both of the sets of stimulus profiles in terms of overall product quality.

These data were then analyzed using conjoint analysis. Conjoint analysis provides a part-worth utility function for each of the attributes. These part-worth utility functions are then used as input data to define groups which exhibit similar reactions to foreign produced products and various marketing mix variables.

Having identified groups which reacted similarly to the attributes of interest, I then identified these groups in terms of the demographic and attitudinal variables previously discussed. It is felt that the results of this analysis provides a basis for the international marketer to segment the market for foreign products, and to effectively reach these segments using different marketing strategies.

In addition to the conjoint analysis package used these data were analyzed using both the Statistical Package for Social Service (SPSS) and the Statistical Analysis System (SAS). A more
detailed description of the methodology and test procedures is contained in Chapter III.

Limitations of the Study

The final results of this study must be interpreted with caution in view of several limitations common to most research of this type.

The most obvious problem is the question of whether the results obtained from the respondents in this study represent a true cross section of U.S. consumers. Despite a reasonable response rate and the use of consumers from several parts of the United States generalizing these results beyond the respondents surveyed must be done with caution. The majority of consumers surveyed were from the State of Ohio, and during the period the data was being gathered this area was experiencing near records of unemployment. Much of this unemployment was due to the area's heavy reliance on the automobile and related industries. With the increasing share of the domestic automobile marketing going to imported automobiles, and with the tremendous amount of publicity accompanying this growth in market share; it is likely that the attitudes of Ohio consumers may differ from those of consumers in areas less affected by imported auto sales.

Another major concern regarding generalizability of these results is the problem of subject self-selection. Although an attempt was made to reduce this problem by using anonymous questionnaires and sampling several different groups of consumers, it is likely that consumers with strong viewpoints both for and against foreign products may be overrepresented in this survey. Additionally, men
were overrepresented in this study due to the use of a service group to collect much of the data.

The fact that the sample used for this research was not random sample also creates difficulties in data analysis and interpretation. A necessary condition underlying any sample drawn to be used to provide the data necessary to calculate statistics which are then used to infer the actual values of parameters of the population under investigation is that the sample is randomly selected. Only when the condition of random selection has been met is it correct to test for statistically significant differences between two sample statistics. As noted, it is clear that the sample used in this research was not randomly selected. Therefore in a strict sense the statistics generated from this sample data should only be reported and no statistical tests should be conducted. However, because these data represent a wide range of attitudes and values which are held by the population under investigation and because it is important to identify if these attitudes differ between various segments of the sample it was decided to conduct the statistical tests as if the sample was randomly selected. Therefore it is extremely important that the reader continue to remind themselves that the statistical tests used in this research are only used as an aid in judgment and are not meant to be used to infer statistical differences between the segments of the population under consideration.

Finally, the problem of generalizability across countries other than the nine countries and products considered in this study must be done with caution. Although an effort was made to use a
representative sample of both developed and less developed countries it must be acknowledged that the attitudes toward the countries studied may not be an exact measure of consumer attitudes toward all developed or less developed countries. Similarly the six product categories studied in Part III of this study and the two specific products used to collect the conjoint data might not reflect a consumer's attitude toward products or product categories not included in this study.

In addition to problems of generalizability, the results of some data analysis techniques used must be interpreted with caution. The conjoint analysis used to measure the importance of country of origin information and marketing mix alternatives in a purchase situation should be considered as exploratory in nature. Used in this situation conjoint analysis is probably most useful in suggesting fruitful avenues for further in-depth research, and should not be considered as providing firm guidelines that would insure market success for foreign products.

Also when considering consumers' reactions to products from less developed countries as one might expect there were no consumers who were identified as preferring products from the less developed countries over products from developed countries. Consequently, the analysis did not include consumers who were favorably biased toward Mexican products. Therefore, a successful marketing campaign was defined as one that could neutralize negative attitudes. In those cases where the number of respondents was too small to make data analysis possible only the raw data results were reported.
The final limitation of this study is the method used to classify consumers as biased for or against foreign products or as neutral toward foreign products. Because there are no clear divisions between these groups these groupings were subjective. The actual dividing points were selected based on discussions with experts in the field of marketing and international business and on the descriptive statistics of the variables. Nonetheless the results of the effectiveness of the various marketing strategies studies is dependent on the bias classification system used. Therefore, the results of the section on marketing strategies must be interpreted with caution.

**Potential Contributions**

The potential theoretical contributions of the study are:

1) extending the understanding of the foreign product bias phenomenon,
2) establishing whether or not alternative marketing strategies can mitigate the effects of foreign product bias, 3) suggesting a method of segmenting markets for foreign products using both demographic and attitudinal variables, and 4) introducing a new typology to help explain the foreign product bias phenomenon.

From a practitioner standpoint the questions examined in this research are important because they allow the U.S. marketer to better understand his market. This understanding will help the marketer to compete more effectively against foreign products and to predict how future sales will be affected by consumer attitudes toward foreign products. This information will be especially important if significant differences are found within the society.
For example, if younger members of society are found to rate products from other industrialized countries higher than U.S. produced products in terms of overall quality, then American products aimed primarily at middle-aged consumers might expect increasing competition from foreign products in the future. Similarly, foreign products trying to enter the U.S. market must understand the foreign product bias phenomenon and how it will affect their marketing efforts.

Additionally this methodology can provide the international marketer an efficient, effective way to formulate marketing strategy in foreign markets which are too small to justify large market researching and test marketing expenditures.

Organization of this Study

This research is divided into five separate chapters. Chapter I has identified the general research area, the purpose of the study and the main issues addressed by the study. Specific research hypotheses which were tested are outlined, as is the methodology used to test them. Possible limitations to be considered when interpreting this study were discussed. Finally the potential contributions to both theory and practice were reviewed.

Chapter II presents a review of the literature relevant to the issue of foreign product bias. Both past and current research efforts and their findings were reviewed and commented upon.

Chapter III details the methodology used to address the research questions. Questionnaire purpose and design were discussed. Sample
selection procedures, data collection procedures, and response rates were reported. Additionally, the statistical tests used, the assumptions underlying them and the raw data used for these tests were explained.

Chapter IV presents the analysis of the questionnaire data collected and the results of the testing of the hypotheses investigated by this study.

Chapter V contains a discussion of the implications of the research findings and the conclusions drawn from these findings. Contributions of the study and suggested areas of future research are discussed.
FOOTNOTES


CHAPTER II
LITERATURE REVIEW

Introduction

The fields of marketing and psychology have devoted considerable attention to explaining the consumer decision process. Consumer behavior theory has accepted the basic premise of psychology that a person is motivated by basic internal needs, internal needs that cause a person to act in certain ways. The primary concern of consumer behavior has been to explain how these internal needs are translated into actual consumption behavior. Numerous models have been developed to explain this process, and two of the most important models will be reviewed here.

The Basic Problem Solving Model

Fundamental to the field of consumer behavior is the idea that consumption is a problem solving process. The model underlying an explanation of this problem solving behavior was developed by John Dewey in his early attempts to explain human actions. These ideas led to a model of problem solving behavior which is in wide use in the field of marketing. This basic five step problem solving model, as depicted in Figure 2-1, is quite useful in providing a basis for more advanced consumer decision process models.

The problem recognition stage seeks to explain what events and conditions are generally associated with an awareness that a problem
Figure 2-1. The Basic Problem Solving Model

exists. Having established the existence of a problem, the problem solver seeks out information regarding the possible solutions to the problem under consideration. This additional information about possible alternatives allows the problem solver to begin evaluating various problem solution alternatives. Finally, a choice is made and the results of this choice provide feedback to the problem solver concerning whether or not the choice was a satisfactory one which was at least temporarily eliminated the problem.

Recognizing the fact that consumption is one form of problem solving behavior, this model provided the foundation for more complex models of consumer behavior. The two models of consumer behavior which have gained the widest acceptance in the marketing community are the Engel, Kollat, Blackwell model and the Howard Model. These models are depicted in Figures 2-2 and 2-3, respectively and are briefly reviewed here.

The Howard Model

The original version of this popular consumer behavior model was developed by John Howard in 1963. It presented the first integrative model of consumer behavior and it helped bridge the gap between psychological theories and their application to the real world problems of consumer behavior.

In addition to incorporating the basic structure of the problem solving model, the Howard model placed major emphasis on the effects of information, attitudes, and consumer confidence on determining the actual purchase behavior of the consumer.
Figure 2-2. The Engel, Kollat, Blackwell Consumer Behavior Model

While this model is useful in understanding how marketing variables affect the consumer purchase decision, it fails to help the marketer understand why a particular choice was made over other alternative choices. Due to the limited value of this model in cross cultural situations, I decided that this model would not be satisfactory in attempting to explain foreign product bias. Therefore, I decided to use the Engel, Kollat, Blackwell consumer behavior model.

The Engel, Kollat, and Blackwell Model

The current Engel, Kollat, and Blackwell Model (EKB) originally dates back to the late 1960s. This model represents an integration of the basic decision process model, several psychological theories which seek to explain individuals' motivations and actions, and a comprehensive information processing model.

The basic process model recognizes the sequential nature of an individual's actions. First, the problem must be recognized by the individual, for our purposes a consumer. Then, the consumer begins a search process designed to identify possible solutions to the problem at hand. The third stage involves an evaluation of the possible alternatives identified in stage two. The choice of one of the alternatives from among all possible alternatives is the fourth stage of this model. Finally, the alternative chosen leads to an outcome which is judged by the consumer to be either satisfactory or unsatisfactory. An unsatisfactory solution implies that the alternative chosen did not completely solve the problem at hand; therefore, the search for a satisfactory solution continues.
Figure 2-3: The Howard Model of Buyer Behavior, 1974 Version

The richness of this model is illustrated by its inclusion of numerous psychological explanations for human behavior. The importance placed on beliefs by this model is consistent with the well established Fishbein extended model. This approach allows motives, beliefs, attitudes, and intentions to be considered as explicit variables in the consumer decision process. Additionally, this model utilizes internalized environmental influences such as cultural norms and values of society, mores of reference groups and the family to explain how such variables can be important determiners of a consumer's motives and lifestyle. The inclusion of these variables is essential if one hopes to understand consumer behavior across national boundaries. Consequently, the EKB model has proven itself to be extremely useful in the fields of international marketing and international consumer behavior. This framework is also useful in attempting to develop an understanding of the foreign product bias phenomenon both in the United States and in other countries.

The EKB model is also very useful to the marketer trying to develop marketing strategies. By providing a clear picture of the fundamental processes that are involved in a consumer's product brand evaluation, this model helps the marketer understand the importance of both internalized environmental influences and general motivating influences. An understanding of the importance of these influences is essential in the development of effective pricing, product and distribution strategies. In developing a promotional strategy, the marketing manager can also use the EKB model to help
recognize how information inputs and information processing stages contribute to a consumer's product choice.

Due to the overall strength of the EKB model in cross-cultural situations and its ability to explain not only how a consumer makes a purchase decision but why that particular decision was made, this model will provide the basis for the methodological design of this study.

The conjoint profiles discussed in Chapter III are an attempt to combine the information input and information processing steps of this model to insure that information about country of origin, price, channel of distribution, and promotional strategy enter a person's active memory. The problem recognition stage of the decision process is represented by the requirement of the respondent to rank the conjoint profiles in terms of most favored to least favored. In order to do this the respondent must search through the alternative product profiles and evaluate each alternative based on the four factors mentioned on the stimulus card.

This search and alternative evaluation process requires the respondent to consider the importance of country of origin versus the marketing mix elements of price, channel, and promotion. Each of these four factors is affected in turn by internalized environmental influences, general motivating influence and product brand evaluation which are unique to that respondent.

The conjoint data analyses process is designed to infer a respondent's intention, attitudes toward the factors on the profile and beliefs about these factors based on the choices made in ranking
the profiles. However, it doesn't attempt to infer anything about the general motivating influences or the internalized environmental influences which directly or indirectly influenced a respondent's choice.

Cultural norms and values which might be important determinants of foreign product bias include the importance of patriotism and the need for Americans to stick together and help other Americans. If this feeling of patriotism is very intense within the society and the consumer had a high degree of normative compliance for this norm then his or her evaluation of foreign products would be reflected in their profile choices. Similarly, the importance of fair play and the importance of honest work may influence a respondent's ranking of foreign and domestic products if they believe that union workers are "not playing fair" and have gotten large pay gains by taking advantage of companies or consumers. This same logic can be applied to feelings about big business or the management of big business.

As the Literature Review will indicate there has been virtually no research in the area of foreign product bias which has attempted to investigate the importance of either internalized environmental influences or general motivating influences. Therefore this research, although guided by theory, must be considered no more than exploratory in terms of its investigation of the importance of these influences in determining the degree and direction of foreign product bias. The specific attitudinal variables studied and the questions used to measure them are explained in detail in Chapter III.
Factors Associated with Product Quality

The fields of marketing and consumer behavior have devoted considerable attention to determining what factors are used by consumers to infer product quality. It is argued that when consumers are faced with a purchase decision involving a product with which they have not had previous experience and which does not provide the normal indicators of product quality that they substitute clues to judge product quality.

Studies have indicated that consumers faced with a purchase decision involving a product unfamiliar to the purchaser generally relies on at least one of the following surrogate clues: the physical product itself, some noticeable component of the product, the environment the product is sold in, the package that the product is contained in, and knowledge obtained from secondary sources about the product.

Numerous researchers have investigated the effect of different prices on perceptions of product quality and have generally found a high correlation between price and perceived quality. These findings were particularly strong in situations where there were few additional clues to product quality or where the product was unfamiliar to the consumer. Similar "halo effects" have been established between perception of products and the prestige associated with particular brands or particular retailers. Again, this research indicates that in situations where the consumer has few clues as to product quality the surrogate clues such as brand name or store image
are used to infer quality to products that offer few additional clues to quality.

Research also indicates that consumers use some physical characteristic of the product itself to infer some level of quality on an unfamiliar product. Among the characteristics studied are shape, taste, color, and odor. For example, the Color Research Institute has found a strong correlation between the color of a detergent and housewife's ratings of mildness. Other studies have established a relationship between smell and ratings of cleaning power.

Early Foreign Product Bias Research

A number of researchers have investigated the effect on perceptions of product quality of providing the consumer with knowledge of the country of product origin. Then perceptions of the "made in" image is defined as the mental picture, the reputation, and the stereotype that businessmen and consumers attach to products of a specific country. This image is created by such variables as past product experience, economic and political background, history, tradition, national stereotypes, and interaction with that country's culture. The early research efforts in this area were led by Robert D. Schooler in conjunction with his doctoral dissertation completed in 1965, Akira Nagashima, the Director of International Marketing for Dailey and Associates, and Curtis C. Reierson, then Chairman of the Marketing Department at Baylor University.
Schooler's Dissertation

Schooler's initial efforts was directed towards determining whether preconceived product image was a function of national origin. This study was limited to Guatemalan consumers and focused on their evaluations of products believed to be from other Central American Common Market (CACM) members. In actuality, the considered fruit juice and fabric were identical but were labeled as being imported from one of the CACM countries. The sample of 200 respondents was drawn from college students studying in Guatemala City.

Using a combination of Z-tests and analysis of variance, Schooler found that no significant difference existed between the evaluation of Guatemalan and Mexican products. However, both Guatemalan and Mexican products were found to be significantly superior to those from Costa Rica and El Salvador.

This study provided a basis for considering country of origin as a clue to determining a product's quality. However, this study was limited by its use of college students. These findings might also be country specific, the result of regional fears, jealousies, and animosities peculiar to Guatemala. The strength of this study was the use of actual products in an experimental setting rather than a survey instrument.

Reierson's Early Research

Curtis Reierson used 155 American college students to investigate attitudes toward a nation's products in general, toward classes of products, and toward specific products. The ten countries
considered in the study included most of the industrialized countries of Western Europe, Canada, the United States, and Japan. The product classes considered were mechanical products, food products, and fashion merchandise. In addition, he studied 26 specific products such as Japanese television sets, Italian office machines, and English suits.

Using Chi-square criteria to analyze products in general and classes of products, and a rank correlation test to analyze specific products, Reiersen established that country of origin was a significant determinant of product quality. Whether products in general, classes of products, or specific products were considered, the estimates of the quality of foreign products showed a statistically significant difference. Also of interest was the finding that for products in general and for every product category American products ranked in first place and Japanese products in last.

This study confirmed Schooler's contention that country of origin was used by consumers to infer product quality; it also demonstrated that this phenomenon occurred within more than a single culture.

Reiersen continued to investigate consumers' attitudes towards foreign products and, in 1967, published a study discussing the possible influence of various communication media on American consumers' attitudes towards foreign products.

Specifically, Reiersen addresses the question of the American consumer image of Italian and Japanese products and how these attitudes may be changed using different communication forms. His dependent variable is attitude toward products from these two
countries measured by a five point agree/disagree scale. The subjects were 242 undergraduate students divided into five nearly equal treatment cells. The communication media studied films, periodical advertising, publications, merchandise displays, and association with a prestigious retailer. He attempted to establish which of these methods were most effective in changing consumer attitudes towards the product.

He found that Japanese products were much lower rated than Italian products and that increased exposure to advertising only had a significant effect on the Italian products. However, Reierson has confounded his measure by using consumer attitudes toward well known branded products as a proxy for attitudes toward the country of origin. Specifically, he uses attitudes toward Sony televisions as one of his measures for attitudes toward Japanese products. This presents a problem because consumers may have formed product specific attitudes based on past experience with the product, which is very different from their attitudes towards the general products of a country. Reierson also uses college students as a proxy for all consumers. This can result in very biased results for many product classes.

Nagashima's Early Research

Building on the works of Schooler and Reierson was a study conducted in 1967 by Akira Nagashima. This study measured and compared Japanese and American attitudes towards foreign products. Nagashima used a seven point semantic differential survey to poll
70 Minnesota businessmen and 100 Tokyo businessmen about their attitudes toward products made in the United States, Japan, England, Germany, France, and Italy. Twenty adjectives and phrases were used to assess attitudes on price, and value, service and engineering, advertising and reputation, design and style, and a consumer profile of people who most often used products from that country.

Both groups of businessmen were also asked their opinions on which country produces the product of the greatest value when one considers price, quality, design, and service for specific product categories. The categories included automobiles, electrical appliances, textiles, cosmetics, foods, and pharmaceutical products.

The findings of this study, while not analyzed using statistical validation methods, were quite interesting and are presented in graphic form in Figure 4. U.S. businessmen felt American products were expensive, reliable, technically advanced, and high status symbols for their owners. However, Japanese businessmen saw U.S. products as moderately priced, of average reliability, technically advanced, and of average status.

Japanese products were viewed by U.S. businessmen as being inexpensive, unreliable, of poor workmanship, imitative, and aimed at lower class consumers. Japanese executives also felt their products were inexpensive, of poor workmanship, imitative, low status symbols, and aimed at lower class consumers.

Both groups rated German products as reliable, of high workmanship, technically advanced and aimed at male consumers. Both groups also selected the German product as the one they would select over
Figure 2-4 Nagashima's 1970 Study

their own country's product given all products were of equal price, quality, and styling.

This study was limited by its selection of only sound businessmen from two countries. It also lacked sound statistical validation of its results. However, it did help establish that the product origin bias existed in Japan as well as the United States.

Schooler Early Research

Following these early, relatively unsophisticated efforts a number of much more rigorous studies involving various aspects of the product origin bias phenomenon appeared. One such study by Schooler and Sunoo focused on the possibility of using regional labeling to avoid biases against specific countries within that region. This study found that there was no statistically significant bias against regionally labeled goods such as "Made in Africa" or "Made in Asia." The researchers argued that these results might be useful to less developed countries trying to enter the U.S. marketplace. However, these results were weakened by the use of university students who could not be assumed to reflect the attitudes of the general consuming public.

A study conducted by Schooler and Wildt sought to determine the strength of the foreign product bias and whether or not price concessions could overcome this bias. Using a sample of 236 upper level college students and a single product, glassware, the researchers were able to establish an elasticity of product bias. They demonstrated that prices could be manipulated to offset foreign
product bias for most consumers, and that for the product in question was a point of indifference beyond which price dominated the foreign product bias as the primary influence in the purchase decision.

This study, while more vigorous than those which preceded it, was still limited by its use of students. Additionally, the use of a single product and only one country, Japan, restricted the generalizability of this work.

Schooler's 1971 Landmark Study

In 1971 Schooler combined many of his previous research techniques into one large study directed towards understanding U.S. consumer bias toward foreign goods. He used 866 households to test six hypotheses which included the following: 1) product evaluations were based on the country, 2) foreign products regionally labeled showed less bias, 3) the evaluations varied on the basis of product category for any given origin, 4) a hierarchy of bias exists, 5) differences exist when tangible products are presented rather than abstract concepts of products, 6) socio-demographic characteristics of the respondents--age, sex, race, education level, occupation, and urban-rural residence--resulted in significant evaluation variation. The countries studied were the U.S., West Germany, Czechoslovakia, India, Chile, and Nigeria. Additionally, the six regions represented by these countries were included in the study as "Made in Asia, Africa, etc." labels. The tangible products tested were: a utilitarian product, cotton cloth; a mechanical product, an ink pen; and a fashion product, a goblet. The dependent variable was product quality based on a semantic differential questionnaire.
Of the six hypotheses tested only numbers one, four, and six were substantiated, using a factorial analysis of variance and the least significant difference test. Of the substantiated hypotheses, the most important to my study was the finding that the U.S. was again the highest rated country of origin.

Although this was an excellent study, it has several shortcomings. The experimental design called for each subject to be shown only the products represented to be from a specific country or region. An interviewer would be required to approach a subject bearing a piece of cloth from Czechoslovakia, a pen from Czechoslovakia and a goblet from Czechoslovakia, and then to solicit their perception of product quality. This procedure allows for an analysis of between subject variance but does not allow for any within subject variance. The results of this study would be strengthened considerably by redesigning the study to measure within subject variance across all the countries and regions. This approach would also seem to be very artificial and could lead to many subjects trying to second guess the purpose of the experiment, thus leading some subjects to assume some subject roles which would confound the results of the experiment.

**Anderson and Cunningham's Research**

With the research basis of foreign product bias firmly established by these early works, a number of researchers expanded their efforts into more specific areas of this general problem. W. T. Anderson and William Cunningham conducted an investigation aimed at determining the extent to which consumers who differ in foreign
products preference were distinguishable using objective demographic and personality attitudes.\textsuperscript{21}

The two closely related hypotheses tested were, first, that consumers exhibiting high preference of foreign products differ significantly from consumers displaying low foreign product preference on selected objective and, second, personality attributes analyzed are significantly more sensitive discriminators of foreign product preference than are the objective variables.

Using a sample of Ford Maverick buyers (58) foreign car buyers (58), the subjects were given a 24-item test to evaluate their attitudes towards foreign products. The independent variable consisted of seven socio-economic and demographic variables and four personality variables. The data was evaluated using discriminant analysis in an effort to determine the predictive power of these variables. The findings showed that the objective variables failed to significantly discriminate foreign product preference, but that personality attributes were significant discriminators.\textsuperscript{22} These findings allowed the researchers to make the general conclusion that "the image of the consumer displaying high foreign product preference is that of an individual of relatively low status concern, low conservatism and dogmatism, with a college education, perhaps an advanced degree. Alternatively, consumers exhibiting low foreign product preference may be characterized as relatively high in status concern, high in conservatism and dogmatism, with less than a completed college education."\textsuperscript{23}
Ralph Gaedeke's Research

Continuing along the investigation of more specific issues in this area, Ralph Gaedeke designed a study aimed at answering the following questions: 1) What are the opinions of consumers towards the quality of products "made in" various developing countries? 2) To what extent are consumer attitudes towards quality of products from developing countries changed when widely known United States brand names are used?24

Gaedeke used 200 college students in an attempt to measure consumer attitudes towards developing countries; the bias induced by using student "volunteers" has already been discussed. Again a semantic differential questionnaire was used to rate general products from different foreign countries. Additionally, brand name products were also rated in the categories of food products, electronic products and textiles, and a Chi-squared analysis was used to evaluate the data. However, this study goes one step further than any of the others. It tests brand name products both with and without the country of origin label attached. The findings indicate that the confounding issue arising from the use of brand names is valid when brand name products are used but than the effects are not the same for every brand and country. Some brands increased their ratings when the country of origin was known; other products dropped when country of origin was known. The major weakness of this survey was the use of students and the use of brand names.
Lillis and Narayana's Research

Lillis and Narayana attempted to measure the product bias towards foreign products of both U.S. and Japanese consumers. Random samples (70 U.S. consumers and 61 Japanese consumers) were asked to complete a semantic differential questionnaire which was used to develop a "profile" of products produced in England, France, Germany, U.S.A. and Japan. The dependent variables were the profile variables with the countries studied being the independent variables.

An interesting finding of this 1973 study was the beginning of a possible shift in U.S. consumer attitudes towards U.S. products. This study found U.S. products generally rated highest by U.S. consumers except in the outward appearance/performance variable, where they rated lower than average in terms of performance.

This study was merely a survey of consumers rather than a research experiment; therefore, there is little to criticize. However, the findings are important if further research shows that consumer attitudes have indeed begun to shift away from the attitude that American products are generally superior to foreign products.

Dornoff, Tankersley and White's Research

A 1974 study by Ronald Dornoff, Clint Tankersley and Gregory White was basically a replication of early work done by Reierson. Their study was designed to answer the following questions: 1) What are the consumers' perceptions of imports? 2) Do these perceptions differ for specific countries? 3) Do these perceptions differ among product classes? 4) Are there differences based on socio-economic characteristics?
Using a questionnaire based on those used by Reierson they collected data from 216 randomly selected subjects from the Greater Cincinnati telephone directory.

Using nonparametric statistical analysis they found that foreign products from the countries studied (France, West Germany, and Japan) were becoming increasingly competitive with U.S. goods in terms of quality. However, the United States was still seen as having overall quality superiority in food products and fashion merchandise, and was virtually tied with West Germany in mechanical products and electronic equipment. This study also indicated that socio-economic classification based on sex and age were of little value in indicating differences in perception, but higher educational levels were associated with higher perception of foreign product quality.27

Etyel and Walker's Research

A study by Michael Etyel and Bruce Walker conducted in 1974 attempted to address the limitations of several early works which maintained that a consumer's attitude toward a foreign country's products in general was also true for specific products from that same country.28 Their work focused on the idea that U.S. consumer attitudes toward another country's product varied with the product. Using a five-point semantic differential questionnaire they surveyed the attitudes of 293 women about products from the United States, Germany, and Japan. They also asked about the quality of automobiles, cameras, and toys from each of those countries.
Employing a Hotelling $T^2$ analysis, they concluded that except for German automobiles there is a significant difference between a general perception of product quality of all products from a particular country and the perceived quality of the specific category of products from the same country. This study was limited by its use of women respondents only, its lack of a more thorough and rigorous analysis of the data, and the limited number of countries and products considered.

Akira Nagashima's Research

In 1975 Akira Nagashima repeated his earlier 1967 survey of Japanese businessmen's perceptions of products produced in the United States, Germany, England, and France. One hundred Tokyo businessmen were surveyed using the same five categories of product factors as the 1967 study. Using little more than "eyeball" statistical analysis, this study found that in terms of their relative status U.S. products had declined in terms of reliability, workmanship, technical advancement, and distribution efficiency. Major gains were made by both Japanese and West German products, particularly in the areas of reliability and workmanship.

A comparison of Nagashima's 1967 results yield some interesting results. The relative status of "Made in U.S.A." products has declined in terms of the "Made in Japan" and "Made in West Germany" products in the opinion of Japanese businessmen. Indeed, in terms of reliability and workmanship "Made in U.S.A." products received
the lowest rating. "Made in U.S.A." products have also shown a marked decline in terms of technical advancement and worldwide distribution.

These results indicate a major negative shift concerning Japanese businessmen's perceptions of U.S.A. made products. However, these results are limited because of the study's use of a semantic differential questionnaire and the lack of statistical analysis to establish whether or not these shifts in attitude were statistically significant.

Current Cross-Cultural Consumer Research

Increasingly, researchers have recognized the need to expand their country of origin studies across national boundaries in order to develop a clean picture of the efforts of this bias in different national marketplaces.

Cattin and Jolibert's Research

Phillippe Cattin and Alain Jolibert continued this trend with a comparison of French and American attitudes.

Using a seven-point semantic differential scale questionnaire, they polled 163 American purchasing directors (a 36% response rate) and 97 French purchasing directors (a 23% response rate) about products made in England, France, Germany, Japan, and the United States. These products were assessed on five primary dimensions; price and value, service and engineering, advertising and reputation, design and style, and consumers' profile which were originally used by Nagashima.
Using simple t-tests the researchers concluded that overall the "Made in Germany," "Made in Japan" and "Made in U.S.A." tended to have more favorable images. However, American respondents rated Japanese products much higher than did French respondents, and in general felt that Japanese products were technically advanced, meticulously built and distributed worldwide.

Attila Yaprak's Dissertation

Attila Yaprak in his unpublished dissertation entitled "Formulating a Multinational Marketing Strategy: A Deductive, Cross-National Consumer Behavior Model" attempted to measure consumers' intentions to purchase a chosen source-country's products based on their attitudes towards that country. He addressed two questions. The first dealt with the effect of a person's attitude about a particular country on their evaluation of the quality of products in general from that country. The second question looked at the relationships of source-country and its interaction with specific attributes of the test products used for the study.

The study used three source-countries (West Germany, Japan, and Italy) and three test-products (cars, cameras and calculators). Once again the researcher chose to use well known brands of products (the cars were the VW Rabbit, the Honda Civic and the Fiat 128); this would tend to confound the findings of the study. It would be difficult to tell if a person's previous knowledge about the Honda Civic helped form his opinion about Japanese products in general or whether his opinion about Japanese products influenced his opinion about the Honda Civic.
The data was generated by a questionnaire operationalized as a five-point Likert Scale. This questionnaire was completed by 158 American business executives and 202 Turkish executives. An analysis using multiple regression indicated that the source country of origin had a significant effect on the purchase intentions and on the product quality evaluations for both groups of executives.

**Jolibert and Peterson's Research**

As an extension of his earlier work with Philippe Cattin, Alain Jolibert combined his efforts with Robert Peterson to investigate the effects of price and brand as determiners of perceived product quality in a cross-cultural setting.

Employing a 2x2x3 factorial design using nationality, brand, and price respectively as main effects, they used analysis of variance to test for all main effects and all interactions. The sample consisted of 181 American and 164 French undergraduate students chosen primarily on the basis of convenience. The results of this analysis indicated that when the product was believed to be from France it received a higher rating than a similar product believed to be from the United States. This was true both for the French and the American subjects.

This study provided some insights into the relative differences across two cultures in the importance of product attributes as cues of product quality. However, this study was severely limited by the use of a student sample and by the small number of factors and levels considered.
The most recent cross-cultural study of consumers' perceptions of foreign product quality is a study by Damanpour and Hallaq which compares the attitudes of U.S. and Danish consumers. Employing the semantic differential scale developed by Nagashima, these researchers surveyed 150 U.S. and 100 Danish households in early 1980. The data analysis was conducted using t-test to detect statistically significant differences in the means.

The findings of this study indicate that on the positive side Danish consumers felt U.S. goods were reliable, technically advanced, inventive and came in a wide variety of selections. However, on the negative side the U.S. products were seen as expensive and lower in workmanship than either West German or Japanese products.

The American consumers generally felt that U.S. products were strongest in the areas of marketing controlled variables such as variety, recognizable brand names and clever use of colors. However, in terms of workmanship they rated well below the West German products, and in terms of technical advancements they were below the Japanese.

Overall this survey provided an interesting comparison of the attitudes held by two nationalities of consumers about foreign products. However, it suffered from small sample size and a non-rigorous methodology.
Johansson, Douglas, and Nonaka's Research

This recent study compares the product stereotypes held by U.S. consumers to the stereotypes held by Japanese consumers in an attempt to assess the importance of "home country" versus "foreign country" bias.38

Using the data obtained from 92 U.S. graduate students and 82 Japanese students about their attitudes toward automobiles, the authors employed a simultaneous equation system in which the country of origin is allowed to affect both overall attitude and beliefs about the product. Their primary purpose was to establish the strength of a "halo" effect in consumers regarding their attitudes toward foreign products. This "halo" effect is the concept the "I like the product; therefore, it must be good" and calls in question the issue of whether beliefs cause evaluations or whether evaluations cause beliefs?

Having collected the data the first factor analyzed is to identify important attributes in ranking domestic and foreign automobiles. Next a standard econometric analysis was carried out to solve the simultaneous equation system which identified beliefs and evaluations.

The results of this analysis indicate that country of origin effects are much more important in formulating beliefs than in overall product evaluations. Additionally, the home country bias was found to be insignificant, and product familiarity tended to reduce foreign product bias. The "halo" effect surrounding all Japanese cars and all American cars tended to be much more consistent than rating of individual models.
While this study was technically very interesting, its value was diminished by its use of one product category which was well known to both groups and the use of students.

Catlin, Jolibert and Lohnes' Research

In an extension of the type of research began two decades earlier by Nagashima, this study investigates the attitudes of American and French industrial buyers toward products made in England, France, West Germany, Japan, and the United States. Using the 20 dimension, seven-point semantic differential scale developed by Nagashima, this researcher surveyed 123 Americans and 97 Frenchmen.

The results of this survey indicated a strong home country bias with both groups preferring West German products after their own. Additionally, discriminant analysis was conducted to determine which of the 20 dimensions were most useful in distinguishing between products from the five countries under study. Fourteen of the dimensions were found to be useful discriminators.

Overall this study was well designed and executed. The sample was appropriate and the response rate was reasonable. However, the results were as previous research would suggest they should be and this study contributed little to a better understanding of foreign product bias.

Current Non-U.S. Consumer Perception Research

With the fields of marketing and consumer behavior gaining academic acceptance worldwide, it follows that researchers outside
the United States would begin to explore how their consumers view foreign products compared to domestic products. Two recent empirical works have focused solely on the consumers within a particular foreign country. These studies contrast with the previous studies which sought to provide a cross-cultural comparison of U.S. and foreign country.

**Baumgartner and Jolibert's Research**

The recent work of Baumgartner and Jolibert both builds on the consumer research studies developed in the U.S. and expands the existing research to analyze the effect of perceived risk on French consumers' perceptions of foreign products. Drawing upon Jacoby and Kaplan's five components of perceived risk--financial, performance, physical, psychological, and social--these researchers used analysis of variance to examine the perceptions of 108 French consumers. Using a repeat measure design involving four products from different risk classifications crossed with four different national origins, they found that both risk classification and national origin were statistically significant variables explaining the variance in the data.

This research indicated that French consumers rated U.S. and West German products consistently higher than domestically produced products and English products for all risk categories. However, these results were weakened by the small sample size and the question of these results being specific to the four products studied. Nonetheless,
this study does indicate a growing awareness of the worldwide interest in consumer behavior.

**John R. Darling and Frederic B. Kraft's Research**

A recent study by John R. Darling combines both a cross-sectional analysis and a longitudinal analysis to examine the general attitudes of consumers in Finland towards the products of various countries and also the attitudes of these consumers toward various dimensions of the marketing strategies associated with these products.41

This work surveyed 328 Finnish consumers in 1975 and a different group of 442 Finnish consumers 1980. Using a 31-item per country "Likert-type" questionnaire and Analysis of Variance, these researchers examined attitudes toward products from England, Finland, France, West Germany, Japan, Sweden, the United States and the Soviet Union.

In terms of attitude change between 1975 and 1980, products from Finland, Japan and the U.S. were viewed more positively while products from England and the U.S.S.R. were viewed less favorably with the remaining countries showing little change. However, in terms of absolute product ratings, products from Finland, Sweden and West Germany continued to be rated significantly higher in overall quality than products from the other five countries. Indeed, the U.S. ranked fifth, behind Japan, in both the 1975 and the 1980 study. Surprisingly, the United States rated sixth in both studies on the marketing practices attitude scale. This might indicate that at least in this market the U.S. marketers have been unable to translate their strong domestic marketing programs to this overseas environment.
While this study was well conceptualized and executed, it suffered from the common problem of sample selection, as was acknowledged in the work itself. The samples were drawn only from the Helsinki metropolitan area and were biased in favor of the more educated segments of the general population.

The importance of understanding the efforts of country of origin bias is beginning to be recognized by marketing researchers outside of the United States. Jerome Bon and Alain Ollivier presented an article emphasizing the importance of understanding the image of products when devising marketing strategies. Although their article is not based on empirical research it presents the important question of a possible "halo effect" causing consumers to associate certain geographically close nations together in both a negative and a positive context. They stress the importance of trying to use multiple vehicles, including governmental actions, cultural institutions and corporate activities to sway the consumer's perception in their favor.

Current U.S. Foreign Product Bias Research

Given that U.S. consumers represent the largest market in the world when measured in terms of purchasing power, their attitudes and opinions are of continuing interest to marketers of both foreign and domestic research. Therefore, the area of foreign produced bias in U.S. consumers continues to draw the attention of academic researchers.
**Seaton and Vogel's Research**

Given the importance of the automotive industry to the economic health of the United States consumers' perceptions of domestic versus foreign automobiles is very important.

This study attempts to measure the importance of country of origin information in the multiattribute situation that also considers the country of corporate headquarters of the manufacturer, and the price of the automobile.43

Using conjoint analysis, the data gathered from 88 unidentified subjects was analyzed to determine the relative importance of those three factors in terms of overall preference, overall quality, overall comfort, and fuel efficiency. The utility values then served as the input for a cluster analysis which sought to identify groups of consumers who reacted similarly to these three variables.

The results of this analysis indicated that of the three factors studied, country of manufacture was by far the most important in determining overall preference, overall quality, and fuel efficiency. Interestingly for overall comfort the most important factor was country of corporate headquarters. These results while interesting can only be considered as exploratory and are limited by the small sample size, and the use of only one product category.

**Khera and Anderson's Research**

Assuming that foreign product bias does exist as has been indicated by numerous studies in this area, an important question becomes how knowledgable are consumers about the actual manufacturing location of well known brands?
Using three product categories, televisions, watches, and athletic shoes this study surveyed 180 consumers in the Dayton, Ohio area to determine whether or not they were able to correctly identify the country of manufacture of 43 nationally distributed brands. The results of this survey indicated that U.S. consumers have great difficulty in correctly identifying a brand's country of manufacture and tend to rely on the sound, spelling, or the word denoting the brand name as an indicator of country of manufacture.

The results of this study are limited by a general lack of generalizability due to sample size and selection. However, the findings do indicate that incorrect country of origin information may result in consumers purchasing products from countries other than those they might have intended.

Kenneth White Research

This study surveys 80 purchasing executives in the U.S. plastics industry to determine their attitudes toward foreign chemical companies as supplier.

This study indicated that 80% of the respondents surveyed preferred to purchase domestic products, and the reason cited most often for using foreign suppliers was lack of domestic supplies. Additionally, younger respondents were more inclined to use foreign suppliers than older purchasing agents, and quite surprisingly Midwestern purchasing agents were more favorable to foreign suppliers than agents from other areas of the country.
This study was limited by its lack of statistical analysis and the use of a single product from a single industry. However, the results are consistent with similar studies in this area.

Summary

This summary is somewhat unusual because it is primarily a summary of a summary. After this Literature Review was completed a very comprehensive article reviewing the literature regarding the effect of country of origin on buyer evaluations of products was published in the Journal of International Business. Because the conclusions reached by this article about the current state of research in this area and the findings of past research are nearly identical to my conclusions and because the "remaining issues" identified by this article strongly justify the need for this study, I have decided to use this review article as the basis for this summary.

The conclusions drawn based both on the articles reviewed and the article mentioned above are the following:

1. The country of origin does affect product evaluations for both products in general and specific product categories.

2. There tends to be a "home country" bias for all the countries studied, and studies reporting U.S. consumer attitudes toward U.S. products usually placed U.S. products in first place.

3. Products from developed countries are usually rated higher than products from less developed countries.
4. Demographic variables have not been found to relate to evaluations of foreign products on any consistent basis. However, various studies found age, sex, education, ethnic background, and income significantly related to foreign product evaluations.

5. Personality variables were not shown to be consistently related to foreign product preferences. However dogmatism, conservatism, and status concern were identified by at least one study as being associated with foreign product evaluations.

6. The product stereotypes expressed toward the general products of a foreign country were not consistent with the stereotypes of specific product categories.

7. The importance of country of origin in product evaluations is also apparent in industrial purchasing situations.

This article also cites several methodological limitations common to most of these studies, they are the following:

1. Most of the studies involved only a single cue, country of origin, to base their evaluations on.

2. In much of the research respondents were only given verbal references to products.

3. In terms of the general validity and reliability problems often encountered in consumer research these studies suffered from untested instruments, possible demand artifacts and low measurement validity.

In addition to the problems noted I feel there were two other important limitations to most of these studies.
4. Students were often used for reasons of convenience rather than drawing a representative sample of U.S. consumers. This is especially true in the few cases where a more sophisticated methodology was employed.

5. Consumers behavior theory and models were ignored when trying to develop a framework to explain foreign product bias. Finally the authors of this article identify the remaining issues surrounding the phenomenon of foreign product bias and the issues identified by them were the precise issues which this research effort was designed to address. In effect their list of remaining issues could serve as the rational or justification for the study that had already been undertaken. The remaining issues identified by this article are as follows:

1. The issue of how much influence the cue of country of origin provides in influencing buyer perceptions of products has not yet been decided.

2. Whether and to what extent, other cues—such as, well known brand name, or a prestigious retailer—can compensate for a negative country of origin cue.

3. What are the determinants of country of origin biases. Is this a function of source country considerations (such as degree of economic development or political climate) of consuming country considerations (such as import experiences, nationalism or cultural affinity with the source country); and would it be more effective to combat them or to compensate for them?
4. Are there significant intercorrelations between the country of origin cue and other cues, such as price, which may tend to reinforce negative biases.

In addition I feel it is important to address the following issues:

5. Has there been a recent shift in U.S. consumer attitudes and a possible weakening or reversal of the "home country" bias observed by other studies.

6. What attitudinal, cultural or economic variables are suggested by consumer theory which might help to explain foreign product bias.
FOOTNOTES


11. Ibid.


13. Ibid., p. 37.


15. Ibid., p. 386.


18. Ibid., p. 889.


22. Ibid., p. 33.

23. Ibid., p. 34.


27. Ibid., p. 28.


29. Ibid., p. 44.


31. Ibid., pp. 97-98.


36. Ibid., p. 35.


47. Ibid., pp. 90-92.

48. Ibid., p. 93.

49. Ibid., p. 94.
CHAPTER III
RESEARCH DESIGN

Overview

This research uses a survey questionnaire to investigate consumer attitudes toward foreign products and the constructs underlying these attitudes and to determine what effect various marketing strategies have on these attitudes. Consumers are classified into different groups based on their degree of positive or negative foreign product bias toward products imported from both industrialized and less developed countries. These consumers are then exposed to several different import marketing strategies and the effectiveness of overcoming foreign product bias is measured. The consumers are then grouped together based on similar ratings of foreign product bias and similar responses to various import marketing strategies. These groups are then analyzed to determine if they can be distinguished from each other based on selected socio-economic demographic variables.

The data collection for this research was carried out using a survey questionnaire designed specifically for this study. This questionnaire was developed in several steps and was pretested in various ways across several groups of consumers. A copy of the final questionnaire appears in the Appendix.

This chapter details how the dependent and independent variables are defined and measured. A discussion of the steps involved in
questionnaire development and sample selection is held in the second part of this chapter. Finally, comments are then made regarding the types of data analysis performed.

**Defining Foreign Product Bias**

The literature review in the previous chapter demonstrates that consumer attitudes toward foreign products has held the interest of researchers both in the United States and abroad for the past two decades. Several definitions of foreign product bias, also called foreign product image, have been developed; however, there is one which has received the widest acceptance. It was developed by Akira Nagashima who defined foreign product bias or image as:

> the 'made in' image is the picture, the reputation, the stereotype that businessmen and consumers attach to products of a specific country. This image is created by such variables as representative products, national characteristics, economic and political background, history and traditions. It has a strong influence on consumer behavior in the international market, as it is associated with mass communication, personal experience, and views of national opinion leaders.

At this definition implies, foreign product bias does not necessarily mean a negative bias towards products from a particular country. Certain groups of consumers may have a strong positive bias towards specific products from a particular country, such as French wines, or some consumers may have a bias in favor of all or most products from a specific country, such as Switzerland. However, for the purposes of this study I am interested in studying more general attitudes of consumers. Certain groups of consumers may have a strong positive bias in favor of all or most products produced
in industrialized countries other than the United States; while other groups of consumers may have strong negative biases against products from these same industrialized countries but a positive bias toward products from different industrialized countries. Similar biases may exist for and against all or most products produced in less developed countries.

The first step of this research is to establish whether or not these biases exist, and if they do exist, how strong are they. The second step involves trying to develop an understanding of why these biases exist, and to determine whether or not different motives may underlie the foreign product bias of different segments of a consumer group which holds the same bias towards foreign products. The third step of this research requires a measure of the effectiveness of various import marketing strategies in overcoming negative product biases or enhancing positive foreign product biases. The final step involves trying to identify market segments which behave in similar ways to foreign products and import marketing strategies.

Methodological Considerations

As the title of this research indicates, the subject of this research is foreign product bias in the United States. Foreign product bias, which can be either positive or negative, is the sum total of consumer's attitudes towards products from foreign countries. A detailed analysis of this statement indicates the obstacles which must be faced in designing an appropriate methodology to address this issue.
The phrase "the sum total" indicates that this phenomenon is composed of several separate parts. A consumer's attitude towards any particular product must include their attitude towards the quality of the parts which comprise the product and the quality of the workmanship which combined these parts to form a completed product. Additionally, the follow-up service provided by the producing company might influence a consumer's attitude towards a product. Therefore, part of this research must be aimed at determining how these major elements of consumer attitude are combined to form an overall opinion of a product.

The word "consumers" suggests several important research considerations. First, "consumers" implies that this research wants to analyze the general consuming public in the United States. This requirement will require a research design that will reach a broad spectrum of consumers. It will not permit the use of only college students or similar convenience samples unless such samples are reasonably representative of the general consuming public. Secondly, the word "consumers" raises the question: how homogeneous are the attitudes of the consuming public. It may be argued that each of approximately 235 million consumers in the United States holds attitudes towards foreign products which are unique to that individual. Such a conclusion would require a complete census of the consuming public, which is clearly impossible in the context of this study. A more reasonable alternative involved the development of a typology which classifies consumers into groups that hold very similar attitudes towards foreign products. Therefore, the development of
some procedure for grouping similarly-minded consumers must be addressed in the methodological design. Finally, it would be useful to determine what characteristics best describe the different groups of like-minded consumers. Are the individuals similar in terms of age, sex, income, geographic location, etc.? This will require the development of a list of variables which might prove useful in describing these groups.

The issue of heterogeneity is also important when considering the importance of the word "products." Are the attitudes of a particular group of like-minded consumers the same for all products from a particular country or are these attitudes product specific? Do consumers have a positive bias towards certain products from a particular country while at the same time having a negative bias towards other products from that same country? The research design selected must be capable of answering these questions.

Finally, the United States imports products from nearly everyone of the 188 different countries identified by the World Bank and while it might be possible to survey attitudes of each of these countries, this undertaking is beyond the limitations of this research. Therefore, some method must be developed to reduce this very large number of countries to a more manageable size while still allowing for a reasonable degree of generalizability.

In summary, the research design selected for this project must be capable of reducing the attitudes of approximately 235 million consumers about several hundred thousand products from over 180
countries into a form which allows meaningful generalization to be made about the foreign product bias phenomenon.

The Self-explicated Measure of Foreign Product Bias

The first section of the research instrument was designed to provide a self-explicated measure of each consumer's foreign product bias towards products from both industrialized and less developed countries. As the literature review has pointed out, foreign product bias is a function of both attitudes toward the quality of foreign products and attitudes toward the value for one's money offered by foreign products defined in terms of the quality and value offered by domestically produced products. Since I am interested in the general attitude about most products produced within a particular country, this portion of the questionnaire was not product specific.

As a measure of a consumer's foreign product bias towards industrialized countries, I decided to aggregate the feelings toward the quality and value of products offered by two of our strongest economic competitors, West Germany and Japan. Therefore, the measure of foreign product bias towards products from industrialized countries is an unweighted average of the quality offered by West German and Japanese products; this is represented by the formula:

\[ Q_{DC} = \frac{\sum q_i}{N_i} \]

where: 
- \( q_i \) = quality ratings of each industrialized competitor
- \( N_i \) = number of industrialized competitors receiving a quality rating.
A similar measure of foreign product bias toward products from less developed countries was also developed. Again, this measure was an unweighted average of the quality ratings given by each consumer for products from South Korea and Mexico. This is represented by the formula:

\[ Q_{LDC} = \frac{\sum q_k}{N_k} \]

where: \( q_k \) = quality ratings of each less developed competitor
\( N_k \) = number of less developed competitors receiving a quality rating.

The benchmark to which these two measures were compared, to determine whether a consumer is biased for or against foreign products, is the respondent's quality rating of domestic products, QUSA.

Once these three measures for each consumer are obtained the next step involves testing for significant differences between both of the measures of foreign product bias and the benchmark measure of domestic product ratings. By comparing these measures for each consumer individually, I was able to eliminate the problems caused by aggregating the results of all consumers and then trying to compare individual ratings with group average ratings. If the tests for significant bias indicate that an individual rates products from either group significantly higher than domestically produced products, then that consumer will be assigned to a strong positive foreign product bias group based on whether these tests were significant for industrialized countries, less developed countries, or both. Conversely, if the tests indicate that a consumer rates foreign products
significantly lower than domestically produced products, then that consumer will assigned to a strong negative foreign product bias group accordingly. Therefore, the self-explicated measure of foreign product bias developed from Part I of the questionnaire will allow consumers to be classified as being biased in favor of foreign products, biased against foreign products or unbiased toward foreign products.

The Multi-Attribute Measure of Foreign Product Bias

As is generally the case in most marketing and other real life situations the self-explicated measure of the importance of any single factor is distorted due to the multi-attribute nature of most choice tasks when asked to evaluate the importance of a number of attributes, one at a time, a respondent may respond quite differently than when asked to evaluate the same attributes simultaneously in a multi-attribute situation. Especially, a consumer may indicate a strong positive or negative bias toward products from a particular foreign country when they are asked to respond to a self-explicated measure of the importance of country of origin in their purchase decisions; however, in a multi-attribute situation the additional factors under consideration may result in a quite different conclusion regarding the importance of country of origin.

In an attempt to deal with these multi-attribute alternatives situations, mathematical psychologists have developed conjoint analysis. In contrast to the self-explicated models which utilize the value ratings of each factor separately and then seek to develop a total
utility rating for some multi-attribute object, conjoint analysis is based on a decompositional approach. Using the approach each respondent is required to react in some measurable way to a set of objects. These reactions are then analyzed in an effort to develop a set of individual attribute value ratings or utilities that are consistent with the consumers' overall preferences within the multi-attribute decision framework.  

Conjoint analysis uses as its basis one of three alternative preference models for each factor under consideration and the model selected is generally assumed to be appropriate for each individual in the analysis. The three models used are the vector model, the ideal-point model and the part-worth function model.  

The vector model operates under the assumption that more of a particular attribute is always better (or works depending on whether the vector has a positive or negative slope). For example, it could be argued that nearly everyone would prefer more income to less assuming the amount of effort required to earn that income was constant; this condition would best be portrayed by monotonically increasing vector, and is illustrated by Figure 3-1. Likewise it might be argued that nearly everyone would prefer to have fewer days spent hospitalized than more; this monotonically decreasing vector is illustrated by Figure 3-2.  

In contrast many attributes probably have a single point that for each individual represents their highest utility. For example, consider the case where an individual is asked to express his
preference for the length of a feature film, it is likely that everyone will have some period of time which they consider ideal and anything above or below that point would result in their overall utility decreasing. This condition is illustrated by Figure 3-3.

While each of the conjoint models discussed so far are useful in certain situations they are all limited by the requirement that the researcher must make an a priori assumption about the shape of an individual's preference function. Consider the attribute of price. One might hypothesize that an individual would always prefer to pay the lowest amount possible for a particular item. This assumption would be consistent with a classical economists concept of price and would best be described by the monotonically decreasing vector model. However, if the researcher was schooled in the marketing philosophy of price he/she might hypothesize that an individual has a particular price that he/she feels is most appropriate for a particular product. Consequently any price above or below this consumer's "correct" price would result in a lower overall utility for that product. This situation is best described by the ideal point model. Unfortunately, these two possibilities to not exhaust all the possibilities for describing models which best explain the importance of price to overall utility. Some consumers may operate under a purchasing rule which dictates that they purchase either high quality/high price products or they purchase a very low price "good deal" item. In a case like this none of the above models describe this preference function adequately.
In order to provide the greatest degree of flexibility in allowing different shapes for the preference function along each level of the attribute the part-worth function model was developed. The part-worth function model evaluates an attribute at a number of specific levels (usually 3 to 5) and calculates a utility for each level. This model is illustrated by Figure 3-4.

In order to provide the respondent with a multi-attribute choice situation the research must use either the two factor-at-a-time procedure called the "trade-off procedure" or the full profile approach.5

The trade-off approach is easy to administer and reduces information overload. This procedure requires the respondent to rank all levels of two factors and to repeat this procedure until all two factor combinations have been rated.

The full-profie approach uses one level of every factor to complete a stimulus full-profile card. The attribute levels are altered in a predetermined way in order to create a complete set of full-profile stimuli. These stimulus cards are then ranked by the respondent from the most preferred to the least preferred. These rankings provide the basic input into the conjoint analysis utility estimation program. This research project utilizes the full-profile methodology and its development is explained fully in the discussion of questionnaire design.

The data analysis techniques employed in conjoint analysis can be classified into three broad categories based on the scale of the dependent variable and the stimulus presentation method used.
Figure 3-1. Monotonically Increasing Vector Model

Figure 3-2. Monotonically Decreasing Vector Model
Figure 3-3. Ideal Point Model

Figure 3-4. Part-Worth Function Model
The first category of methods assumes that the dependent variable is at most ordinally scaled and a full-profile presentation method was used. Although numerous algorithms have been identified which can be employed to handle this type of analysis,6 the three most commonly used methods are MONANOVA, PREFMAP, and LINMAP. In these cases when the dependent variable is assumed to be intervally scaled or higher it is possible to use ordinary least squares regression by creating dummy variables for the different levels of each attribute studied.10

When the paired comparison data collection method is used two choice probability models, LOGIT11 and PROBIT12 have been used to estimate the preference function.

Repeated studies using alternative estimation procedures have not demonstrated any clear cut superiority of one particular method over the alternatives. Indeed, two of the best known experts in this field conclude that Overall, the estimation methods do not seem to differ very much in their predictive validity.13 In terms of cross validity and predictive validity LOGIT and LINMAP were the slightly preferred procedures.14 Based on the results of these tests it was decided to use the LINMAP Version III: Linear Programming Techniques for Multidimensional Analysis of Preference Judgments developed by Allan D. Shacker and V. Scinivasan released in 1978.15
The Questionnaire

The data collection instrument used in this research was a multi-section consumer questionnaire which was designed to be administered by the subject himself. I developed the items on this questionnaire based on the research issues which I identified as important in the literature review and/or several in-depth interviews of people involved in this area.

The development of the questionnaire used in this research was done in four distinct phases. The first phase involved combining the findings of the literature review and several in-depth interviews into a very extensive questionnaire which covered all of the research questions addressed in this study. The second phase consisted of a pre-test of the questionnaire developed in phase one and a thorough debriefing of each of the participants who completed the questionnaire. The next phase required a new questionnaire to be developed based on the findings of the pre-test. Finally, the new questionnaire was given to the participants of the pre-test and they were again debriefed after they had completed the questionnaire. The new questionnaire was also given to a group of students twice over a one-week interval to test its test-retest reliability.

Initial Questionnaire Development

The initial questionnaire was designed both to provide the data necessary to answer the research issues addressed by this study and to test various data collection formats.
The first part of the questionnaire was designed to provide a direct self-explicated measure of consumer perceptions of foreign versus domestic products in terms of overall product quality, value and workmanship. In this part of the questionnaire the subject was asked to rate each of ten countries (South Korea, France, Taiwan, West Germany, Italy, Japan, Brazil, U.S.A., Mexico, and England) in terms of either overall product quality, overall best value for one's money or overall highest workmanship on a scale of 1 to 9 (with 1 being the lowest value and 9 the highest).

The second part of the questionnaire consisted of 25 statements with which the subject was asked to indicate the degree of agreement or disagreement on a strongly agree, agree, neither agree nor disagree, disagree, strongly disagree scale. These questions were designed to help determine the underlying basis for a subject's foreign product bias.

These 25 questions were designed to measure a subject's feelings in several areas. These areas were as follows:

1) Should Americans support other Americans by purchasing U.S. made products--is it one's patriotic duty to buy American?
2) Is it in one's own best economic interest to buy American-made products?
3) Are the wage levels in many U.S. industries too high--have U.S. workers priced themselves and their products out of the market?
4) Have American workers lost pride in their work?
5) How important is country of origin information in the purchase decision—would consumers prefer more explicit country of origin information?

6) How do American products rate in terms of quality and value compared to her major competitors—West Germany and Japan.

7) Who is most responsible for the present difficulties facing several large U.S. industries such as steel and automobile, the workers/unions or management?

The third part of this questionnaire was designed to provide self-explicated utilities of the importance of price, promotion, place of purchase, and country of manufacture in the purchase decision of both a relatively expensive item and a relatively inexpensive item. Here the subjects were asked to imagine themselves considering the purchase of an air-tight woodburning stove. Then they were asked to rate each factor mentioned above in terms of its importance in their purchase decision on a scale of a 1 (very important) to 9 (very unimportant). They were also asked to rate several alternatives within each of these factors in terms of how likely they could be to choose a woodburning stove which was associated with this factor level. For example, under place of purchase, the subject was asked their likelihood of purchasing their stove at J.C. Penney's, K-Mart, Sears, Buckeye Heating—a specialty store—and Woodsman Supply—another specialty store.

The fourth part of this questionnaire required the subject to rate 18 full-profile conjoint models. These profiles were developed using six factors, each of which had three levels. The factors used were
the country where the parts used in the manufacture of the stove were produced, the country where the stove was assembled, the country where the firm producing the stove was headquartered, the price of the stove, the store selling the stove, and the promotional strategy used to sell the stove. Each subject was asked to rate each of the 18 profiles on the likelihood that he would purchase that model on a scale of 1 (would not purchase) to 20 (absolutely would purchase the model in question). The ratings of these profiles provide the data needed for a standard conjoint analysis which provides a measure of each subject's utility for each factor. These utilities are combined with the self-explicated utilities provided from part three to allow the researcher to measure the importance of each factor in a multi-attribute purchase decision situation.

The last part of the questionnaire involved collecting information on 11 socio-economic demographic variables. The variables were sex, age, education, primary occupation of family head, ethnic background, 1981 income level, income level change expected in 1982, make of last new automobile purchased, union membership, spouses union membership, and area of the U.S. where the subject considers home. These demographic variables provide the basis of identifying specific market segments which react in similar ways to foreign products and to import marketing strategies.

In this initial questionnaire, two different products, a relatively expensive woodburning stove and a relatively inexpensive umbrella, were used to develop product profiles used to measure consumer utilities using both the self-explicated model and the
full-profile conjoint model. Therefore, the initial questionnaire had an additional two sections dealing with the umbrella purchase decision. These sections used the same six factors each with three levels in the full-profile conjoint analysis; however, the levels of the marketing strategy factors—price, promotion, and place of purchase—were changed to represent levels appropriate to a purchase decision involving an umbrella.

Having completed the main body of the questionnaire itself, a major problem was how would the 36 full-profile conjoint models be presented to the subjects. Most previous uses of conjoint analysis employed individual pre-printed cards to represent each conjoint profile. These cards would normally be carried by the interviewer who would hand them to the subject at the appropriate time, record the subject's response and collect the cards at the end of the section. However, because this was a self-administered questionnaire which was being designed to be mailed to a large number of consumers, this method was deemed unsatisfactory. Two alternatives which would be appropriate to self-administering would be to send each subject 36 cards or to represent several profiles on a single page of the questionnaire. It was decided that the only economically feasible way of handling the problem for this research was to show nine profiles on each of four pages of the questionnaire. The subjects were then instructed to remove the appropriate pages which contained either the stove or umbrella profiles and put both sheets of profiles in front of them at once.
In its final form the initial questionnaire consisted of seven sections plus 36 full-profile conjoint models which were portrayed on four pages at the end of the questionnaire. It was expected that each subject would be required to spend approximately 30 minutes completing the questionnaire. After the questionnaire was proofread by several colleagues, 25 copies were prepared for a pre-test.

The Pre-test of the Questionnaire
The questionnaire was pre-tested in several different stages. The pre-tests were designed to cover several different areas of concern, including the following:

1) the content validity of the questionnaire
2) the ease of understanding the instructions and the questions asked
3) the suitability of using multiple conjoint profiles on a single page
4) the desirability of asking subjects to rate conjoint profiles rather than rank them
5) the willingness and ability of consumers to respond to the questions

At the first stage of the pre-test, members of the faculty and graduate students at The Ohio State University who were knowledgeable in international business, marketing and consumer behavior, reviewed the questionnaire and suggested ways to improve its readability and its meaningfulness. These suggestions and comments were used to make minor revisions in the original version of the questionnaire.
Twenty-five copies of this questionnaire were prepared for the second stage of the pre-test.

During the weekend of March 13 and 14, 1982, 25 consumers representing a wide variety of socio-economic backgrounds were asked to participate in the second step of the pre-test. They were given a questionnaire and asked to complete it. They were also told that this questionnaire was in the development stage and that they would be debriefed in detail after having completed the questionnaire. They were asked to note the total time required to complete the questionnaire and encouraged to make comments on the questionnaire about any questions or instructions which confused them or were unclear to them.

After the subjects had an opportunity to complete the questionnaire, they were debriefed for approximately 30 minutes by the researcher. The time required to complete the questionnaire was noted and the subject was asked if they felt the time required to complete the questionnaire was excessive and if it was, what would be the maximum time they would spend. They were also asked if they would have completed the questionnaire and mailed it back in if they had received it in the mail. Then the questionnaire was covered section by section to determine if the instructions were properly understood and if the questions or alternatives were clear.

As Table 3-1 indicates, of the 25 questionnaires distributed, 24 were returned and the subjects were debriefed. Of the 24 returned questionnaires, 21 were judged to be usable. All three of the unusable questionnaires were judged to be unacceptable because the
subject had chosen only the one conjoint profile model that they would have purchased and failed to rate the remaining 17 models. The average time required to complete the questionnaire was 39 minutes; however, this increases to 42 minutes if the times required to complete the unusable questionnaires are disregarded. Only 11 of the subjects indicated that they would have completed the questionnaire if they had received it in the mail, and of these, four said they would have done so only because they knew me personally and wanted to be helpful.

Most subjects indicated that the maximum time they would consider spending on a similar questionnaire they received in the mail was 15 or 20 minutes with 17 being the mean. The section by section debriefings revealed that each section needed to be modified in order to improve subject understanding and/or ease of answering.

### TABLE 3-1

**QUESTIONNAIRE PRE-TEST RESULTS**

<table>
<thead>
<tr>
<th>Number of Subjects</th>
<th>Returned Questionnaires</th>
<th>% of Total</th>
<th>Usable Questionnaires</th>
<th>% of Total</th>
<th>Average Completion Time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>24</td>
<td>96%</td>
<td>21</td>
<td>84%</td>
<td>39</td>
</tr>
<tr>
<td>Would Return Questionnaire</td>
<td>% of Total</td>
<td>Would Return Unsolicited Questionnaire</td>
<td>% of Total</td>
<td>Average Acceptable Completion time (minutes)</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>44</td>
<td>7</td>
<td>28</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>
Pre-test Results of Part I

Section one, which required each respondent to provide a self-explicated rating of general product quality, value, and workmanship, was well received by most respondents. The directions were understood and carried out successfully by all respondents. However, several problem areas were pinpointed during the debriefings.

Several respondents expressed confusion with the nine-point scale that was anchored only on the extremes with the adjectives excellent and poor. Therefore, the final questionnaire was changed to a seven-point scale which was anchored at the 7, 5, 3, 1 ratings with the adjectives excellent, good, fair, and poor, respectively. This provided the respondent with a much clearer picture of what an intermediate rating actually meant.

There was also a problem in terms of mechanically being able to complete this section quickly and accurately. Several respondents felt that the countries were too close together and it was easy to get off the correct row. To correct this problem I added an additional space between each country and separated each row of countries and ratings with a continuous line of periods.

Additionally, the majority of respondents expressed an uncertainty about the difference between quality and workmanship. Most subjects felt that these subsections were asking essentially the same question. Therefore, in order to eliminate the confusion and reduce the length of the questionnaire, I elected to drop the sub-section on workmanship. Also in an effort to reduce questionnaire size, I decided to drop Italy from the questionnaire.
Finally, there were a number of subjects that felt that the ratings of a country's overall quality level of all of its products was difficult because of the wide range of quality across different products. In order to measure the degree of product specific differences in ratings I decided to add an additional section. This section required the respondent to rank the nine countries in question in terms of overall quality of products in six product specific categories. These categories are autos/auto parts, T.V.'s/stereos, clothing/shoes, food products, home appliances, and toys/games.

Pre-test Results of Part II

The second section of the questionnaire was designed to use agree-disagree statements to determine attitudes toward foreign and domestic products and to provide some insights as to why the attitudes exist. These questions were designed to measure the following areas:

1. Feelings about the appropriateness of "Buy American" campaigns and whether or not these attitudes were motivated by economic self interest. Reference questions 2, 3, 10, 13, 15, 17, 22, 24, 25.

2. Feelings about American and foreign worker attitudes toward the products they produce. Reference questions 8, 12, 21.

3. Feelings about the idea that many large unions have raised their wages high so that the products they produce have been priced out of the market. Reference questions 7, 16, 20, 23.

4. Questions aimed at determining whether or not the consumer tries to determine in what country a product was produced,
and if this information were available if it would affect their purchase decision. Reference questions 1, 9, 18, 19.

5. Whether or not products which are assembled in a particular country with parts produced in another country are considered to be different in quality from products and assembled in the same country. Reference question 11.

6. Specific questions about product quality and value from the U.S. and Japan were used as validation questions for Part I. Reference questions 4, 5, 6, 14.

The subjects had generally very positive responses to this section. With only a few exceptions, the questions for the most part were judged easy to understand. A few subjects felt that there were too many questions asking the same thing in a slightly different way.

Several subjects suggested wording changes which would help clarify the meaning of the question, for example, question one needs to be changed to read "in which country a product was produced" instead of "where a product was produced." Several subjects also felt that absolute statements such as "The Japanese are the world leaders in developing new technology" should be changed to more general statements such as "are among the leaders." Question 15 was cited as being confusing and poorly written. Since the issue of quality and value are addressed in Part I, questions 4, 5, 6, and 14 will be dropped to help shorten the questionnaire. Also, question 3 will be dropped since it is nearly the same question as number 2. Question 8 will be reworded to read "the same tools as foreign workers."
This leaves 20 questions to be answered on the same agree-disagree scale.

Pre-test Results on Parts III and VI

These sections were designed to provide the self-explicated utilities for use in the hybrid conjoint model. However, while there were no significant problems in these two sections, it was decided to eliminate them from the questionnaire based on two primary considerations. First, the use of the hybrid conjoint model has yet to be validated in the literature. Such a validation would require a test-retest predictive validity study which is beyond the scope of this consumer based research study due to the lack of control over the subjects necessary for a retest. The second factor was the amount of time required to complete these sections. The additional time—which averaged approximately eight minutes, according to the subject in the debriefing—would result in a questionnaire which would be too long and consequently have a much lower response rate.

Pre-test Results of Parts IV and VII

These sections were designed to provide the data necessary to employ a decompositional analysis of individual consumer utilities using a standard conjoint analysis program. Using a standard 36 fractional factorial design, 18 full-profile product descriptions were developed. Each subject was asked to rate each product profile on a 20 to 1 metric scale based on purchase intent. These ratings provide the dependent variable for the conjoint analysis technique.
These sections produced the widest range of subject responses. They ranged from "a very interesting exercise" to "too long and demanding" to "the whole thing was very confusing." Most subjects felt that the use of "Parts manufactured in:," "Products assembled in:," and "Company headquarter in" was too confusing and these items used were not mutually exclusive. The rating system was also criticized as being too difficult to understand and complete.

These sections will be completely redone. The first three factors will be combined into a single "Produce made in" factor. This will allow the use of a $3^4$ fractional factorial design. This will mean that all nine full-profiles will fit on a single page which will eliminate the need to detach the profiles from the rest of the questionnaire. The rating system will also be changed to use the more conventional ranking of profiles in terms of most likely to purchase to least likely to purchase (1 to 9).

These sections will be analyzed using a standard conjoining regression. The results of this analysis will be used to group subjects into groups based on similar product utilities. These groups will be analyzed using cross-tabs to determine whether or not the demographic variables in Part VI are useful in differentiating the groups.

Retest Results of the Finalized Questionnaire

Having revised the questionnaire as described above, it was again reviewed by several faculty members at The Ohio State University who are experts in the fields of international business and
marketing. Their review indicated that they felt the questionnaire had reached an acceptable form and was ready for distribution.

The questionnaire was also distributed to the subjects who had completed the first questionnaire. They were given an opportunity to complete the revised questionnaire and then debriefed. The results of the debriefings were very positive. Nearly all the subjects felt that this questionnaire was easy to understand and complete. The product changes from woodburning stoves to microwave ovens was something they could more easily relate to. The most enthusiastic responses were about the new format placing all the profiles for a single product on a single page and using a ranking system. With the exception of one typographic error which was corrected before the finally printing of the questionnaire, there were no significant complaints about the revised, final questionnaire.

A copy of the final questionnaire and the cover letter that accompanied it is included in Appendix A.

Basic Fractional Factorial Design: $3^4$

For four factors each with three levels the following design provides a basis for uncorrelated estimates of all main effects when the interactions are negligible. $16$

\[
\begin{array}{cccc}
0 & 0 & 0 & 0 \\
0 & 1 & 1 & 2 \\
0 & 2 & 2 & 1 \\
1 & 0 & 1 & 1 \\
1 & 1 & 2 & 0 \\
\end{array}
\]
The four factors used in this research are country of product manufacturer, price, place of purchase, and promotional information. The three levels of country of product manufacture were Japan, the United States, and Mexico for both analyses. The three levels of price were $175, $350, and $525 for the microwave oven analysis and $4, $10, and $16 for the umbrella analysis. The three levels of place of purchase for both analyses were Sears, K-Mart, and a hypothetical specialty store described to the respondent. National T.V., Consumer's Report magazine and salespersons' recommendation comprised the three levels of promotional information.

Sample Selection

The sample selection methodology used in this study was dictated both the theoretical considerations and practical considerations. The number of respondents needed to be large enough to insure a reasonable measure of external validity so that the findings of the study could be generalized beyond the sample surveyed. From a practical standpoint this study was constrained by the enormous costs associated with conducting any consumer behavior study which might be considered representative of all consumers in the United States. Additionally, part of the focus of this study was to address the issue raised by earlier studies which used a convenience group of college students.
and then tried to generalize these results to consumers as a whole. Consequently, the sample selection methodology used had to satisfy the criteria of being methodologically sound, able to be self-funded by the researcher and includes at least enough college students to allow a comparison between their attitudes and those of other consumers.

The total sample is comprised of three basic groups, Ohio consumers, non-Ohio consumers and college students. A total of 940 questionnaires were distributed from May 1982 to September 1982.

The largest single group surveyed were Ohio consumers. These consumers were primarily composed of members of the Ohio Air National unit located at Mansfield, Ohio. These individuals had come from all parts of Ohio to attend their weekend drill held once each month. They range in age from 17 to 60, and it is felt by this researcher that they are responsible representative of a majority of Ohio consumers. A total of 400 questionnaires were distributed to this group. Of this total 42.0% or 168 were returned and 161 of the questionnaires were judged to be usable for this research project which was an overall usable response rate of 40.31%.

The second largest group surveyed were undergraduate business students from the Ohio State University. Two hundred students were surveyed and 124 usable questionnaires were returned from an overall usable response rate of 62.0%. An additional 40 college students from the University of Southern California were surveyed; this group produced an overall usable response rate of 65.0%.
In an attempt to broaden the survey base of the study I travelled to shopping malls in Manchester, New Hampshire, Houston, Texas, and Oakland, California where I distributed questionnaires complete with a cover letter explaining the purpose of the survey, and a business reply envelope to 100 randomly selected shoppers at each location. The results of this distribution can be seen by reviewing the Summary of Sample Data Table 3-2. Overall the results of this distribution method were somewhat disappointing with the overall usable response rates ranging from a high of 19% to a low of 10%. However both time and monetary constraints dictated that the data collection process be terminated at this point.

Overall the results of the data collection process were deemed satisfactory. Of the 940 questionnaires distributed 369 were returned for an overall response rate of 39.3% and after editing 359 of these were considered usable for this research study. Therefore, the overall usable response was 38.2%
### Table 3-2
**Summary of Sample Data**

<table>
<thead>
<tr>
<th>Group</th>
<th># Dist</th>
<th># Returned</th>
<th>% Response Rate</th>
<th># Usable</th>
<th>Usable Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohio Service</td>
<td>400</td>
<td>168</td>
<td>42.0%</td>
<td>161</td>
<td>40.31%</td>
</tr>
<tr>
<td>Calif-consumer</td>
<td>100</td>
<td>20</td>
<td>20.0%</td>
<td>19</td>
<td>19.0%</td>
</tr>
<tr>
<td>Texas-consumer</td>
<td>100</td>
<td>10</td>
<td>10.0%</td>
<td>10</td>
<td>10.0%</td>
</tr>
<tr>
<td>New England-consumer</td>
<td>100</td>
<td>19</td>
<td>19.0%</td>
<td>19</td>
<td>19.0%</td>
</tr>
<tr>
<td>OSU-students</td>
<td>200</td>
<td>126</td>
<td>63.0%</td>
<td>124</td>
<td>62.0%</td>
</tr>
<tr>
<td>Calif-students</td>
<td>40</td>
<td>26</td>
<td>65.0%</td>
<td>26</td>
<td>65.0%</td>
</tr>
<tr>
<td>OSU-Test*</td>
<td>60</td>
<td>44</td>
<td>73.3%</td>
<td>42</td>
<td>70.0%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>940</td>
<td>369</td>
<td>39.3%</td>
<td>359</td>
<td>38.2%</td>
</tr>
</tbody>
</table>

*Used to judge test-retest reliability not included in total or in final data analysis.

**The Data Base**

As completed questionnaires were returned each was assigned a four digit identification which was written on the questionnaire itself and the envelope that it arrived in. The first digit of the code number was used to identify the specific sample group that the respondent belonged to and the last three digits were used to identify a specific questionnaire. This procedure greatly facilitated subsequent editing tasks.
Next each questionnaire was edited to insure an acceptable level of completeness and to insure that the questions were answered correctly. During this process ten questionnaires were found to be unusable due to incompleteness.

The remaining 359 questionnaires were entered in a fixed format data base using the data entry approach suggested by the Statistical Package for the Social Sciences, 2nd edition. After this computer data base was completed it was edited electronically using the SPSS-Frequency procedure. Mispunched data was identified by questionnaire identification number and that questionnaire was re-examined and the data connection made.

The final data base was a data matrix of 359 rows and 125 columns which represented 121 separate variables. This data base provided the input into the SPSS, SAS, and HNMAP statistical analysis programs which were used to test the hypotheses of this study. Subsequent modifications to this data base were made using the SPSS computer procedure, the SPSS add variables procedure, and the SAS MERGE procedure.

**Hypotheses Tested**

One of the fundamental research questions addressed by this study is the extent to which the foreign product bias phenomenon affects consumers' attitudes toward overall product quality and value. Therefore, the first hypothesis tested is the idea that country of origin knowledge does not affect consumers' ratings of product quality. Failure to reject this first hypothesis would indicate
that at least for the sample under consideration that these consumers are not bias in favor of or against foreign products on the basis of their overall quality. Expressed in its null form the hypothesis becomes:

$$H_{1.1}: \text{Country of Origin Knowledge has no Effect on Perceptions of Overall Product Quality Ratings.}$$

This hypothesis will be tested using the data generated by section one of the questionnaire. The testing procedure used will be an Analysis of Variance using a respondent rating of product quality as the criterion variable and the nine levels of the factor country as the independent variable. This unbalanced ANOVA will be ran using the standard SAS GLM model. Previous studies suggest that the null hypothesis will be rejected which would indicate that country of origin information does play a significant role in determining a consumers' overall rating of product quality.

Next, I need to establish whether or not the bias toward a particular country's products is positive or negative. Therefore, it is necessary to test the product quality ratings of each country against the ratings of domestically produced products. Expressed in the null form these hypotheses become:

$$H_{1.2}: \text{There is no Difference in the Overall Quality Ratings of Products Produced in South Korea and Products Produced in the United States.}$$

$$H_{1.3}: \text{There is no Difference in the Overall Quality Ratings of Products Produced in France and Products Produced in the United States.}$$
H_{1.4}: There is no Difference in the Overall Quality Ratings of Products Produced in Taiwan and Products Produced in the United States.

H_{1.5}: There is no Difference in the Overall Quality Ratings of Products Produced in West Germany and Products Produced in the United States.

H_{1.6}: There is no Difference in the Overall Quality Ratings of Products Produced in Japan and Products Produced in the United States.

H_{1.7}: There is no Difference in the Overall Quality Ratings of Products Produced in Brazil and Products Produced in the United States.

H_{1.8}: There is no Difference in the Overall Quality Ratings of Products Produced in Mexico and Products Produced in the United States.

H_{1.9}: There is no Difference in the Overall Quality Ratings of Products Produced in England and Products Produced in the United States.

These hypotheses will be tested using the SPSS procedure T-test for tests of means between two independent samples where the mean product quality rating for each country is the variable to be tested.

Based on the previous findings in this area I would expect that each of these null hypotheses would be rejected and using a one-tailed testing procedure that the domestically produced products would be rated higher than foreign produced products. However, a large part of this research is directed toward establishing whether or not there has been a major shift in the American consumers' attitude towards products from particular foreign countries.

Based on the record merchandise trade deficits that the United States
has been running recently, 36 billion in 1982 and an estimated
deficit of 60 billion in 1983, it is probable that a major
attitude shift has occurred. Since Japan alone accounted for 18
billion of the 1982 deficit, approximately one-half, it is possible
that Japanese product has a group generally perceived as being
superior in terms of overall quality to domestically produced pro-
ducts. If such is the case the T-test between Japanese and American
products in terms of overall quality should reveal that the mean
ratings of the Japanese products is significantly higher than the
ratings of U.S. products.

In addition to questions of product quality this study examines
the interaction of product quality with product price to determine
consumers' attitudes toward the overall value for one's money
offered by products from foreign products compared to the value
offered by U.S. procedures. This issue is addressed in the second
section of part I of the survey instrument. First I must test
the general hypotheses that country of origin knowledge has no
effect on consumers' perceptions of overall product value offered
by products from different countries. Expressed in the null form
this hypothesis becomes:

\[ H_{2.1}: \text{Country of Origin Knowledge has no Effect on Perceptions of Overall Product Value Ratings.} \]

This hypothesis will be tested using the same GLM procedure
used to test hypothesis \( H_{1.1} \). Again the literature suggests that
this null hypothesis will be rejected.
Assuming the underlying null hypothesis is rejected it will be necessary to test each of the overall value ratings for each foreign country against the value rating for domestically produced products. The testing procedure will be the SPSS T-test procedure for individual group means previously used. Previous studies have not addressed the issue of value directly, consequently, the results of this section of the analysis are open to speculation. The specific hypotheses tested are:

\( H_{2,2} \): There is no Difference in Value Ratings of Products Produced in South Korea and Products Produced in the United States.

\( H_{2,3} \): There is no Difference in the Value Rating of Products Produced in France and Products Produced in the United States.

\( H_{2,4} \): There is no Difference in the Value Rating of Products Produced in Taiwan and Products Produced in the United States.

\( H_{2,5} \): There is no Difference in the Value Rating of Products Produced in West Germany and Products Produced in the United States.

\( H_{2,6} \): There is no Difference in the Value Rating of Products Produced in Japan and Products Produced in the United States.

\( H_{2,7} \): There is no Difference in the Value Rating of Products Produced in Brazil and Products Produced in the United States.

\( H_{2,8} \): There is no Difference in the Value Rating of Products Produced in Mexico and Products Produced in the United States.

\( H_{2,9} \): There is no Difference in the Value Rating of Products Produced in England and Products Produced in the United States.
The third type of analysis done on the data from Part I of the questionnaire will be an examination of the quality and value interaction for each country individually. The possibility exists that a country whose products are perceived to be of very high quality may have a much lower value rating because of the premium prices extracted for their products. Conversely a country may have a low rating on product quality but due to an aggressive market pricing strategy be perceived has generally offering very good value for one's money. Therefore the mean ratings of product quality and value offered will be tested for significant differences using the SPSS T-test for dependent samples. The hypotheses to be tested expressed in their null form become:

\[ H_{3.1} \] There is no Difference Between the Overall Quality Rating and the Overall Value Rating for Products Produced in South Korea.

\[ H_{3.2} \] There is no Difference Between the Overall Quality Rating and the Overall Value Rating for Products Produced in France.

\[ H_{3.3} \] There is no Difference Between the Overall Quality Rating and the Overall Value Rating for Products Produced in Taiwan.

\[ H_{3.4} \] There is no Difference Between the Overall Quality Rating and the Overall Value Rating for Products Produced in West Germany.

\[ H_{3.5} \] There is no Difference Between the Overall Quality Rating and the Overall Value Rating for Products Produced in Japan.

\[ H_{3.6} \] There is no Difference Between the Overall Quality Rating and the Overall Value Rating for Products Produced in Brazil.

\[ H_{3.7} \] There is no Difference Between the Overall Quality Rating and the Overall Value Rating for Products Produced in the United States.
There is no Difference Between the Overall Quality Rating and the Overall Value Rating for Products Produced in Mexico.

There is no Difference Between the Overall Quality Rating and the Overall Value Rating for Products Produced in England.

A finding that the foreign product bias phenomenon still exists is expected and is supported by previous findings. A finding that a major shift has occurred in American consumers' attitudes toward foreign products which contradicts earlier studies which found domestically produced products to be consistently rated superior in quality to foreign products would have very significant implications for both marketers of foreign products in the United States and marketers of domestic products which must compete against these foreign products. However, both these findings suggest two fruitful avenues for additional research. The first avenue addresses the question "Is there a particular characteristic or group of characteristics which are associated with the foreign product bias phenomenon?" In other words do consumers with a strong bias for or against foreign products tend to be younger or older or better educated or wealthier than consumer with consumers without a foreign product bias. The second area deserving further study is the question of whether the foreign product bias phenomenon is product specific based on past experience with products from a particular country serving only to influence the attitudes toward those specific products or whether the foreign product bias has a "halo" effect which causes a favorable or negative experience with a product from
a foreign country to influence the consumers' attitude toward other product categories from that country.

Demographic Factors Associated with Foreign Produced Bias

Trying to determine who tends to be bias for or against foreign products and to describe these like minded individuals in terms of a characteristic useful for market segmentation is the job of demographic analysis. The variables under consideration in this study are a combination of variables obtained through a review of the previous studies in this area and the pre-test results obtained during questionnaire development. The factors which are to be tested in this study are the following: sex, age, educational level, occupation of family head, ethnic background, income, expected change in income, type of automobile owned, whether the respondent is a union member or spouse of a union member, geographic region of the United States a person is a native of. Expressed in their null form these hypotheses become:

\[ H_{4.1} : \] There is no Association Between Sex and the Degree of Foreign Product Bias Displayed.

\[ H_{4.2} : \] There is no Association Between Age and the Degree of Foreign Product Bias Displayed.

\[ H_{4.3} : \] There is no Association Between Educational Level and the Degree of Foreign Product Bias Displayed.

\[ H_{4.4} : \] There is no Association Between Occupation and the Degree of Foreign Product Bias Displayed.

\[ H_{4.5} : \] There is no Association Between Ethnic Background and the Degree of Foreign Product Bias Displayed.
H. There is no Association Between Income Level and the Degree of Foreign Product Bias Displayed.

H\textsubscript{4.7}: There is no Association Between Expected Change in Income Level and the Degree of Foreign Product Bias Displayed.

H\textsubscript{4.8}: There is no Association Between Type of Automobile Owned and the Degree of Foreign Product Bias Displayed.

H\textsubscript{4.9}: There is no Association Between Union Membership and the Degree of Foreign Product Bias Displayed.

H\textsubscript{4.10}: There is no Association Between Spouse's Union Membership and the Degree of Foreign Product Bias Displayed.

H\textsubscript{4.11}: There is no Association Between Geographic Region the Respondent is a Nature of and the Degree of Foreign Product Bias Displayed.

These hypotheses all have nominal data or ordinal as the independent variable therefore they will be tested using the SPSS Chi-squared procedure which tests whether systematic relationship exists between two variables.\textsuperscript{29} This is done by computing the cell frequencies which would be expected if the null hypothesis was true and comparing the expected frequencies to the actual frequencies observed in the sample.

Testing the Association of Attitudinal Variables with Foreign Product Bias

In addition to determining which demographic variables are related to the degree of foreign product bias expressed by a consumer; this study also looks at six attitudinal variables associated with foreign product bias.
These six variables will be tested by seeing how well they serve as independent variables in predicting the dependent variable degree of foreign product bias expressed by a consumer. This test will be performed using the SAS multiple regression procedure. The six independent variables used will represent the total score of the respondent on the questions used to measure that attitude. The specific questions associated with each attitude was discussed earlier in this chapter. The independent variable will be the respondents overall rating of products from developed countries minus the rating of domestically produced products. A second regression will be run using their ratings of products from less developed countries minus their ratings of domestic products as the independent variable.

The coefficients of both regressions will be tested using a standard F-test to determine if and how much each variable is related to a respondent's degree of foreign product bias. These results will be used to test the specific hypotheses about the influence of attitudinal variables, expressed in their null form they become:

\[ H_{5.1} : \] Consumers' Attitudes Toward the Importance of Patriotism When Considering the Purchase of a Foreign Product are not Associated with the Degree of Foreign Product Bias Displayed.

\[ H_{5.2} : \] Consumers' Attitudes Toward the Pride American Workers Take in Their Work are not Associated with the Degree of Foreign Product Bias Displayed.

\[ H_{5.3} : \] Consumers' Attitudes Concerning Whether Members of Large Unions are Overpaid are not Associated with the Degree of Foreign Product Bias Displayed.
H5.4: Consumers' Attitudes Toward Big Business are not Associated with the Degree of Foreign Product Bias Displayed.

H5.5: Consumers' Attitudes Concerning the Economic Consequences to Themselves of Purchasing Foreign Products are not Associated with the Degree of Foreign Product Bias Displayed.

H5.6: Consumers' Attitudes Toward the Importance of Determining Country of Origin when Making a Purchase are not Associated with the Degree of Foreign Product Bias Displayed.

Measuring the Extent to Which Foreign Product Bias is Product Specific

As noted earlier in this chapter the concept of foreign product bias is extremely complex and is composed of both attitudes toward products in general from a specific country and attitudes toward a specific product from a particular country. Consumers may hold very different attitudes toward the general products from a country and a specific product class from that same country. Specific product classes which have been investigated by previous studies include the following: automobiles, food, pharmaceutical products, electrical appliances, and clothing. 30

Therefore, this study will address the issue of whether foreign product bias is product specific; additionally it will examine the issue of which product classes exert the greatest influence on overall attitudes. As previously discussed, respondents will be requested to rank the nine countries considered in this study in terms of product quality for six specific product classes including automobiles or automotive parts, televisions or stereos, clothing or shoes, food
products, home appliances, and toys or games. These rankings will provide the data necessary to test the hypothesis that foreign product bias is product specific. Expressed in its null form this hypothesis becomes:

\[ H_{6.1}: \text{Overall rankings of a country's product quality are independent of the Product Class Being Ranked.} \]

This hypothesis will be tested by comparing the ranking for each of the six product classes using the Freidman two-way analysis of variance by ranks non-parameter testing procedure.\(^{32}\)

Assuming that the null hypothesis is rejected as the literature would suggest, and the degree of foreign product bias is shown to vary by product class, the next step is to see which of these product classes are most closely associated with overall quality ratings of products in general. If a particular product class is significantly associated with overall product ratings then it is reasonable to conclude that that product class has a greater influence on shaping consumer attitudes toward a country than product classes which show no association with overall quality ratings. Therefore, the ratings for each product class will be compared to the overall product quality ratings developed from Part I of the questionnaire to test the hypothesis that these ratings are statistically associated with each other. Expressed in their null form these hypotheses become:

\[ H_{6.2}: \text{The Quality Rating of the Product Class - Automobiles/Automotive Parts is not Associated with the Rating of Overall Product Quality.} \]
\[ H_{6.3} : \] The Quality Rating of the Product Class - T.V.'s/Stereos is not Associated with the Rating of Overall Product Quality.

\[ H_{6.4} : \] The Quality Rating of the Product Class - Clothing/Shoes is not Associated with the Rating of Overall Product Quality.

\[ H_{6.5} : \] The Quality Rating of the Product Class - Food Products is not Associated with the Rating of Overall Product Quality.

\[ H_{6.6} : \] The Quality Rating of the Product Class - Home Appliances is not Associated with the Rating of Overall Product Quality.

\[ H_{6.7} : \] The Quality Rating of the Product Class - Toys/Games is not Associated with the Rating of Overall Product Quality.

Again these hypotheses will be tested using a non-parametric procedure for comparing the rankings of two samples, this procedure is called the Spearman Rank Correlation Coefficient Test. 28

Testing the Overall Importance of Marketing Mix Elements in Determining Consumers' Ranking of Product Quality

In addition to running the conjoint analysis procedure previously discussed it has been suggested that the ranking data used as the input to the conjoint analysis program also be used as the dependent variable in an ANOVA program in order to test main effects of the attributes under study and to test for possible interactions which might be present. 34

Therefore I used the SAS ANOVA procedure discussed earlier to test the significance of the three marketing mix elements under consideration in this study, price, channel and promotion. Additionally,
this procedure was used to test for interactions between the country of origin information and these three marketing elements; other possible interactions are ignored because they are not an issue in this study.

In addition to the ANOVA analysis all possible pairs of factors means were tested to determine if the difference in means is significant. The test used is the Duncan multiple range test. This test was chosen because it is a powerful posteriori contrast which is able to effectively handle subsets of different sizes, and although it does not control for experimentwise error rates, the small number of contrasts tested make that fact insignificant. 35

The specific hypotheses which were tested for each of the marketing mix elements expressed in their null form are the following:

\[ H_{7.1} \]: Promotional Policy Employed Does Not Have An Effect On Perceptions Of Overall Product Quality.


\[ H_{8.1} \]: The Channel Of Retail Distribution Employed Does Not Have An Effect On Perceptions Of Overall Product Quality.


\[ H_{9.1} \]: The Price of the Product Has No Association With The Effectiveness Of The Marketing Strategy In Overcoming Foreign Product Bias.
The Place of Purchase of the Product Has No Association With The Effectiveness Of The Marketing Strategy In Overcoming Foreign Product Bias.

The Promotion Method of the Product Has No Association With The Effectiveness Of The Marketing Strategy In Overcoming Foreign Product Bias.

Grouping Respondents According To Degree Of Foreign Product Bias

Having examined the issue of whether or not foreign product bias exists and the extent to which it does exist in various demographic grouping, the next phase of the study addresses the issue of how the marketing manager can best choose among the marketing mix strategies available to him or her in an effort to negate the feeling of negative foreign product bias or to enhance positive foreign product bias. Due to the fact that the strategies which prove most effective for products from other industrialized countries may not be the same strategies which work for products from less developed countries, these two situations will be studied separately.

The first step in this analysis requires each respondent to be rated in terms of their degree of bias for or against products from both developed and less developed countries based on the self-explicated expressions of the quality of foreign products in Part I of the questionnaire. Each respondent will be rated as either high negative, neutral or high positive for both products from other developed countries and less developed countries. This classification will be accomplished by comparing their rating of products from West Germany and Japan to their ratings of domestically produced products.
this procedure has been discussed in detail in an earlier part of this chapter. If the rating for the foreign produced product is equal to or greater than one point on the rating scale the respondent will be classified as high positive. Conversely if the respondent's rating is less than or equal one point lower the respondent will be classified as high negative; otherwise the respondent will be considered to be basically neutral toward foreign produced products.

Next the respondent will be exposed to a multi-attribute purchasing situation using the full-profile conjoint model discussed previously. The results of this analysis will allow me to measure each respondent's foreign product bias after having been exposed to various marketing strategies which varied price, promotion, and place of purchase as has been detailed earlier. By analyzing the utility values produced for the factor-country of origin and each level of that factor which represents a different country I will be able to classify each respondent in terms of his/her effective foreign product bias after having been exposed to various marketing strategies. In effect I am not attempting to measure whether the marketer was able to change the attitude of the consumer but whether the actions of the consumer could be changed by different marketing strategies.

Each respondent will be classified as high positive if their utility for the Japanese product is significantly higher than their utility for the domestically produced product. They will be classified as high negative if their utility for the Japanese product is significantly lower than their utility for the domestically
produced product. If the two utilities are not significantly different they will be classified as neutral in terms of foreign product bias.

Combining these two classifications yields a 3x3 cell matrix for products from other developed countries and another 3x3 cell matrix for products from less developed countries. This matrix is illustrated by Figure 3-5. A cell by cell examination of this matrix will help in understanding where the marketing manager has been effective in altering consumers' behavior.

Foreign Product Bias as Measured on the Self-Explicated Scales of Product Quality

<table>
<thead>
<tr>
<th>Foreign Product Bias as Measured by Conjoint Analysis in the Multi-Attribute Setting</th>
<th>High Negative</th>
<th>Neutral</th>
<th>High Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Negative</td>
<td>Cell # 1</td>
<td>Cell # 2</td>
<td>Cell # 3</td>
</tr>
<tr>
<td>Neutral</td>
<td>Cell # 4</td>
<td>Cell # 5</td>
<td>Cell # 6</td>
</tr>
<tr>
<td>High Positive</td>
<td>Cell # 7</td>
<td>Cell # 8</td>
<td>Cell # 9</td>
</tr>
</tbody>
</table>

Cell #1 represents those consumers who expressed a very negative attitude toward foreign products when asked directly about the quality of foreign products compared to the quality of domestic products and when faced with a theoretical multi-attribute purchase decision the knowledge that the product was produced in a foreign country resulted in a very low utility value for that product. In this case the marketer was not able to overcome the negative
attitude toward foreign products by using any combination of the three marketing strategies studied.

Cell #2 represents those consumers who were classified as unbiased toward foreign products based on their responses to Part I of the questionnaire; however, in the multi-attribute purchase decision they expressed a negative bias toward the foreign product considered. This suggests a possible interaction between country of origin knowledge and at least one of the marketing factors under study. For an example of this interaction consider a consumer who is neutral toward foreign products; however, in a purchase situation if the foreign product is very low priced then the consumer reacts based on an attitude symbolized by the cheaply produced "Made in Japan" stereotype which characterized the attitude toward Japanese products for many years after World War II and rates the product as being undesirable. A finding like this would be of great importance to the importer trying to select a marketing strategy which would avoid conjuring up negative stereotypes associated with foreign products. Cell #3 represents the same general consumer reaction only in this case the reaction was much stronger than the reaction observed in cell #2.

Cell #4 represents consumers who expressed a strong negative bias toward foreign products but had the bias neutralized by some element of the marketing mix. By examining the utility values for each consumer it will be possible to determine what percentage of the consumers experienced this change due to the price strategy, the promotion strategy or the distribution strategy. This knowledge
would aid the practitioner in designing a marketing strategy which
could neutralize the effect of country of origin labelling
information.

Cell #5 represents consumers who were consistently neutral
toward foreign products and who were not significantly affect by
the knowledge of country of origin in the multi-attribute purchase
setting.

Cell #6 contains consumers who expressed a very favorable atti-
tude toward foreign products when asked directly, but when actually
considering a purchase the country of origin knowledge significantly
didn't affect the outcome. The interpretation of these findings would
suggest that either the marketing strategy was successful in over-
coming a strong feeling either positive or negative toward foreign
products or more probably that the knowledge of country of origin
was never an important determinant of purchase behavior for this
group of consumers. In other words a consumer may express strong
attitudes toward foreign products but these attitudes are unimportant
in determining purchase behavior. In the latter case any marketing
strategy would appear to overcome foreign product bias.

Cell #7 represents the greatest change in expected behavior.
This group of consumers expressed a strong bias against foreign pro-
ducts when asked directly about the quality of foreign products;
however, in the multi-attribute setting they actually preferred
foreign products over domestic products. By examining each of the
utility values for the marketing mix factors, I can determine which
factor was most responsible for this change in behavior. This
knowledge would provide the marketer with direction in developing a marketing strategy for imported products. Cell #8 represents the same general reaction; however, in this case the consumer initially expressed a neutral feeling toward foreign products.

Cell #9 represents consumers who expressed a strong positive bias toward foreign products and this bias was an important influence in their purchase decision. These consumers would represent an excellent target market for imported products.

Developing Measures of Marketing Strategy Effectiveness

Having classified consumers both on self-explicated measures and multi-attribute of foreign product bias, my next task is to develop a measure of marketing strategy effectiveness. These general outcomes can be expected to occur when a marketer implements a new marketing strategy; the strategy may not significantly change product performance, the strategy may improve product performance, or the strategy may decrease product performance. The same three outcomes apply to marketing attempts to handle foreign product bias. The marketing strategy may result in no significant change in the performance of the foreign product, the marketing strategy may improve the performance of the foreign product by overcoming negative biases or enhancing positive biases, or the strategy may decrease foreign product performance by reinforcing negative biases or neutralizing positive biases.

Referring again to Figure 3-5, cells #1, #5, and #9 represent the situation where the cells 2, 3, and 6 for the factor country is
very low then that implies that country of origin was not an important consideration in their purchase choice.

In order to determine which elements of the marketing mix were most effective in improving foreign product performance it will be necessary to examine each factor individually to see if it was related to foreign product performance. This will be done by determining which level of each individual factor was preferred by each consumer. Due to the nature of conjoint analysis there will be cases where ties are possible between most preferred two levels of a factor; when this occurs there is no clear preference for any level of this element of the marketing mix. Consequently for each marketing mix element four outcomes are possible: Level A is preferred, Level B is preferred, Level C is preferred, or the consumer has no preference for a particular level of this factor.

This classification system will allow me marketing strategy chosen did not result in a significant improvement or decrease in the performance expected of the foreign product. However, cells #4, #7, and #8 represent the situations where the performance of the foreign product was significantly better than the performance expected based on self-explicated attitudes toward foreign products. Finally, cells #2, #3, and #6 represent the case where the performance level that would have been expected based on the self-explicated attitudes toward foreign products was not observed in the multi-attribute pursuit. This decreased level of expected performance may be due to the effect of the marketing strategy used or it may be due to the relative unimportance of country of origin knowledge in the purchase
situation. This question can be answered by examining the utility weight associated with the factor country. If the utility weight for the consumers contained in to test the hypothesis that this factor is significantly associated with the effectiveness of the marketing strategy in overcoming foreign product bias. Expressed in their null form these hypotheses become:

\[ H_{9.1} \]: The Price Of The Product Has No Association With The Effectiveness Of The Marketing Strategy In Overcoming Foreign Product Bias.

\[ H_{9.2} \]: The Place of Purchase Of The Product Has No Association With The Effectiveness Of The Marketing Strategy In Overcoming Foreign Product Bias.

\[ H_{9.3} \]: The Promotion Method Used Has No Association With The Effectiveness Of The Marketing Strategy In Overcoming Foreign Product Bias.

Each of these hypotheses will be tested using a Chi-squared analysis with the marketing strategy effectiveness group as the nominal dependent variable and the factor level as the nominal independent variable.

**Demographic Factors Associated with the Responsiveness of Foreign Product Bias to Change Due to Marketing Strategies**

Having classified respondents according to the amount of change observed in their behavior in the multi-attribute purchase situation the problem now becomes attempting to find a useful way of describing these groups. For example, do younger consumers tend to respond more favorably to certain marketing strategies than older consumers; or do men respond differently than women to different marketing strategies?
The characteristics which will be used to describe these groups must be ones that would be useful to the marketing manager for market segmentation purposes. For this study the most likely characteristics are the ones which I felt might be related to a respondent's foreign product bias. These are sex, age, education, occupation, ethnic background, income level, expected change in income, type of automobile owned, union membership, spouse's union membership and geographic region of residence. Therefore, each of these characteristics will be tested using Chi-squared analysis to measure their association with the level of responsiveness demonstrated toward marketing strategies used to market foreign products. Expressed in the null form these hypotheses become:

\[ H_{10.1} : \text{There Is No Association Between Sex and Responsiveness To Marketing Strategies.} \]

\[ H_{10.2} : \text{There Is No Association Between Age and Responsiveness To Marketing Strategies.} \]

\[ H_{10.3} : \text{There Is No Association Between Educational Level and Responsiveness To Marketing Strategies.} \]

\[ H_{10.4} : \text{There Is No Association Between Occupation and Responsiveness To Marketing Strategies.} \]

\[ H_{10.5} : \text{There Is No Association Between Ethnic Background and Responsiveness To Marketing Strategies.} \]

\[ H_{10.6} : \text{There Is No Association Between Income Level and Responsiveness To Marketing Strategies.} \]
H10.7: There Is No Association Between Expected Change in Income Level and Responsiveness To Marketing Strategies.

H10.8: There Is No Association Between Type Of Automobile Owned and Responsiveness To Marketing Strategies.

H10.9: There Is No Association Between Union Membership and Responsiveness To Marketing Strategies.

H10.10: There Is No Association Between Spouse's Union Membership and Responsiveness To Marketing Strategies.

H10.11: There Is No Association Between Geographic Region One Is A Nature Of and Responsiveness To Marketing Strategies.

Using a Chi-squared analysis to test these hypotheses requires the data matrix to conform to two general rules of thumb: 1) no cell can have an expected frequency less that one and 2) no more than 20% of all the cells may have an expected frequency less than five. Since several of the characteristics under analysis have numerous factor levels and the dependent variable cell membership has nine levels it was necessary to reduce the number of cells in the Chi-squared matrix. This was done in two ways. First each characteristic was reduced to a maximum of three levels by collapsing appropriate columns of data. Secondly, the dependent variable was reduced to three levels. The three cells which represent no change in the self-explicated attitude toward foreign products were combined into a single level, these are cells #1, #5, and #9. Next the three cells which represent a favorable change in attitude in the multi-attribute setting were combined into a single level, these are
cells #4, #7, #8. Finally, the three cells which represent the case where the respondent's feelings toward foreign products in the multi-attribute situation were even more bias against foreign products were combined into a single level, these cells are #2, #3, #6.

The variable age consisted of four levels; however, the small number of respondents in the over 55 category required me to combine them with the 41-55 group to form an over 40 group.

The variable education originally had six groups, however I reduced this to three groups. These three groups were high school graduates or less, some college and college graduate or more. This breakdown resulted in the smallest group having 72 members.

Primary occupation of family head was divided into nine groups originally; however, these nine groups were reduced to three groups for this analysis. The three groups are best described as white-collar workers, blue/pin collar workers and students. This grouping yielded groups of 169, 106, and 52 respondents, respectively.

Ethnic background originally included six groups; however, these groups were reduced to white-American born and other. Even using this collapsing scheme yielded an "other" group of only 36 respondents.

The six income levels were reduced to three levels; under $13,000, $13,000 to $30,000, and over $30,000. Similarly the expected change in personal income was reduced from nine groups to three groups. The three groups are 5% or over increase, under 5% increase to no change and a decrease in income expected.
The type of automobile owned was reduced to two groups, produced in the United States and produced outside the United States.

Finally, the geographic region that the respondent considered himself/herself a native of was reduced to East, Midwest, and West.
FOOTNOTES


4. Ibid., p. 106.


21. Ibid., p. 151.


23. Ibid., p. 237.


26. Ibid., p. 92.


30. Ibid., pp. 342-349.


33. Ibid., pp. 432-435.


CHAPTER IV
ANALYSIS OF DATA AND FINDINGS

Overview

The analysis of the data collected for this study about foreign product bias and the results of the tests of the hypotheses set forth in Chapters I and III are presented in this chapter. In addition, other information which was relevant to the study but not the specific hypotheses tested is presented at the end of the chapter as "other findings."

Ratings of Product Quality

The responses from part I of the questionnaire were aggregated across all consumers and the results are presented in Table 4-1. Here we find that Japanese products had the highest overall rating for product quality, West German products were second, domestically produced products were rated third with England, France, Brazil, Taiwan, South Korea, and Mexico in that order. These ratings are consistent with the findings of previous studies that products from the industrialized countries are rated higher in quality than products from less industrialized countries. However if these ratings are statistically significant they contradict previous findings which showed domestic products to be consistently rated overall superior in quality to foreign products; this would represent a significant shift in consumer attitude toward products from Japan and West Germany.
### Table 4-1

**Ratings of Overall Product Quality**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Median Rating</th>
<th>Mean Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Japan</td>
<td>5.993</td>
<td>5.850</td>
</tr>
<tr>
<td>2</td>
<td>West Germany</td>
<td>5.778</td>
<td>5.579</td>
</tr>
<tr>
<td>3</td>
<td>United States</td>
<td>5.589</td>
<td>5.451</td>
</tr>
<tr>
<td>4</td>
<td>England</td>
<td>4.864</td>
<td>4.756</td>
</tr>
<tr>
<td>5</td>
<td>France</td>
<td>4.473</td>
<td>4.667</td>
</tr>
<tr>
<td>6</td>
<td>Brazil</td>
<td>3.616</td>
<td>3.575</td>
</tr>
<tr>
<td>7</td>
<td>Taiwan</td>
<td>3.406</td>
<td>3.427</td>
</tr>
<tr>
<td>8</td>
<td>South Korea</td>
<td>3.178</td>
<td>3.274</td>
</tr>
<tr>
<td>9</td>
<td>Mexico</td>
<td>3.039</td>
<td>3.079</td>
</tr>
</tbody>
</table>

**Note:** The highest possible rating is 7.00, the lowest possible rating is 1.00.
Tests to Establish the Existence of Foreign Product Bias

The first requirement of this study was to establish that consumers used country of origin information as an information clue to judge product quality and that products from certain countries are assumed to be high or low in quality only because they are produced in that country. This concept has been defined as the foreign product bias phenomenon. To establish the existence of this phenomenon I tested the null hypothesis that country of origin knowledge has no effect on perception of overall product quality ratings, Hypothesis 1.1.

Using the SAS analysis of variance procedure, I used the quality ratings from part I of the questionnaire (see Table 4-1) as the dependent variable and each specific country as one of the nine levels of the factor, country, as the independent variable. The ANOVA, Table 4-2, shows the results of this procedure.

TABLE 4-2
ANALYSIS OF VARIANCE IN PRODUCT QUALITY RATINGS

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>PR &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>8</td>
<td>3221.54</td>
<td>402.59</td>
<td>239.91</td>
<td>.0001</td>
</tr>
<tr>
<td>Error</td>
<td>3069</td>
<td>5151.29</td>
<td>1.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3077</td>
<td>8372.83</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The decision reached based on this analysis was to reject the null hypotheses of $H_{1.1}$. This established the existence of foreign product bias and was consistent with the findings of previous studies. Having established that this bias exists I then examined the ratings of each country to determine whether the foreign product bias was positive (meaning consumers rated products from that country higher than domestic products) or negative (meaning consumers rated products from that country lower than domestic products).

This required the overall quality rating received for each of the eight foreign countries to be tested against the quality ratings of domestic products. This test was conducted using the SPSS t-test procedure for tests of means between two independent samples. This part of the analysis tested the hypotheses $H_{1.2}$ to $H_{1.9}$ and the results are given in Table 4-3.

This table indicates that domestic products were rated higher in quality than products from South Korea, France, Taiwan, Brazil, Mexico, and England; this is consistent with the "home country" bias found by earlier studies. However, contrary to previous findings domestic products were rated slightly lower in quality than German products (this difference is not significant), and significantly lower in quality than Japanese products. These findings suggest that there has been recent significant shift in attitudes of U.S. consumers toward products produced in West Germany and Japan. West German products are viewed as being at least as high in quality as domestic products, while Japanese products are viewed as being significantly
higher in quality than U.S. products. This finding supports the contention that the Japanese have successfully reversed the long held idea of a majority of U.S. consumers that Japanese products were cheap, inferior imitations of American products.

The difference in quality ratings can best be illustrated by looking at the raw data figures which are given in Table 4-4. Of the 354 people who rated the overall quality of Japanese products the highest rating possible while only 50 (14.1%) of the respondents gave U.S. products an excellent quality rating. Similarly 72 (20.6%) individuals rated West German goods as excellent. This indicates that there is a sizeable group of consumers who feel that both the Japanese and the West Germans have surpassed the U.S. in the overall quality of the products they produce.

Tests of Overall Value Offered by Foreign Products

However the quality offered by a product is only part of what makes a particular product attractive to the purchaser. Another very important consideration is the value offered by a product. Even if products from a particular country are significantly lower in quality, than products from other countries if they are priced low enough to compensate for the lack of quality, they may be viewed as good values by the consumer. This would make them an attractive alternative for the value conscience purchaser. The concept of value offered was tested by comparing the value offered by domestic products to the value offered by foreign products. Table 4-5 contains the Ratings of Overall Value Offered. This test required the value rating
### TABLE 4-3

**QUALITY RATING OF DOMESTIC VS. FOREIGN PRODUCTS**

<table>
<thead>
<tr>
<th>Hypothesis Tested</th>
<th>Countries</th>
<th>Mean Difference</th>
<th>df</th>
<th>T-value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1.2</td>
<td>U.S.A. vs. South Korea</td>
<td>2.1766</td>
<td>350</td>
<td>25.53</td>
<td>reject;* U.S. higher</td>
</tr>
<tr>
<td>H1.3</td>
<td>U.S.A. vs. France</td>
<td>9.773</td>
<td>352</td>
<td>12.35</td>
<td>reject;* U.S. higher</td>
</tr>
<tr>
<td>H1.4</td>
<td>U.S.A. vs. Taiwan</td>
<td>2.0199</td>
<td>350</td>
<td>22.49</td>
<td>reject;* U.S. higher</td>
</tr>
<tr>
<td>H1.5</td>
<td>U.S.A. vs. West Germany</td>
<td>-.1318</td>
<td>348</td>
<td>-1.58</td>
<td>don't reject, equal ratings</td>
</tr>
<tr>
<td>H1.6</td>
<td>U.S.A. vs. Japan</td>
<td>-.3983</td>
<td>353</td>
<td>-4.75</td>
<td>reject;* Japanese higher</td>
</tr>
<tr>
<td>H1.7</td>
<td>U.S.A. vs. Brazil</td>
<td>1.8873</td>
<td>345</td>
<td>24.29</td>
<td>reject;* U.S. higher</td>
</tr>
<tr>
<td>H1.8</td>
<td>U.S.A. vs. Mexico</td>
<td>2.3654</td>
<td>352</td>
<td>30.51</td>
<td>reject;* U.S. higher</td>
</tr>
<tr>
<td>H1.9</td>
<td>U.S.A. vs. England</td>
<td>.7017</td>
<td>351</td>
<td>10.31</td>
<td>reject;* U.S. higher</td>
</tr>
</tbody>
</table>

*At alpha = .01
TABLE 4-4
RESPONDENTS RATINGS OF OVERALL PRODUCT QUALITY

<table>
<thead>
<tr>
<th>Country</th>
<th>Excellent-Rating</th>
<th>Excellent-Good Rating</th>
<th>Good Rating</th>
<th>Good-Fair Rating</th>
<th>Fair Rating</th>
<th>Fair-Poor Rating</th>
<th>Poor Rating</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>1</td>
<td>7</td>
<td>55</td>
<td>68</td>
<td>138</td>
<td>57</td>
<td>25</td>
<td>351</td>
</tr>
<tr>
<td>France</td>
<td>11</td>
<td>48</td>
<td>141</td>
<td>77</td>
<td>56</td>
<td>13</td>
<td>7</td>
<td>352</td>
</tr>
<tr>
<td>Taiwan</td>
<td>0</td>
<td>20</td>
<td>67</td>
<td>80</td>
<td>90</td>
<td>64</td>
<td>30</td>
<td>351</td>
</tr>
<tr>
<td>West Germany</td>
<td>72</td>
<td>142</td>
<td>82</td>
<td>30</td>
<td>17</td>
<td>4</td>
<td>2</td>
<td>349</td>
</tr>
<tr>
<td>Japan</td>
<td>106</td>
<td>140</td>
<td>78</td>
<td>13</td>
<td>14</td>
<td>2</td>
<td>1</td>
<td>354</td>
</tr>
<tr>
<td>Brazil</td>
<td>2</td>
<td>15</td>
<td>49</td>
<td>121</td>
<td>100</td>
<td>45</td>
<td>14</td>
<td>346</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>50</td>
<td>140</td>
<td>109</td>
<td>38</td>
<td>13</td>
<td>4</td>
<td>1</td>
<td>355</td>
</tr>
<tr>
<td>Mexico</td>
<td>1</td>
<td>5</td>
<td>38</td>
<td>80</td>
<td>114</td>
<td>83</td>
<td>32</td>
<td>353</td>
</tr>
<tr>
<td>England</td>
<td>13</td>
<td>67</td>
<td>151</td>
<td>77</td>
<td>32</td>
<td>10</td>
<td>2</td>
<td>352</td>
</tr>
</tbody>
</table>
TABLE 4-5

RATINGS OF OVERALL VALUE OFFERED

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Median Rating</th>
<th>Mean Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Japan</td>
<td>5.901</td>
<td>5.714</td>
</tr>
<tr>
<td>2</td>
<td>West Germany</td>
<td>5.083</td>
<td>4.977</td>
</tr>
<tr>
<td>3</td>
<td>United States</td>
<td>5.000</td>
<td>4.932</td>
</tr>
<tr>
<td>4</td>
<td>England</td>
<td>4.504</td>
<td>4.348</td>
</tr>
<tr>
<td>5</td>
<td>Taiwan</td>
<td>4.119</td>
<td>4.058</td>
</tr>
<tr>
<td>6</td>
<td>South Korea</td>
<td>3.969</td>
<td>3.934</td>
</tr>
<tr>
<td>7</td>
<td>France</td>
<td>3.921</td>
<td>3.862</td>
</tr>
<tr>
<td>8</td>
<td>Brazil</td>
<td>3.772</td>
<td>3.699</td>
</tr>
<tr>
<td>9</td>
<td>Mexico</td>
<td>3.532</td>
<td>3.510</td>
</tr>
</tbody>
</table>

received by each foreign country to be tested against the value rating of domestic products.

The first hypothesis tested was $H_{2,1}$ which looked at the general question of foreign product bias on perception of overall product value. The results of this analysis which used the SAS ANOVA produce previously discussed is presented in Table 4-6. At an alpha level of .01 we can reject the null hypothesis and conclude that country of origin information is used by consumers to judge the value offered by a particular product. This means that consumers do use country of origin information to infer certain levels of product quality on foreign products.
Again I needed to establish the direction of this foreign product bias using the SPSS T-test procedure. The results of this part of the analysis tested the hypotheses \( H_{2.2} \) to \( H_{2.9} \) and the results are given in Table 4-7.

Again we can see that domestically produced goods have a significantly higher value rating than goods from South Korea, France, Taiwan, Brazil, Mexico, and England testing at an alpha level of .01. However, the domestic goods were rated lower in value than German goods but not significantly so. Once again strong evidence of an attitude shift was demonstrated by the significantly higher rating of overall value offered by Japanese products. These conclusions are reinforced by examining the raw data figures of value ratings given in Table 4-8.

Japan still dominates the picture with 93 (26.6%) of all the respondents giving products from Japan an overall value rating of excellent. This compares to 37 (10.5%) excellent ratings for domestically produced products and 31 (9.0%) excellent ratings received by West German products.
### TABLE 4-7

VALUE RATINGS OF DOMESTIC VS. FOREIGN PRODUCTS

<table>
<thead>
<tr>
<th>Hypothesis Tested</th>
<th>Countries</th>
<th>Mean Difference</th>
<th>df</th>
<th>T-value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_{2.2}$</td>
<td>U.S.A. vs. South Korea</td>
<td>9942</td>
<td>346</td>
<td>9.19</td>
<td>reject;* U.S. higher</td>
</tr>
<tr>
<td>$H_{2.3}$</td>
<td>U.S.A. vs. France</td>
<td>1.0776</td>
<td>347</td>
<td>12.11</td>
<td>reject;* U.S. higher</td>
</tr>
<tr>
<td>$H_{2.4}$</td>
<td>U.S.A. vs. Taiwan</td>
<td>8732</td>
<td>346</td>
<td>8.12</td>
<td>reject;* U.S. higher</td>
</tr>
<tr>
<td>$H_{2.5}$</td>
<td>U.S.A. vs. West Germany</td>
<td>-.0289</td>
<td>345</td>
<td>-.33</td>
<td>don't reject</td>
</tr>
<tr>
<td>$H_{2.6}$</td>
<td>U.S.A. vs. Japan</td>
<td>-.7765</td>
<td>348</td>
<td>-8.60</td>
<td>reject;* Japan higher</td>
</tr>
<tr>
<td>$H_{2.7}$</td>
<td>U.S.A. vs. Brazil</td>
<td>1.2271</td>
<td>338</td>
<td>13.57</td>
<td>reject* U.S. higher</td>
</tr>
<tr>
<td>$H_{2.8}$</td>
<td>U.S.A. vs. Mexico</td>
<td>1.4207</td>
<td>346</td>
<td>15.00</td>
<td>reject* U.S. higher</td>
</tr>
<tr>
<td>$H_{2.9}$</td>
<td>U.S.A. vs. England</td>
<td>-.6000</td>
<td>344</td>
<td>7.67</td>
<td>reject* U.S. higher</td>
</tr>
</tbody>
</table>

*At alpha = .01
<table>
<thead>
<tr>
<th>Country</th>
<th>Excellent Rating</th>
<th>Excellent Good Rating</th>
<th>Good Rating</th>
<th>Good-Fair Rating</th>
<th>Fair Rating</th>
<th>Fair-Poor Rating</th>
<th>Poor Rating</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>11</td>
<td>31</td>
<td>89</td>
<td>80</td>
<td>83</td>
<td>35</td>
<td>18</td>
<td>347</td>
</tr>
<tr>
<td>France</td>
<td>4</td>
<td>25</td>
<td>107</td>
<td>107</td>
<td>80</td>
<td>34</td>
<td>15</td>
<td>348</td>
</tr>
<tr>
<td>Taiwan</td>
<td>10</td>
<td>48</td>
<td>85</td>
<td>80</td>
<td>73</td>
<td>35</td>
<td>16</td>
<td>347</td>
</tr>
<tr>
<td>West Germany</td>
<td>31</td>
<td>92</td>
<td>120</td>
<td>64</td>
<td>25</td>
<td>8</td>
<td>6</td>
<td>346</td>
</tr>
<tr>
<td>Japan</td>
<td>93</td>
<td>137</td>
<td>79</td>
<td>20</td>
<td>13</td>
<td>5</td>
<td>3</td>
<td>350</td>
</tr>
<tr>
<td>Brazil</td>
<td>0</td>
<td>13</td>
<td>72</td>
<td>116</td>
<td>88</td>
<td>38</td>
<td>12</td>
<td>339</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>37</td>
<td>78</td>
<td>121</td>
<td>71</td>
<td>30</td>
<td>11</td>
<td>3</td>
<td>351</td>
</tr>
<tr>
<td>Mexico</td>
<td>5</td>
<td>22</td>
<td>40</td>
<td>110</td>
<td>90</td>
<td>61</td>
<td>19</td>
<td>347</td>
</tr>
<tr>
<td>England</td>
<td>10</td>
<td>35</td>
<td>128</td>
<td>92</td>
<td>57</td>
<td>18</td>
<td>5</td>
<td>345</td>
</tr>
</tbody>
</table>
Equally as important is the apparent shifts occurring within the other countries being studied. As Table 4-9 illustrates the average rating for quality and for value was not significantly different so no adjustment in scales was necessary. An analysis of the shifts in quality rating and value rating for each country might illustrate the quality-price interaction which would be extremely useful to the marketing practitioner. The results of this analysis is found in Table 4-9.

South Korea, Taiwan, Brazil, and Mexico all made significant increases in ratings where moving from the question of product value instead of product quality. In fact, both South Korea and Taiwan received a higher rating in terms of overall value offered than products from France. This finding illustrates the possibility that products from the developing countries may have begun to establish themselves as good value alternatives to the high quality but much higher priced goods from some of the industrialized countries. Indeed every industrialized country except Japan showed a significant decrease in its ratings when rated in terms of value offered instead of product quality. It seems that Japan stands alone among the industrialized countries investigated in this study as the only one offering the highest quality products at a price which makes them an excellent value even when compared to the often much less expensive products from the developing countries.
TABLE 4-9
QUALITY VS. VALUE RATINGS FOR EACH COUNTRY

<table>
<thead>
<tr>
<th>Hypothesis Tested</th>
<th>Country</th>
<th>Quality Mean</th>
<th>Value Mean</th>
<th>t-Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>H3.1</td>
<td>South Korea</td>
<td>3.3139</td>
<td>3.9750</td>
<td>-10.18*</td>
<td>reject H. low quality but good value</td>
</tr>
<tr>
<td>H3.2</td>
<td>France</td>
<td>4.4588</td>
<td>3.9093</td>
<td>8.86*</td>
<td>reject H. good quality but poor value</td>
</tr>
<tr>
<td>H3.3</td>
<td>Taiwan</td>
<td>3.5028</td>
<td>4.0608</td>
<td>-8.07*</td>
<td>reject H. low quality but good value</td>
</tr>
<tr>
<td>H3.4</td>
<td>West Germany</td>
<td>5.5718</td>
<td>5.0387</td>
<td>8.58*</td>
<td>reject H. very high quality but only good value</td>
</tr>
<tr>
<td>H3.5</td>
<td>Japan</td>
<td>5.8529</td>
<td>5.7575</td>
<td>1.67</td>
<td>don't reject H. very high quality and very high value</td>
</tr>
<tr>
<td>H3.6</td>
<td>Brazil</td>
<td>3.5575</td>
<td>3.7213</td>
<td>3.12*</td>
<td>reject H. low quality and low value</td>
</tr>
<tr>
<td>H3.7</td>
<td>U.S.A.</td>
<td>5.4511</td>
<td>4.9783</td>
<td>8.67*</td>
<td>reject H. high quality but only good value</td>
</tr>
<tr>
<td>H3.8</td>
<td>Mexico</td>
<td>3.0964</td>
<td>3.493</td>
<td>-6.07</td>
<td>reject H. low quality and low value</td>
</tr>
<tr>
<td>H3.9</td>
<td>England</td>
<td>4.7424</td>
<td>4.3435</td>
<td>7.68</td>
<td>reject H. good quality and good value</td>
</tr>
<tr>
<td></td>
<td>X</td>
<td>4.3970</td>
<td>4.363</td>
<td>1.22</td>
<td>no significant difference</td>
</tr>
</tbody>
</table>

*Alpha level = .01
Testing the Association of Demographic Variables With Foreign Product Bias

Up to this point I had been successful in establishing the existence of foreign product bias in U.S. consumers and in measuring that bias in terms of both countries and product categories. Next I focused my attention on the question of whether or not certain demographic characteristics are associated with a consumers' level of foreign product bias. The variables under consideration were sex, age, educational level, occupation, ethnic background, income level, anticipated change in income level, type of automobile owned, union membership, spouse's union membership, and geographic region of residence.

This problem becomes very complex when one considers the large number of countries and variables under study. Also a variable may prove to be very useful in predicting foreign product bias towards products from one country but not from another country. For example, sex may be very useful in predicting bias toward France but not useful in predicting bias toward Mexico. Therefore, each country demographic variable combination was tested using the SPSS Chi-squared analysis recommended for nominal variables. The summary of this analysis is contained in Table 4-10. An analysis of these results indicated that no variable was associated with the quality ratings of all nine of the countries but several variables were associated with the quality rating of several countries. Sex, age, education, income level, change in income level, and union membership were all associated with product quality ratings of at least three countries.
<table>
<thead>
<tr>
<th>Country</th>
<th>Sex</th>
<th>Age</th>
<th>Education</th>
<th>Occupation</th>
<th>Ethnic</th>
<th>Income</th>
<th>Change in Income</th>
<th>Car Type</th>
<th>Union</th>
<th>Union Spouse</th>
<th>Geographic Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes***</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>France</td>
<td>Yes***</td>
<td>Yes***</td>
<td>No</td>
<td>No</td>
<td>Yes**</td>
<td>Yes**</td>
<td>No</td>
<td>Yes***</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Taiwan</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes***</td>
<td>No</td>
</tr>
<tr>
<td>West Germany</td>
<td>Yes**</td>
<td>Yes*</td>
<td>Yes**</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes*</td>
<td>No</td>
<td>Yes**</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Yes***</td>
<td>No</td>
<td>Yes**</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Brazil</td>
<td>No</td>
<td>Yes*</td>
<td>Yes**</td>
<td>No</td>
<td>No</td>
<td>Yes***</td>
<td>Yes**</td>
<td>No</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>Yes***</td>
<td>Yes**</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>N/A</td>
<td>Yes**</td>
</tr>
<tr>
<td>Mexico</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>England</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes***</td>
<td>Yes***</td>
<td>No</td>
<td>Yes**</td>
<td>N/A</td>
<td>No</td>
</tr>
</tbody>
</table>

**Note:**

- *at alpha = .10
- **at alpha = .05
- ***at alpha = .01
- N/A: not applicable
The countries where demographics are most often associated with product quality ratings were France, West Germany, Brazil, and the United States. Looking at each of the characteristics individually.

Sex of the respondent was a useful predictor variable in terms of quality ratings for the countries of France, West Germany, Japan, and the United States. The results of this $X^2$ analysis can be seen on Table 4-11. Women rated French products much higher in quality than men rated them; women rated products from West Germany much lower than men did; men rated Japanese products lower than women did; and men rated domestically produced products much lower than women did.

Age of the respondent was a useful predictor variable in terms of quality ratings for the countries of France, West Germany, Brazil, and the United States. The results of the Chi-squared tests that were run are presented in Table 4-12. The under 25 age group rated French products significantly higher than either the 25-40 year olds or the over 40 age group. West German products were rated much higher by the 25-40 year old group than either of the other two groups. The younger age category was associated with higher quality ratings for products from Brazil. Somewhat surprisingly the younger, under 25, age group gave domestic goods a significantly higher rating than the older age groups. However, in the other five countries under study I could not reject the null hypothesis that age was not associated with quality ratings.
TABLE 4-11
SEX AS A DETERMINANT OF QUALITY RATINGS:
HYPOTHESIS TESTED H₄.1

<table>
<thead>
<tr>
<th>Country</th>
<th>df</th>
<th>$X^2$ value</th>
<th>p-value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>4</td>
<td>3.399</td>
<td>.493</td>
<td>not significant</td>
</tr>
<tr>
<td>France</td>
<td>4</td>
<td>16.201</td>
<td>.003</td>
<td>significant***</td>
</tr>
<tr>
<td>Taiwan</td>
<td>5</td>
<td>5.661</td>
<td>.341</td>
<td>not significant</td>
</tr>
<tr>
<td>West Germany</td>
<td>4</td>
<td>11.894</td>
<td>.018</td>
<td>significant**</td>
</tr>
<tr>
<td>Japan</td>
<td>4</td>
<td>20.960</td>
<td>.000</td>
<td>significant***</td>
</tr>
<tr>
<td>Brazil</td>
<td>5</td>
<td>4.346</td>
<td>.501</td>
<td>not significant</td>
</tr>
<tr>
<td>United States</td>
<td>4</td>
<td>11.543</td>
<td>.021</td>
<td>significant**</td>
</tr>
<tr>
<td>Mexico</td>
<td>4</td>
<td>1.062</td>
<td>.900</td>
<td>not significant</td>
</tr>
<tr>
<td>England</td>
<td>4</td>
<td>6.224</td>
<td>.183</td>
<td>not significant</td>
</tr>
</tbody>
</table>

*at alpha = .10
**at alpha = .05
***at alpha = .01
TABLE 4-12

AGE AS A DETERMINANT OF QUALITY RATING:

HYPOTHESIS TESTED $H_{4.2}$

<table>
<thead>
<tr>
<th>Country</th>
<th>df</th>
<th>$X^2$ Value</th>
<th>P Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>8</td>
<td>11.304</td>
<td>.503</td>
<td>not significant</td>
</tr>
<tr>
<td>France</td>
<td>8</td>
<td>23.108</td>
<td>.003</td>
<td>significant***</td>
</tr>
<tr>
<td>Taiwan</td>
<td>10</td>
<td>7.632</td>
<td>.665</td>
<td>not significant</td>
</tr>
<tr>
<td>West Germany</td>
<td>8</td>
<td>13.984</td>
<td>.082</td>
<td>significant*</td>
</tr>
<tr>
<td>Japan</td>
<td>8</td>
<td>6.205</td>
<td>.624</td>
<td>not significant</td>
</tr>
<tr>
<td>Brazil</td>
<td>10</td>
<td>17.439</td>
<td>.065</td>
<td>significant*</td>
</tr>
<tr>
<td>United States</td>
<td>8</td>
<td>17.214</td>
<td>.028</td>
<td>significant**</td>
</tr>
<tr>
<td>Mexico</td>
<td>8</td>
<td>7.920</td>
<td>.441</td>
<td>not significant</td>
</tr>
<tr>
<td>England</td>
<td>8</td>
<td>11.988</td>
<td>.152</td>
<td>not significant</td>
</tr>
</tbody>
</table>

*at alpha = .10
**at alpha = .05
***at alpha = .01
Education was not found to be associated with the ratings of product quality in six of the nine countries studied (see Table 4-13). However in West Germany, Japan and Brazil education appeared to be associated with quality ratings. In general the higher the respondent's educational level the higher his/her rating for products from West Germany and Japan. However there does not seem to be a consistent normative relationship between respondent's educational level and their rating for the quality of Brazilian products.

The variable income was found to be significantly associated with quality ratings of products from France, Brazil, and England (see Table 4-14). The relationship between the ratings of French products and income level of the respondent is surprising. The relationship appears to be fairly linear but monotonically decreasing, as income raises the rating of French products decreases. The same basic relationship occurs in the Brazil/income matrix; however, in the England/income matrix there is no consistent relationship between income and quality ratings of English products.

The variable change is expected income was found to be significantly associated with quality ratings of products from France, West Germany, Brazil, and England (see Table 4-15). The quality ratings for France appear to be based on a fairly linear relationship which is positively sloped. The more one's income is expected to increase the higher is the quality rating for French products; conversely the greater one's expected income decreases the lower the quality rating. A similar relationship is found for the relationship between West German products and expected change in income.
TABLE 4-13
EDUCATION AS A DETERMINANT OF QUALITY RATING:
HYPOTHESIS TESTED $H_{4.3}$

<table>
<thead>
<tr>
<th>Country</th>
<th>df</th>
<th>$\chi^2$ Value</th>
<th>p Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>12</td>
<td>11.304</td>
<td>.053</td>
<td>not significant</td>
</tr>
<tr>
<td>France</td>
<td>12</td>
<td>16.750</td>
<td>.159</td>
<td>not significant</td>
</tr>
<tr>
<td>Taiwan</td>
<td>15</td>
<td>18.453</td>
<td>.239</td>
<td>not significant</td>
</tr>
<tr>
<td>West Germany</td>
<td>12</td>
<td>21.430</td>
<td>.044</td>
<td>significant**</td>
</tr>
<tr>
<td>Japan</td>
<td>12</td>
<td>24.942</td>
<td>.015</td>
<td>significant**</td>
</tr>
<tr>
<td>Brazil</td>
<td>15</td>
<td>23.054</td>
<td>.083</td>
<td>significant*</td>
</tr>
<tr>
<td>United States</td>
<td>12</td>
<td>9.305</td>
<td>.677</td>
<td>not significant</td>
</tr>
<tr>
<td>Mexico</td>
<td>12</td>
<td>12.358</td>
<td>.417</td>
<td>not significant</td>
</tr>
<tr>
<td>England</td>
<td>12</td>
<td>12.896</td>
<td>.377</td>
<td>not significant</td>
</tr>
</tbody>
</table>

* at alpha = .10
** at alpha = .05
*** at alpha = .01
TABLE 4-14
INCOME AS A DETERMINANT OF QUALITY RATING:
HYPOTHESIS H_{4.6}

<table>
<thead>
<tr>
<th>Country</th>
<th>df</th>
<th>$X^2$ Value</th>
<th>p Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>20</td>
<td>20.536</td>
<td>.425</td>
<td>not significant</td>
</tr>
<tr>
<td>France</td>
<td>20</td>
<td>34.175</td>
<td>.0250</td>
<td>significant**</td>
</tr>
<tr>
<td>Taiwan</td>
<td>25</td>
<td>23.346</td>
<td>.557</td>
<td>not significant</td>
</tr>
<tr>
<td>West Germany</td>
<td>20</td>
<td>26.110</td>
<td>.162</td>
<td>not significant</td>
</tr>
<tr>
<td>Japan</td>
<td>20</td>
<td>15.528</td>
<td>.745</td>
<td>not significant</td>
</tr>
<tr>
<td>Brazil</td>
<td>25</td>
<td>44.627</td>
<td>.009</td>
<td>significant***</td>
</tr>
<tr>
<td>United States</td>
<td>20</td>
<td>21.260</td>
<td>.382</td>
<td>not significant</td>
</tr>
<tr>
<td>Mexico</td>
<td>20</td>
<td>17.825</td>
<td>.599</td>
<td>not significant</td>
</tr>
<tr>
<td>England</td>
<td>20</td>
<td>47.036</td>
<td>.001</td>
<td>significant***</td>
</tr>
</tbody>
</table>

*alpha = .10
**alpha = .05
***alpha = .01
<table>
<thead>
<tr>
<th>Country</th>
<th>df</th>
<th>$X^2$ Value</th>
<th>p Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>20</td>
<td>22.652</td>
<td>.306</td>
<td>not significant</td>
</tr>
<tr>
<td>France</td>
<td>20</td>
<td>31.919</td>
<td>.044</td>
<td>significant**</td>
</tr>
<tr>
<td>Taiwan</td>
<td>25</td>
<td>24.683</td>
<td>.480</td>
<td>not significant</td>
</tr>
<tr>
<td>West Germany</td>
<td>20</td>
<td>30.647</td>
<td>.060</td>
<td>significant*</td>
</tr>
<tr>
<td>Japan</td>
<td>20</td>
<td>18.596</td>
<td>.548</td>
<td>not significant</td>
</tr>
<tr>
<td>Brazil</td>
<td>25</td>
<td>42.139</td>
<td>.017</td>
<td>significant**</td>
</tr>
<tr>
<td>United States</td>
<td>20</td>
<td>15.052</td>
<td>.773</td>
<td>not significant</td>
</tr>
<tr>
<td>Mexico</td>
<td>20</td>
<td>17.591</td>
<td>.614</td>
<td>not significant</td>
</tr>
<tr>
<td>England</td>
<td>20</td>
<td>44.600</td>
<td>.001</td>
<td>significant***</td>
</tr>
</tbody>
</table>

*alpha = .10

**alpha = .05

***alpha = .01
However no such relationships were noticed for either Brazil or England.

Union membership was found to be associated with the quality ratings of products from South Korea, France, West Germany, and England (see Table 4-16). In every case union membership was associated with a lower overall quality rating of products from these four countries. In fact even in those foreign countries where the association did not test significant, union membership was associated with a lower product quality ranking; however, domestically produced products were not consistently rated higher by union members as one might expect.

The geographic region (see Table 4-17) that the respondent was a native of was found to be significantly associated only with quality ratings of domestically produced goods. While this association was not clear cut across all rating/region cells it appears that the Midwest tends to rate domestically produced product much higher in quality than other regions. The West tends to be the region that rates domestic products the lowest in overall quality.

The factors of type of automobiles owned, primary occupation of the household head and respondents' ethnic background were not found to be significantly associated with the quality ratings of any of the nine countries under study (see Tables 4-18, 4-19, 4-20). Additionally, the lack of responses from spouses of union members made it impossible to test the significance of this variable.
TABLE 4-16
UNION MEMBERSHIP AS A DETERMINANT OF QUALITY RATING:
HYPOTHESIS TESTED $H_{4.9}$

<table>
<thead>
<tr>
<th>Country</th>
<th>df</th>
<th>$X^2$ Value</th>
<th>p Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>4</td>
<td>16.188</td>
<td>.003</td>
<td>significant***</td>
</tr>
<tr>
<td>France</td>
<td>4</td>
<td>22.677</td>
<td>.000</td>
<td>significant***</td>
</tr>
<tr>
<td>Taiwan</td>
<td>5</td>
<td>6.570</td>
<td>.255</td>
<td>not significant</td>
</tr>
<tr>
<td>West Germany</td>
<td>4</td>
<td>9.740</td>
<td>.045</td>
<td>significant**</td>
</tr>
<tr>
<td>Japan</td>
<td>4</td>
<td>3.142</td>
<td>.534</td>
<td>not significant</td>
</tr>
<tr>
<td>Brazil</td>
<td>5</td>
<td>8.144</td>
<td>.148</td>
<td>not significant</td>
</tr>
<tr>
<td>United States</td>
<td>4</td>
<td>3.642</td>
<td>.457</td>
<td>not significant</td>
</tr>
<tr>
<td>Mexico</td>
<td>4</td>
<td>10.704</td>
<td>.030</td>
<td>significant**</td>
</tr>
<tr>
<td>England</td>
<td>4</td>
<td>10.704</td>
<td>.030</td>
<td>significant**</td>
</tr>
</tbody>
</table>

*at alpha = .10
**at alpha = .05
***at alpha = .01
### TABLE 4-17
GEOGRAPHIC RESIDENCE OF RESPONDENT AS A DETERMINANT OF QUALITY RATING
HYPOTHESIS TESTED $H_{4,11}$

<table>
<thead>
<tr>
<th>Country</th>
<th>df</th>
<th>$X^2$ Value</th>
<th>p Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>12</td>
<td>9.742</td>
<td>.639</td>
<td>not significant</td>
</tr>
<tr>
<td>France</td>
<td>12</td>
<td>13.190</td>
<td>.355</td>
<td>not significant</td>
</tr>
<tr>
<td>Taiwan</td>
<td>15</td>
<td>3.810</td>
<td>.998</td>
<td>not significant</td>
</tr>
<tr>
<td>West Germany</td>
<td>12</td>
<td>11.270</td>
<td>.506</td>
<td>not significant</td>
</tr>
<tr>
<td>Japan</td>
<td>12</td>
<td>5.550</td>
<td>.937</td>
<td>not significant</td>
</tr>
<tr>
<td>Brazil</td>
<td>15</td>
<td>21.707</td>
<td>.116</td>
<td>not significant</td>
</tr>
<tr>
<td>United States</td>
<td>12</td>
<td>23.825</td>
<td>.022</td>
<td>significant**</td>
</tr>
<tr>
<td>Mexico</td>
<td>12</td>
<td>8.601</td>
<td>.737</td>
<td>not significant</td>
</tr>
<tr>
<td>England</td>
<td>12</td>
<td>9.391</td>
<td>.669</td>
<td>not significant</td>
</tr>
</tbody>
</table>

*at alpha = .10

**at alpha = .05

***at alpha = .01
TABLE 4-18

AUTOMOBILE OWNED AS A DETERMINANT OF QUALITY RATING:

HYPOTHESIS TESTED $H_{4.8}$

<table>
<thead>
<tr>
<th>Country</th>
<th>df</th>
<th>$X^2$ Value</th>
<th>p Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>24</td>
<td>24.626</td>
<td>.426</td>
<td>not significant</td>
</tr>
<tr>
<td>France</td>
<td>24</td>
<td>21.496</td>
<td>.609</td>
<td>not significant</td>
</tr>
<tr>
<td>Taiwan</td>
<td>30</td>
<td>17.373</td>
<td>.968</td>
<td>not significant</td>
</tr>
<tr>
<td>West Germany</td>
<td>24</td>
<td>20.372</td>
<td>.675</td>
<td>not significant</td>
</tr>
<tr>
<td>Japan</td>
<td>24</td>
<td>24.970</td>
<td>.408</td>
<td>not significant</td>
</tr>
<tr>
<td>Brazil</td>
<td>30</td>
<td>30.701</td>
<td>.430</td>
<td>not significant</td>
</tr>
<tr>
<td>United States</td>
<td>24</td>
<td>24.179</td>
<td>.451</td>
<td>not significant</td>
</tr>
<tr>
<td>Mexico</td>
<td>24</td>
<td>18.516</td>
<td>.777</td>
<td>not significant</td>
</tr>
<tr>
<td>England</td>
<td>24</td>
<td>24.914</td>
<td>.410</td>
<td>not significant</td>
</tr>
</tbody>
</table>
### TABLE 4-19

**OCCUPATION AS A DETERMINANT OF QUALITY RATING:**

**HYPOTHESIS TESTED $H_{4.4}$**

<table>
<thead>
<tr>
<th>Country</th>
<th>df</th>
<th>$X^2$ Value</th>
<th>p Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>20</td>
<td>25.331</td>
<td>.1891</td>
<td>not significant</td>
</tr>
<tr>
<td>France</td>
<td>20</td>
<td>15.576</td>
<td>.743</td>
<td>not significant</td>
</tr>
<tr>
<td>Taiwan</td>
<td>25</td>
<td>22.746</td>
<td>.592</td>
<td>not significant</td>
</tr>
<tr>
<td>West Germany</td>
<td>20</td>
<td>23.810</td>
<td>.251</td>
<td>not significant</td>
</tr>
<tr>
<td>Japan</td>
<td>20</td>
<td>23.685</td>
<td>.256</td>
<td>not significant</td>
</tr>
<tr>
<td>Brazil</td>
<td>25</td>
<td>24.618</td>
<td>.484</td>
<td>not significant</td>
</tr>
<tr>
<td>United States</td>
<td>20</td>
<td>14.113</td>
<td>.824</td>
<td>not significant</td>
</tr>
<tr>
<td>Mexico</td>
<td>20</td>
<td>12.980</td>
<td>.878</td>
<td>not significant</td>
</tr>
<tr>
<td>England</td>
<td>20</td>
<td>27.648</td>
<td>.118</td>
<td>not significant</td>
</tr>
<tr>
<td>Country</td>
<td>df</td>
<td>$X^2$ Value</td>
<td>p Value</td>
<td>Conclusion</td>
</tr>
<tr>
<td>------------------</td>
<td>----</td>
<td>-------------</td>
<td>---------</td>
<td>--------------------</td>
</tr>
<tr>
<td>South Korea</td>
<td>4</td>
<td>4.637</td>
<td>.327</td>
<td>not significant</td>
</tr>
<tr>
<td>France</td>
<td>4</td>
<td>4.639</td>
<td>.326</td>
<td>not significant</td>
</tr>
<tr>
<td>Taiwan</td>
<td>5</td>
<td>3.286</td>
<td>.656</td>
<td>not significant</td>
</tr>
<tr>
<td>West Germany</td>
<td>4</td>
<td>1.340</td>
<td>.855</td>
<td>not significant</td>
</tr>
<tr>
<td>Japan</td>
<td>4</td>
<td>4.577</td>
<td>.334</td>
<td>not significant</td>
</tr>
<tr>
<td>Brazil</td>
<td>5</td>
<td>5.281</td>
<td>.383</td>
<td>not significant</td>
</tr>
<tr>
<td>United States</td>
<td>4</td>
<td>2.694</td>
<td>.610</td>
<td>not significant</td>
</tr>
<tr>
<td>Mexico</td>
<td>4</td>
<td>5.940</td>
<td>.204</td>
<td>not significant</td>
</tr>
<tr>
<td>England</td>
<td>4</td>
<td>7.505</td>
<td>.111</td>
<td>not significant</td>
</tr>
</tbody>
</table>
Testing the Association Demographic Variables With Product Value Ratings

As has been discussed the concepts of product quality and product value mean two very different things to different market segments. Therefore, it is important to examine the data for any statistically significant association between country of origin and value ratings of foreign products. This analysis was done using the same Chi-squared analysis used in the previous section of this study.

The Chi-squared analysis analyzed the association between each of the nine countries under study and the 11 demographic variables previously discussed. A summary of this analysis is continued in Table 4-21. This summary reveals that there are several differences between the association between quality ratings of products and the demographics under study and the ratings of product values and the demographics under study. Most interesting is the finding that occupation which was not associated with quality ratings is associated with value ratings for four of the countries in the study.

Analyzing each variable individually we find that the variable sex is significantly associated with value ratings for both Taiwan and Brazil. In both cases women tended to rate products from both countries as being of average value. However, men tended to be divided into those who felt products from these countries were very good values and those who felt the products from these countries were poor values.
<table>
<thead>
<tr>
<th>Hypothesis Tested</th>
<th>Country</th>
<th>Sex</th>
<th>Age</th>
<th>Education</th>
<th>Occupation</th>
<th>Ethnic</th>
<th>Income</th>
<th>Change in Income</th>
<th>Car Type</th>
<th>Union</th>
<th>Union Spouse</th>
<th>Geographic Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₃.1</td>
<td>S. Korea</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes**</td>
<td>No</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>H₃.2</td>
<td>France</td>
<td>No</td>
<td>Yes*</td>
<td>No</td>
<td>Yes*</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes***</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>H₃.3</td>
<td>Taiwan</td>
<td>Yes*</td>
<td>No</td>
<td>No</td>
<td>Yes*</td>
<td>No</td>
<td>No</td>
<td>Yes*</td>
<td>No</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>H₃.4</td>
<td>W. Germany</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>N/A</td>
<td>Yes**</td>
</tr>
<tr>
<td>H₃.5</td>
<td>Japan</td>
<td>No</td>
<td>No</td>
<td>Yes***</td>
<td>Yes**</td>
<td>Yes*</td>
<td>No</td>
<td>Yes**</td>
<td>No</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>H₃.6</td>
<td>Brazil</td>
<td>Yes**</td>
<td>No</td>
<td>Yes*</td>
<td>No</td>
<td>Yes**</td>
<td>No</td>
<td>Yes**</td>
<td>No</td>
<td>Yes*</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>H₃.7</td>
<td>U.S.A.</td>
<td>No</td>
<td>No</td>
<td>Yes***</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>N/A</td>
<td>Yes*</td>
<td>No</td>
</tr>
<tr>
<td>H₃.8</td>
<td>Mexico</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>N/A</td>
<td>Yes***</td>
</tr>
<tr>
<td>H₃.9</td>
<td>England</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

N/A: not applicable

*at alpha = .10

**at alpha = .05

***at alpha = .01
The variable age was found to be associated only with the value ratings of products from France. The relationship indicated that younger consumers rated French products as much better values than older consumers. This finding might be explained by the differences in purchasing habits between these age groups. Perhaps the younger consumers purchase more fashionable clothing and cosmetics than older consumers, and since these products have traditionally been associated with France, their use might influence the thinking of younger consumers.

Education was found to be associated with value ratings of products from Japan and Brazil. Higher levels of education were associated with higher value ratings for the Japanese products. For Brazil the relationship was somewhat obscure, however, the lowest value ratings were generally associated with the lowest educational levels.

There was a significant association between value ratings of products from France, Taiwan, Japan, and the United States, and occupation of the household head. The highest ratings for French products were associated with self-employed persons while the lowest ratings were from factory workers. Products from Taiwan were rated highest by clerical/salespersons and lowest by factory workers. Professionals rated products from Japan as excellent values while factory workers rated Japanese products low in value. As might be expected based on their low value ratings of foreign products, factory workers rated domestically produced products much higher in value than other occupational groups and professional people rated them much lower in terms of their overall value for one's money.
The ethnic background of the respondent was associated with value ratings for both Japanese products and Brazilian products. The lowest ratings of Japanese products were associated with white respondents, while non-white respondents tended to rate Japanese products as excellent more frequently than white respondents. However, the association was not found to be extremely strong and only yielded a p-value of .0961.

Somewhat surprisingly income was not found to be significantly associated with value ratings for any of the nine countries included in this study. Similarly the variable change in expected income level for 1982 was only associated with value ratings for the country of Brazil. It appears that the lowest value ratings are associated with those respondents who expect the largest decrease in their income. Perhaps this reflects their general feelings of anger toward cheap labor countries which may result in their losing their job and experiencing a drop in income; however, if this were the case we could expect a similar finding for the countries of South Korea, Taiwan, and Mexico.

The type of automobile owned was found to be associated with value ratings for three of the oriented countries studied, South Korea, Taiwan, and Japan. It appears that the highest value ratings for these three countries come from owners of Japanese cars. This suggests that perhaps a regional "halo" effect exists for consumers who try Japanese products and are satisfied with their results. Perhaps these consumers use their favorable experiences with Japanese products as the basis of their favorable value ratings for other
oriental countries. If such is the case then promotional messages which emphasize the quality and value offered by Japanese and other Asian countries products would be a successful promotional strategy for other Asian countries.

Again, union membership was found to be associated with very low ratings of product value. This relationship only proved significant for the countries of France and Brazil, however, a similar but non-significant relationship was noticed for South Korea, Taiwan, Japan, and Mexico who had p-values of .116, .222, .149, .117, respectively. The relationship between value ratings and spouse's union membership could not be tested because of the small number of responses from respondents married to union members.

Finally the association between value ratings and the geographic area that the respondent was a native of was found to be significant for West Germany, the United States, and Mexico. The East and Midwest tended to rate the value offered by West German products much higher than respondents from the South or the West. The West rated domestic products much lower than the other areas of the country while rating Mexico products much higher than the other regions. Perhaps this reflects the much higher percentage of Mexican-American consumers in the West and an increased familiarity with Mexican products. The East gave the Mexican products very low ratings as did Midwesterns.

Summarizing the results of any Chi-squared analysis is normally very difficult, however, when the number of analyzes includes ratings of nine countries across 11 variables and two ratings scales this task becomes enormous. I had hoped to find several variables which were
significantly associated with the ratings of all nine countries. This finding would have allowed me to say that younger better educated consumers who lived in the western portion of the United States consistently rated foreign products higher in terms of both quality and value than other consumers. However, this was not the case with this study.

While there were numerous statistically significant associations between both quality and value ratings of each of the nine countries studied the pattern of these associations was not clear. The results do indicate that young professionals tend to rate French products higher in terms of quality and value than other demographic groups; and that factory workers tend to rate foreign products lower in quality and value than other occupational groups. However, these results are not conclusive.

Of the 180 null hypotheses tested in this section of the analysis 42 of them resulted in rejection of the null hypothesis. Working with an alpha level of .05 we would expect nine of these tests to incorrectly reject a true null hypothesis. Additionally, the null hypotheses which were rejected were not consistent across either demographic characteristic or country. If the results had indicated that age was a significant factor in value ratings for all nine countries then the interruption of these findings would be much easier. As it is, these results can only be relied upon to suggest possible trends and to serve as the basis for more specific research.
Most likely these results reflect the reality that consumers are a very heterogeneous collection of individuals and any attempt to try to group them into homogeneous clusters using multiple characteristics is destined to meet with limited success. The experience of marketing practitioners suggest that even the relatively simple task of trying to group consumers according to their attitudes toward laundry detergent can be extremely complex given the heterogeneous nature of consumers. Consequently the finding that attempting to divide consumers into clearcut well defined groups based on their attitudes toward products from a foreign country met with limited success is not entirely surprising. However these findings can aid in developing an understanding of what foreign product bias is, how it is formed and what consumer groups are most likely to have strong positive or negative biases.

Results of Responses to Questions About Issues Which Affect Foreign Product Bias

As discussed in detail in Chapter III, Part II of the questionnaire contained 20 questions about current issues which are related to the topic of foreign product bias. These 20 questions covered six broad areas of interest. These areas were as follows:

1. Should Americans support other Americans by purchasing U.S. made products—is it one's patriotic duty to buy American? Reference questions 2, 6, 10, 17.

2. Is it in one's own best economic interest to buy American-made products? Reference questions 9, 12, 19, 20.
(3) Are the wage levels in many U.S. industries too high—have U.S. workers priced themselves and their products out of the market? Reference questions 3, 11.

(4) Have American workers lost pride in their work? Reference questions 7, 8, 16.

(5) How important is country of origin information in the purchase decision—would consumers prefer more explicit country of origin information? Reference questions 1, 5, 13, 14.

(6) Who is most responsible for the present difficulties facing several large U.S. industries such as steel and automobiles—the workers/unions or management? Reference questions 4, 15, 18.

For the issue of should Americans support other Americans by purchasing U.S. made products—is it one's patriotic duty to buy American the results of the specific questions are as follows:

I would purchase an American product even if it cost more than the same quality foreign product.

Strongly Agree = 5%, Agree = 12%, Undecided = 15%,
Disagree = 40%, Strongly Disagree = 28%

I feel it is every American's patriotic duty to purchase American made products.

Strongly Agree = 6%, Agree = 15%, Undecided = 15%,
Disagree = 43%, Strongly Disagree = 20%
Even if an American-made product is somewhat lower in quality than a foreign product (assuming the price is the same) it is still better to purchase the American product.

Strongly Agree = 2%, Agree = 13%, Undecided = 13%,
Disagree = 55%, Strongly Disagree = 17%

Americans should help support other Americans by purchasing U.S. made products.

Strongly Agree = 9%, Agree = 38%, Undecided = 25%
Disagree = 23%, Strongly Disagree = 5%

The results of this section are rather interesting only 17% of the respondents indicated they would be willing to pay a premium price for an American product and only 15% indicated that they would purchase a lower quality product just because it was American made. However, 41% (and 25% were undecided) of the respondents indicated that they would purchase an American product to help other Americans. This implies that if the price and quality were nearly equal a large percentage of American consumers would purchase American products; however, they are unwilling to pay a premium or accept lower quality to do so. Apparently this willingness is based more on economic self-interest than a feeling of patriotism based on the response to whether or not it was one's patriotic duty to buy American in which 63% disagreed (with 16% undecided) with that idea.

The next issue considered was whether or not consumers felt it was in their own economic best interest to buy American made products; the results to the specific questions dealing with this issue were as follows:
It is one's own economic best interest to buy American-made products.

- Strongly Agree = 12%, Agree = 41%, Undecided = 19%
- Disagree = 24%, Strongly Disagree = 4%

If the U.S. continues to allow foreign products into this country I'm afraid that I may someday lose my job.

- Strongly Agree = 5%, Agree = 17%, Undecided = 19%
- Disagree = 43%, Strongly Disagree = 15%

I prefer to buy American products because if too many U.S. workers are laid off due to foreign competition, then I might lose my job too.

- Strongly Agree = 6%, Agree = 27%, Undecided = 24%
- Disagree = 38%, Strongly Disagree = 5%

The U.S. would be much better off economically if it would greatly restrict the number of foreign products allowed into this country.

- Strongly Agree = 10%, Agree = 26%, Undecided = 20%
- Disagree = 31%, Strongly Disagree = 13%

The results of this section indicate that only approximately half of the consumers who support the "buy American idea" are motivated based on the fear of losing their job. This conclusion is based on the fact that 43% agree that they personally would be better off to buy American but only 22% feel it is because they would lose their jobs. Possible explanations for this finding include the fear that friends or relatives may lose their jobs, or that one's tax burden might increase as more people lose their jobs. It is encouraging to note that nearly half of the individuals who feel it would be
better to purchase American products are opposed to the idea of increased protectionistic measures to restrict the flow of foreign products into this country. This conclusion is based on the finding that 53% of consumers feel they should buy American but only 29% feel restricting foreign products is an acceptable alternative. Presumably these individuals would encourage individuals to buy American but not force them to do so by restricting the entry of foreign products.

The third issue focused on by this study is the question of whether the wage rates in many U.S. industries are too high; have American workers priced themselves and their products out of the market? The results of the specific questions addressing this issue were as follows:

American automobile workers are overpaid.

Strongly Agree = 42%, Agree = 27%, Undecided = 21%
Disagree = 9%, Strongly Disagree = 1%

Members of most large unions are overpaid.

Strongly Agree = 27%, Agree = 38%, Undecided = 22%
Disagree = 11%, Strongly Disagree = 2%

The results of this section clearly indicate that the vast majority of consumers feel that union members are overpaid and have priced themselves out of the market. This attitude was expressed in the comment section of several questionnaires; the general feeling seemed to be "why should I pay an over-inflated price for a U.S. product just to support factory worker who is making mega-bucks for producing products of inferior quality." There appears to be
a group of consumers who are reacting negatively toward domestically produced products because they feel that union members are overpaid. It is interesting to speculate whether or not the well publicized wage reductions accepted by several of the larger unions since this survey was conducted has resulted in a softening of opinion toward union members.

A related issue questions whether American workers have lost pride in their work. This idea is addressed in the following three questions:

A product assembled in a foreign country but with U.S. made parts is probably lower in quality than the same product assembled in the U.S.

- Strongly Agree = 2%, Agree = 7%, Undecided = 24%
- Disagree = 54%, Strongly Disagree = 12%

Many American workers lack pride in the products they produce.

- Strongly Agree = 20%, Agree = 50%, Undecided = 13%
- Disagree = 14%, Strongly Disagree = 3%

Japanese produce better products because they are willing to work harder and they take more pride in their work than U.S. workers.

- Strongly Agree = 22%, Agree = 43%, Undecided = 15%
- Disagree = 15%, Strongly Disagree = 4%

These findings suggest that the vast majority of consumers in this study feel that American workers lack pride in their work; they also revealed that they do not believe the practice of shifting assembly operations to low labor cost countries necessarily would
result in a decline in product quality. In comparison to that group of workers who have recently received so much favorable publicity about their work ethnic, the Japanese workers, American workers are perceived by many to lack the same pride and motivation in their work. This suggests that not only have U.S. products slipped to number three in terms of quality and value offered, but the workers who produce these products are suffering a decline in their image. Consequently if U.S. firms wish to become more competitive with their foreign competition they should consider not only upgrading the quality image of the products they produce but also focus on upgrading the public image of the workers who produce those products. This task should be shared by the leadership of the large unions who must be made to realize that they have a serious image problem and their long term survival may depend on reversing the decline of that image.

The next issue is of tremendous importance both to marketers of imported products and to marketers who compete against imported products. It is concerned with the importance of country of origin information in the purchase decision—would consumers prefer more explicit country of origin information? Four questions addressed this problem from slightly different perspectives. These questions were as follows:

When shopping I often make an effort to determine in which country a product was produced.

Strong Agree = 9%, Agree = 31%, Undecided = 11%
Disagree = 36%, Strongly Disagree = 13%
Knowing in which country a product was produced would be a major factor in determining whether or not I would purchase it.

Strongly Agree = 7%, Agree = 15%, Undecided = 16%
Disagree = 43%, Strongly Disagree = 19%

I feel that many foreign products try to hide the fact that they are produced in a foreign country.

Strongly Agree = 6%, Agree = 28%, Undecided = 23%
Disagree = 37%, Strongly Disagree = 3%

When shopping it is often very difficult to determine in which country a product has actually been produced.

Strongly Agree = 6%, Agree = 48%, Undecided = 16%
Disagree = 28%, Strongly Disagree = 2%

These findings indicate that country of origin is an important factor in the purchase decision but not an overriding one for most consumers. They also suggest that consumers often have difficulty determining where a product is made and nearly half of the consumers feel that this difficulty might be a deliberate attempt to conceal country of origin information. However, it is not clear that more stringent country of origin labeling requirements would make a significant change in product performance since over half the consumers do not even make an effort to determine country of origin and only 22% would consider this information, if available, a major factor in their purchase decision.

These findings are consistent with a study that concluded consumers exhibited considerable difficulty in determining where many
products were produced. This study concluded that a significant majority of consumers simply assumed that just because a brand was American, that the product carrying that brand name was manufactured in the U.S. and a foreign brand was manufactured overseas; and in the case of lesser known brands, the respondents seemed to use a brand's name, sound, spelling, etc. for clues to its manufacturing domicile.\(^2\)

These results bring into question the effectiveness of currently popular "buy American" campaigns. It appears that only one out of five consumers are amendable to this patriotic appeal in the first place and even if they do want to buy American they may experience difficulty in achieving this goal because of the confusion surrounding country of origin information; and requirements to provide clearer country of origin information may actually result in a decline in sales of U.S. products if enough consumers have a positive bias toward foreign products.

The last issue researched in this part of the study concerns consumers' perceptions of who is responsible for the present difficulties facing several large U.S. industries such as steel and automobiles. The three questions which addressed this issue are the following:

Given the same tools as foreign workers, American workers can produce the highest quality products in the world.  

- Strongly Agree = 19%, Agree = 25%, Undecided = 21%  
- Disagree = 28%, Strongly Disagree = 7%
Unions are the primary cause of the economic problems of several major U.S. industries, such as steel and automobiles.

Strongly Agree = 17%, Agree = 37%, Undecided = 17%
Disagree = 20%, Strongly Disagree = 8%

Poor management and lack of planning are the primary causes of the economic problems of several major U.S. industries.

Strongly Agree = 25%, Agree = 40%, Undecided = 18%
Disagree = 15%, Strongly Disagree = 2%

The results of this section are somewhat surprising. It appears that management's poor performance is considered to be even a more significant factor in contributing to the recent decline in U.S. competitiveness than either worker attitudes and abilities or union attitudes. However, all three groups appear to be held in low esteem by the consumers in this study. Only 17% disagree that management's poor performance and lack of planning has lead to problems, while only 28% disagree with the same basic statement about unions; additionally only 35% of the respondents felt that American workers were not capable of producing extremely high quality products given the right tools.

Based on these findings it appears that all segments of U.S. industry have serious image problems, and any campaign to reverse the bias held by some consumers against domestically produced products must change the poor images held by workers, unions and management in addition to attitudes held about American products.
Testing the Association of Attitudinal Variables With Foreign Product Bias

To establish whether or not the six attitudinal variables discussed in the previous section were significantly related to foreign product bias I decided to run a multiple regression analysis. The dependent variable for the first analysis was the amount of foreign product bias expressed toward products from other developed countries. This variable was measured by subtracting the average quality rating of products of developed countries from the rating of domestic products. The independent variables were the six attitudinal variables. Each was measured by summing the reference questions which were designed to measure that attitude. The second analysis used the same independent variables however the dependent variable was the average rating of products from less developed countries minus the rating of domestic products. The final analysis was simply an attempt to discover how well these attitudinal variables predicted a respondent's rating of domestic products.

Using the SAS stepwise regression procedure each of these analyses were ran using .20 as the significance level for entry into the model and .10 as the significance level for staging in the model after a variable had entered.

The results of the first analysis which used foreign product bias toward products from other developed countries is presented in Table 4-22. This analysis indicated that five of the attitudinal variables were significant predictors of foreign product bias. In interpreting these results it is important to remember that a positive
predicted value indicates a favorable bias toward foreign products, and a negative value an unfavorable bias. The intercept term was -.11153513 and the coefficients were as follows: factor one -.09525095, factor three -.11277955, factor four -.19783109, factor five .05112675, and factor six .06954463. However, both factors two and six were not significant at an alpha level of .05.

The findings indicate that the more a respondent agrees with the statements concerning the importance of considering patriotism when making a purchase the more like that respondent is to be negatively biased toward foreign products. Also the more the respondent disagrees with the idea that American workers are overpaid the more negative their rating toward foreign products. Similarly the more they disagree with the suggestion that American workers have lost pride in their work the more product bias they display. Factor five's score indicates that people who feel that country of origin information is an important factor in their purchase decisions tend to be more favorable toward foreign products from developed countries. Finally although factor six was not significant at an alpha level of .05 it did enter the equation with a p-value of .0665, and this factor indicated that respondents who felt big business and big unions were responsible for American's economic problems tended to respond more favorably toward foreign products.

It is interesting that factor two did not enter. Factor two concerned a respondent's feeling that foreign competition would
### TABLE 4-22

**REGRESSION ANALYSIS - BIAS TOWARD PRODUCTS FROM DEVELOPED COUNTRIES USING ONLY ATTITUDBINAL VARIABLES**

<table>
<thead>
<tr>
<th>Source</th>
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<th>ms</th>
<th>F</th>
<th>p &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>5</td>
<td>144.8</td>
<td>28.9</td>
<td>19.1</td>
<td>.0001</td>
</tr>
<tr>
<td>Error</td>
<td>333</td>
<td>505.2</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>338</td>
<td>650.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Square = .2279765

<table>
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<tr>
<th>B Value</th>
<th>F</th>
<th>p &gt; F</th>
<th>Hypothesis Tested</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.11153513</td>
<td>-</td>
<td>.0001</td>
<td></td>
</tr>
<tr>
<td>Factor one</td>
<td>0.09525095</td>
<td>18.42</td>
<td>.0001</td>
<td>H\textsubscript{5.1} Reject</td>
</tr>
<tr>
<td>Factor two</td>
<td>did not enter</td>
<td>-</td>
<td>-</td>
<td>H\textsubscript{5.2} Don't Reject</td>
</tr>
<tr>
<td>Factor three</td>
<td>-0.11277955</td>
<td>8.31</td>
<td>.0042</td>
<td>H\textsubscript{5.3} Reject</td>
</tr>
<tr>
<td>Factor four</td>
<td>-0.19783109</td>
<td>27.34</td>
<td>.0001</td>
<td>H\textsubscript{5.4} Reject</td>
</tr>
<tr>
<td>Factor five</td>
<td>0.05112657</td>
<td>3.95</td>
<td>.0477</td>
<td>H\textsubscript{5.5} Reject</td>
</tr>
<tr>
<td>Factor six</td>
<td>0.06954463</td>
<td>3.39</td>
<td>.0665</td>
<td>H\textsubscript{5.6} Reject</td>
</tr>
</tbody>
</table>
### TABLE 4-23

**REGRESSION ANALYSIS - BIAS TOWARD PRODUCTS FROM LESS DEVELOPED COUNTRIES USING ONLY ATTITUDINAL VARIABLES**

<table>
<thead>
<tr>
<th>Source</th>
<th>Df</th>
<th>ss</th>
<th>ms</th>
<th>F</th>
<th>p &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2</td>
<td>31.8</td>
<td>15.9</td>
<td>9.5</td>
<td>.0001</td>
</tr>
<tr>
<td>Error</td>
<td>335</td>
<td>558.0</td>
<td>1.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>337</td>
<td>589.8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Square = .05388771

<table>
<thead>
<tr>
<th>Hypothesis Tested</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_{5.1}$</td>
<td>Reject</td>
</tr>
<tr>
<td>$H_{5.2}$</td>
<td>Don't Reject</td>
</tr>
<tr>
<td>$H_{5.3}$</td>
<td>Don't Reject</td>
</tr>
<tr>
<td>$H_{5.4}$</td>
<td>Reject</td>
</tr>
<tr>
<td>$H_{5.5}$</td>
<td>Don't Reject</td>
</tr>
<tr>
<td>$H_{5.6}$</td>
<td>Don't Reject</td>
</tr>
</tbody>
</table>
have a negative impact on their personal economic situation; apparently this factor had no significant additional influence on their ratings of the overall quality of foreign products.

The second regression used the bias displayed in quality ratings of products from less developed countries as the dependent variable. The results of this analysis are presented on Table 4-23. As the very low R squared value of .05388771 indicates, even through this regression is statistically significant it explains very little of the total variance observed in the data. In fact, only two of the six factors used as independent variables entered the equation.

Factor one entered with a coefficient of .05973236 which indicates that those who tend to disagree that it is one's patriotic duty to buy American made products express less bias against products from less developed countries.

The only other factor to enter this regression was factor four. This factor had a coefficient of -.12162843. This suggests that respondents who disagreed that U.S. workers had lost pride in the work rated products from less developed countries lower than respondents who agreed with that statement.

The low R square value for this equation can be explained in part by looking at the intercept term of this regression. The intercept is -2.12387211. This means that most respondents rated products from less developed countries much lower than domestic products and this uniformly low rating was independent of the respondent's attitudes toward the other factors under consideration.
In addition to testing the association of the attitudinal variables with foreign product bias I also decided to investigate the association of both attitudinal variables and the 11 demographic variables previously mentioned with foreign product bias (see Table 4-24).

For products from developed countries the full regression equation resulted in a R square increase from .22279765 to .263662035. Again factors one, four, and five entered with coefficients of .11773475, -.20254504, and .06287189, respectively; these factors have the same interpretation as before. In addition, the 40-55 year old group was found to be more favorable to foreign products than the 25-40 year old group who were more favorable than the under 25 year old group. These findings are consistent with the Chi-squared analysis using demographics which found younger consumers very positive toward domestic products and older consumers positive toward West German products in particular.

In contrast with the Chi-squared analysis which found occupation related to value ratings but not quality ratings, this analysis found factor workers and skilled laborers much more biased against foreign products than other occupational grouping. This finding was consistent with the findings based on product value.

An unexpected finding was that non-white respondents were much more biased against products from developed countries than white respondents. Perhaps this reflects their concerns that foreign competition may result in them losing their job based on a last hired-first fired labor policy of most firms.
### TABLE 4-24

**REGRESSION ANALYSIS - BIAS TOWARD PRODUCTS FROM DEVELOPED COUNTRIES USING BOTH ATTITUDINAL VARIABLES AND DEMOGRAPHIC VARIABLES**

<table>
<thead>
<tr>
<th>Source</th>
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<th>MS</th>
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<th>p &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>8</td>
<td>171.4</td>
<td>21.4</td>
<td>14.8</td>
<td>.0001</td>
</tr>
<tr>
<td>Error</td>
<td>330</td>
<td>478.7</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>338</td>
<td>650.1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = .26362035

<table>
<thead>
<tr>
<th>B Value</th>
<th>F Value</th>
<th>p &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.55786472</td>
<td>-</td>
</tr>
<tr>
<td>Factor one</td>
<td>0.11773475</td>
<td>30.63</td>
</tr>
<tr>
<td>Factor four</td>
<td>-0.20254504</td>
<td>33.34</td>
</tr>
<tr>
<td>Factor five</td>
<td>0.06287189</td>
<td>6.21</td>
</tr>
<tr>
<td>Age 25-40</td>
<td>0.46021210</td>
<td>7.89</td>
</tr>
<tr>
<td>Age 40-55</td>
<td>0.94078005</td>
<td>13.42</td>
</tr>
<tr>
<td>Blue collar workers</td>
<td>-0.51758204</td>
<td>6.82</td>
</tr>
<tr>
<td>Non-white</td>
<td>-0.44831868</td>
<td>3.88</td>
</tr>
<tr>
<td>New England native</td>
<td>-0.55401219</td>
<td>3.54</td>
</tr>
</tbody>
</table>
Finally respondents from New England were found to be more biased against foreign products than respondents from other regions of the nation. The underlying reason for this finding are unclear and with the small sample of respondents from this region further analysis with this data is not possible.

As a cross check to provide a better understanding of the importance of demographic and attitudinal variables I ran a third regression on the data from developed countries. I again used product bias as the dependent variable; however, this time only the demographic variables represented by dummy variables served as the independent variable (see Table 4-25). This regression yield on R-square value of only .06219219 and the only variables which entered were age and occupation. This contrasts with an R-square of .22279765 using only attitudinal variables and .263661035 using both attitudinal and demographic variables.

These findings suggest that the attitudes of respondents toward issues surrounding foreign products are most important in determining foreign product bias. This is consistent with the Engle, Hollat, Blackwell Model which suggests that internalized environmental influences and general motivating influences would be the most important determinants of a consumer's attitude and beliefs about foreign products.
### TABLE 4-25

REGRESSION ANALYSIS - BIAS TOWARD PRODUCTS FROM DEVELOPED COUNTRIES USING ONLY DEMOGRAPHIC VARIABLES

<table>
<thead>
<tr>
<th>Source</th>
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<th>MS</th>
<th>F</th>
<th>p &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2</td>
<td>40.4</td>
<td>20.2</td>
<td>11.1</td>
<td>.0001</td>
</tr>
<tr>
<td>Error</td>
<td>336</td>
<td>609.6</td>
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<tr>
<td>Total</td>
<td>338</td>
<td>650.0</td>
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</tr>
</tbody>
</table>

R-Squared = .06219219

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.56488877</td>
<td>-</td>
</tr>
<tr>
<td>Age &lt; 25</td>
<td>-0.44674939</td>
<td>9.26</td>
</tr>
<tr>
<td>Blue collar worker</td>
<td>-0.82485640</td>
<td>14.81</td>
</tr>
</tbody>
</table>
Measuring Attitudes Toward Foreign Products in Specific Product Categories

In addition to establishing that foreign product bias exists toward products from foreign countries, I needed to determine whether or not these biases are common for all products from that country or whether or not these biases are true for only certain products from a particular country. Having discovered that U.S. consumers rate Japanese products in general higher in both quality and value than domestic products I needed to discover if these attitudes are true across all or most product categories.

Part III of the questionnaire asked the respondent to rank each of the nine countries in terms of the overall quality of their products for six specific product lines: automobiles/auto parts, televisions/stereos, clothing/shoes, food products, home appliances, and toys/games. See Tables 4-26, 4-27, 4-28, 4-29, 4-30, and 4-31, respectively.

The results of this analysis are rather surprisingly. The United States which was rated as third in overall product quality (see Table 4-1) received the highest median rating in four of the six product categories studied; these categories are food, clothing, household appliances, and toys. The U.S. was second in the television category and third in the automobile category. Interestingly Japan which was rated highest in both overall product quality and overall value offered was rated highest in only two categories: automobiles and televisions. Japan was rated fifth in clothing, fifth in food products, second in household appliances and second in toys.
TABLE 4-26
AUTOMOBILE/AUTOMOTIVE PARTS QUALITY RANKINGS

<table>
<thead>
<tr>
<th>Country</th>
<th>Median Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Japan</td>
<td>1.845</td>
</tr>
<tr>
<td>2. West Germany</td>
<td>1.856</td>
</tr>
<tr>
<td>3. United States</td>
<td>2.778</td>
</tr>
<tr>
<td>4. England</td>
<td>4.246</td>
</tr>
<tr>
<td>5. France</td>
<td>4.559</td>
</tr>
<tr>
<td>6. Brazil</td>
<td>7.167</td>
</tr>
<tr>
<td>7. Mexico</td>
<td>7.207</td>
</tr>
<tr>
<td>8. Taiwan</td>
<td>7.324</td>
</tr>
<tr>
<td>9. South Korea</td>
<td>7.687</td>
</tr>
</tbody>
</table>

NOTE: Highest ranking possible is 1.00, lowest ranking possible 9.00.
### TABLE 4-27

TELEVISION/RADIOS QUALITY RANKINGS

<table>
<thead>
<tr>
<th>Country</th>
<th>Median Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Japan</td>
<td>1.169</td>
</tr>
<tr>
<td>2. United States</td>
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</tr>
<tr>
<td>3. West Germany</td>
<td>3.179</td>
</tr>
<tr>
<td>4. Taiwan</td>
<td>4.985</td>
</tr>
<tr>
<td>5. England</td>
<td>5.054</td>
</tr>
<tr>
<td>6. France</td>
<td>5.363</td>
</tr>
<tr>
<td>7. South Korea</td>
<td>6.500</td>
</tr>
<tr>
<td>8. Mexico</td>
<td>7.872</td>
</tr>
<tr>
<td>9. Brazil</td>
<td>8.005</td>
</tr>
</tbody>
</table>

**NOTE:** Highest ranking possible is 1.00, least ranking possible is 9.00.
TABLE 4-28
CLOTHING QUALITY RANKINGS

<table>
<thead>
<tr>
<th>Country</th>
<th>Median Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. United States</td>
<td>1.534</td>
</tr>
<tr>
<td>2. France</td>
<td>2.673</td>
</tr>
<tr>
<td>3. England</td>
<td>3.467</td>
</tr>
<tr>
<td>4. West Germany</td>
<td>4.307</td>
</tr>
<tr>
<td>5. Japan</td>
<td>5.200</td>
</tr>
<tr>
<td>6. Taiwan</td>
<td>5.714</td>
</tr>
<tr>
<td>7. South Korea</td>
<td>6.386</td>
</tr>
<tr>
<td>8. Mexico</td>
<td>7.209</td>
</tr>
<tr>
<td>9. Brazil</td>
<td>7.314</td>
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</tbody>
</table>

NOTE: Highest ranking possible is 1.00, lowest ranking possible is 9.00.
<table>
<thead>
<tr>
<th>Country</th>
<th>Median Ranking</th>
</tr>
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<td>France</td>
<td>3.187</td>
</tr>
<tr>
<td>England</td>
<td>3.796</td>
</tr>
<tr>
<td>West Germany</td>
<td>4.302</td>
</tr>
<tr>
<td>Japan</td>
<td>5.325</td>
</tr>
<tr>
<td>Brazil</td>
<td>5.583</td>
</tr>
<tr>
<td>Mexico</td>
<td>5.692</td>
</tr>
<tr>
<td>Taiwan</td>
<td>7.649</td>
</tr>
<tr>
<td>South Korea</td>
<td>8.035</td>
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</table>

NOTE: Highest ranking possible is 1.00, lowest ranking possible is 9.00.
# TABLE 4-30

HOUSEHOLD APPLIANCES QUALITY RANKINGS

<table>
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<tr>
<th>Country</th>
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<tbody>
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<td>2. Japan</td>
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</tr>
<tr>
<td>3. West Germany</td>
<td>3.094</td>
</tr>
<tr>
<td>4. England</td>
<td>4.747</td>
</tr>
<tr>
<td>5. France</td>
<td>5.138</td>
</tr>
<tr>
<td>6. Taiwan</td>
<td>5.750</td>
</tr>
<tr>
<td>7. South Korea</td>
<td>6.620</td>
</tr>
<tr>
<td>8. Mexico</td>
<td>7.776</td>
</tr>
<tr>
<td>9. Brazil</td>
<td>7.776</td>
</tr>
</tbody>
</table>

NOTE: Highest ranking possible is 1.00, lowest ranking possible is 9.00.
<table>
<thead>
<tr>
<th>Country</th>
<th>Median Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. United States</td>
<td>1.557</td>
</tr>
<tr>
<td>2. Japan</td>
<td>2.047</td>
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<tr>
<td>3. West Germany</td>
<td>3.657</td>
</tr>
<tr>
<td>4. Taiwan</td>
<td>4.100</td>
</tr>
<tr>
<td>5. England</td>
<td>5.223</td>
</tr>
<tr>
<td>6. France</td>
<td>5.500</td>
</tr>
<tr>
<td>7. South Korea</td>
<td>6.114</td>
</tr>
<tr>
<td>8. Mexico</td>
<td>7.270</td>
</tr>
<tr>
<td>9. Brazil</td>
<td>7.899</td>
</tr>
</tbody>
</table>

NOTE: Highest ranking possible is 1.00, lowest ranking possible is 9.00
Germany the second highest rated country in terms of overall product quality received its highest rating, second, in the automobile category. Germany rated third in televisions, household appliances and toys, and was rated fourth in clothing and food.

As expected the less developed countries generally received the lowest rankings. However, the order of these rankings is somewhat surprising. Brazil was ranked lowest in four of the product categories, T.V.'s/radio, clothing, household appliances and toys. This contrasts with their sixth rating in overall product quality ratings; in fact Brazil received the highest overall product quality ratings of all the less developed countries. This suggests the tentative explanations that perhaps consumers view Brazil favorably as a source of products, but have had very limited experience with products from this country. Therefore, when asked to rate Brazilian products in general their ratings are relatively favorable, but when faced with rating specific product classes from Brazil they rate it very low because they have never actually seen an example of this product class which was produced in Brazil so the low rating becomes a "no opinion" response rather than a negative response. This suggests that imports from Brazil should receive a generally favorable consumer response.

The rankings for products from Taiwan were also somewhat surprising. Although ranked seventh in terms of overall product quality, Taiwan was ranked fourth in terms of the quality of their T.V.'s/radios and toys/games. These findings suggest that Taiwan may be entering the early stages of a significant shift in consumer
attitudes toward their products, similar to the shift in attitude
experiences since the mid-1960's by Japanese products. For example,
in Time Magazine's 1958 survey Japanese products were ranked lowest
in terms of desirability compared to products from other industrialized countries; in Akia Nagashima's 1965 study of Japanese
products rated lowest in terms of desirability when compared to
other industrialized countries except in the areas of electric products, transistor radios and cameras; similarly in Dornoff's
et al. 1972, study Japanese products rated low in quality in all
product classes except electronic equipment (radios, televisions, etc.) where they were ranked highest among the countries studied. These findings tend to suggest that perhaps a portion of Japan's recent success in marketing products to the United States may be
due to their ability to change consumer's overall attitudes toward
their products based on consumers' experiences with electronic equipment and related items. If this is the case then we might
expect attitudes toward Taiwanese products to experience a similar favorable shift in the not too distant future.

The rankings for France also demonstrate the strength of
traditional stereotypes. France has long been noted as the world
center for high fashion and fine food. These stereotypes are consistent with their overall fourth ranking in product quality in
general but their second ranking in terms of clothing quality and
food quality. It is also interesting to note that these stereotypes could not overcome the domestic consumer's
bias for domestic products as illustrated by the United States' first ranking in both food and clothing.

These data were used to test the hypotheses about foreign product bias being product specific $H_{6.1}$ to $H_{6.7}$, as discussed in Chapter III. If foreign product bias is product specific this means that a high rating in one product category does not necessarily result in a high rating in another product category or a high rating in overall product quality ratings.

The first hypothesis was tested using the Friedman two-way analysis of variance designed to test the null hypothesis that $k$ dependent samples have been drawn from the same population; it uses ordinal (ranked) data to perform this analysis. The results of this test on Table 4-32 indicate that the null hypothesis would be rejected at an alpha level of .01. This means that foreign product bias is product specific and in order to have a more comprehensive understanding of this phenomenon it is important to recognize the fact that general attitudes toward products from a particular country may not accurately reflect a consumer's attitude toward specific product classes from the same country. Therefore, in designing a marketing strategy for a particular foreign product which is to be sold in the United States it is important to assess consumers' attitudes toward that specific product class from that specific country. However, it is important to realize that these rankings are self-explicated rankings by the consumer in a survey situation and in the multi-attribute purchase decision these rankings might change.
### TABLE 4-32

FRIEDMAN TWO-WAY ANALYSIS OF PRODUCT RANKINGS BY COUNTRY: HYPOTHESIS $H_{6,1}$

<table>
<thead>
<tr>
<th>Country</th>
<th>Chi-square</th>
<th>Df</th>
<th>$P &gt; \chi^2$</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>193.1</td>
<td>5</td>
<td>.001</td>
<td>Reject*</td>
</tr>
<tr>
<td>France</td>
<td>375.1</td>
<td>5</td>
<td>.001</td>
<td>Reject*</td>
</tr>
<tr>
<td>Mexico</td>
<td>184.6</td>
<td>5</td>
<td>.001</td>
<td>Reject*</td>
</tr>
<tr>
<td>United States</td>
<td>328.6</td>
<td>5</td>
<td>.001</td>
<td>Reject*</td>
</tr>
<tr>
<td>England</td>
<td>143.3</td>
<td>5</td>
<td>.001</td>
<td>Reject*</td>
</tr>
<tr>
<td>Japan</td>
<td>750.1</td>
<td>5</td>
<td>.001</td>
<td>Reject*</td>
</tr>
<tr>
<td>South Korea</td>
<td>139.9</td>
<td>5</td>
<td>.001</td>
<td>Reject*</td>
</tr>
<tr>
<td>Taiwan</td>
<td>333.8</td>
<td>5</td>
<td>.001</td>
<td>Reject*</td>
</tr>
<tr>
<td>West Germany</td>
<td>331.1</td>
<td>5</td>
<td>.001</td>
<td>Reject*</td>
</tr>
</tbody>
</table>

*alpha = .01
The remaining hypotheses relating to the issue of whether or not foreign product bias is product specific and how the overall rankings of product quality compare to the rankings of specific product classes were tested using the Spearman Rank Correlating Rest. This test analyzes the differences between two variables using ordinal data. The results of these tests are presented in Table 4-33.

The results of this analysis indicates that only two of the six product categories under investigation are not independent of overall product quality ratings. This indicates that the quality rankings of automobiles and automotive parts is highly correlated with consumers' overall rankings of product quality for the nine countries under study. In addition the ranking of home appliances was also found to be significantly associated with overall product rankings.

These findings suggest that consumers' perception of automobile/automotive parts quality may play a very important part in determining one's attitude toward general product quality of products from foreign countries. This finding may best be explained by the fact that consumers usually are aware of the country of origin of an automobile without consulting any packaging or labelling information. However, this is probably not the case for the other products being studied. Consequently, the quality perception of a country's automobiles may strongly influence consumers' general perception of the quality of products from that country. Additionally, these findings may be explained in part by the tremendous volume of publicity surrounding the automobile industry in recent years.
### TABLE 4-33

**COMPARISON OF PRODUCT CLASS RANKINGS TO GENERAL PRODUCT QUALITY RATINGS BY PRODUCT: HYPOTHESIS 6.2-6.7.**

<table>
<thead>
<tr>
<th>Hypothesis Tested</th>
<th>Product</th>
<th>Correlating Coefficient</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2</td>
<td>Automobiles/Auto Parts</td>
<td>.950</td>
<td>Reject</td>
</tr>
<tr>
<td>6.3</td>
<td>T.V./Steroes</td>
<td>.800</td>
<td>Don't reject</td>
</tr>
<tr>
<td>6.4</td>
<td>Clothing/Shoes</td>
<td>.617</td>
<td>Don't reject</td>
</tr>
<tr>
<td>6.5</td>
<td>Food</td>
<td>.667</td>
<td>Don't reject</td>
</tr>
<tr>
<td>6.6</td>
<td>Home Appliances</td>
<td>.850</td>
<td>Reject</td>
</tr>
<tr>
<td>6.7</td>
<td>Toys/Games</td>
<td>.766</td>
<td>Don't reject</td>
</tr>
</tbody>
</table>

*alpha = .01
These results suggest that the favorable publicity received by Japanese automobiles in terms of their high product quality may be responsible for Japanese being able to overcome the home country bias U.S. consumers have demonstrated in past studies. If this is true it gives new meaning to the phase "What is good for GM is good for America." If the automobile industry is used as the principle cue to a country's general level of product quality then, the success or failure of the U.S. automobile's efforts to improve product quality and to improve consumers' perceptions of product quality may be crucial to other industries who are faced with increasing competition from foreign products.

While the same argument might be made about home appliances which quality rankings were also found to be significantly associated with overall product quality ranking; it seems more reasonable to argue that this finding actually reinforces the importance of automotive quality perceptions. This is due to the fact that, unlike the other product categories studied, home appliances may not be associated with particular foreign countries. Therefore, when a consumer is asked to rank the quality of home appliances from the countries under review, they may be forced to resort to general perceptions of product quality because they don't know which home appliances are produced where.

Should these conclusions be accurate it seems likely that the outcome of the automobile industries to improve their product quality and to change consumers' perceptions of their product quality
will have far reaching consequences for all segments of the United States' economy.

The Effect of Marketing Mix Elements in Determining Rankings of Product Quality in a Multi-attribute Setting

Using a procedure suggested in the literature, an ANOVA analysis was conducted to determine the main effects of country of origin, price, channel, and promotion. Additionally, the possible interactions of country of origin and each of these marketing mix elements were investigated. This analysis was conducted using the combined profile rankings for both high risk products and low risk products where the main effect of product was included in the model and the dependent variable was profile ranking.

The results of the ANOVA are presented in Table 4-34. The results of this analysis indicate that all of the main effects under study were significantly related to perceptions of overall product quality; however, the factor product is only significant at an alpha level of .10. Additionally, the interactions of country with each of the marketing mix elements are also significant.

However, these results must be interpreted with caution for several reasons. The ANOVA procedure is not specifically designed to analyze ordinal data, which was the data type used in this study. However, the assumption that product rankings are similar enough to interval data to allow analyses designed for interval or higher data to be used is not uncommon in marketing and marketing research.
TABLE 4-34
THE EFFECT OF COUNTRY OF ORIGIN INFORMATION AND MARKETING MIX ELEMENT ON PRODUCT QUALITY RANKINGS

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>P</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>2</td>
<td>2397.86</td>
<td>1198.93</td>
<td>460.9</td>
<td>.0001</td>
<td>Reject H(_{7,1}^*)</td>
</tr>
<tr>
<td>Price</td>
<td>2</td>
<td>3356.56</td>
<td>1678.28</td>
<td>561.3</td>
<td>.0001</td>
<td>Reject H(_{8,1}^*)</td>
</tr>
<tr>
<td>Store</td>
<td>2</td>
<td>251.76</td>
<td>125.88</td>
<td>42.1</td>
<td>.0001</td>
<td>Reject H(_{9,1}^*)</td>
</tr>
<tr>
<td>Promotion</td>
<td>2</td>
<td>3399.44</td>
<td>1699.72</td>
<td>568.5</td>
<td>.0001</td>
<td></td>
</tr>
<tr>
<td>Product</td>
<td>1</td>
<td>9.83</td>
<td>9.83</td>
<td>3.3</td>
<td>.0739</td>
<td>Reject H(_{7,2}^*)</td>
</tr>
<tr>
<td>Country X Price</td>
<td>4</td>
<td>3651.20</td>
<td>912.80</td>
<td>305.3</td>
<td>.0001</td>
<td>Reject H(_{8,1}^*)</td>
</tr>
<tr>
<td>Country X Store</td>
<td>4</td>
<td>6756.00</td>
<td>1689.00</td>
<td>564.9</td>
<td>.0001</td>
<td>Reject H(_{9,1}^*)</td>
</tr>
<tr>
<td>Country X Promotion</td>
<td>4</td>
<td>3608.32</td>
<td>902.08</td>
<td>301.7</td>
<td>.0001</td>
<td>Reject H(_{7,2}^*)</td>
</tr>
<tr>
<td>Error</td>
<td>6134</td>
<td>18344.75</td>
<td>2.99</td>
<td></td>
<td></td>
<td>Reject 9.2*</td>
</tr>
</tbody>
</table>

\*alpha = .01
One must also remember that only five factors were present in the entire model and if the model was fully specified then 100% of the total variance would have been explained by this model. Therefore the results of this analysis should only be interpreted to indicate which of the factors under consideration are most important in explaining variation relative to the other factors under consideration. The percentage of explained variance attributable to each of the sources studied is presented in Table 4-35.

The results of this analysis indicate that country of origin information is less important than the main effect of both pricing and promotional strategies in explaining the variation in product quality rankings. The main effect of channel of distribution explains very little of the overall variation in the data; however the interaction effect of country of origin and store was very significant. An investigation of the country store interaction revealed that quality ratings for domestically produced products were relatively unaffected by the channel strategy used. However, for products from other developed countries, represented in this analysis by Japan, the use of the discount store as the retail outlet resulted in a significantly lower quality rating and this effect was slightly stronger in low risk products than in high risk products. For products from less developed countries, represented by Mexico, this analysis indicated that the use of the discount retail outlet resulted in a high overall product quality ranking than the use of other channel alternatives. This finding was consistent for both high risk and low risk products.
### TABLE 4-35

PERCENTAGE OF VARIANCE EXPLAINED BY COUNTRY OF ORIGIN
AND MARKETING MIX ELEMENTS BY PRODUCT RISK CLASSIFICATION

<table>
<thead>
<tr>
<th>Source</th>
<th>Combined %</th>
<th>High Risk</th>
<th>Low Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>20.43</td>
<td>20.55</td>
<td>20.46</td>
</tr>
<tr>
<td>Store</td>
<td>1.53</td>
<td>2.10</td>
<td>0.94</td>
</tr>
<tr>
<td>Promotion</td>
<td>20.69</td>
<td>18.95</td>
<td>22.54</td>
</tr>
<tr>
<td>Product</td>
<td>.01</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Country X Price</td>
<td>11.11</td>
<td>10.53</td>
<td>11.74</td>
</tr>
<tr>
<td>Country X Store</td>
<td>20.56</td>
<td>19.75</td>
<td>21.50</td>
</tr>
<tr>
<td>Country X Promotion</td>
<td>10.98</td>
<td>11.32</td>
<td>10.70</td>
</tr>
<tr>
<td>R-squared</td>
<td>76.78</td>
<td>66.41</td>
<td>49.06</td>
</tr>
</tbody>
</table>
The interpretation of these results must be tempered by the understanding that the ANOVA analysis used is recommended only to investigate the possibility that significant interactions exist. Due to the use of ordinal measures and the use of a fractional factorial design the results of this analysis must not be interpreted literally; rather these findings should be used to suggest possible avenues of further research--research that is designed specifically to measure main effects and interactions under experimentally conditions.

Testing Respondents' Responsiveness to Marketing Strategies

Using the clustering procedure discussed in Chapter III, each respondent was classified as demonstrating a favorable shift in attitude toward foreign products in a multi-attribute purchase setting, a negative shift in attitude or no shift in attitude. The multi-attribute purchase setting provided the respondent with four clues to be considered a surrogate indicators of product quality: country of origin, price, retail outlet, and type of promotional strategy employed. This procedure resulted in five marketing strategy response group classifications. The negative/negative group demonstrated a bias against foreign products in both the self-explicated attitude measurement phase and in the multi-attribute decision phase. The neutral--negative group demonstrated an increase in foreign product bias when exposed to the various marketing strategies studied. The neutral/neutral group showed relatively little foreign product bias in either situation; while
the positive/positive group was favorably biased toward foreign products in both situations. Finally, the netural-­positive group showed a favorable shift in consumers' attitudes when exposed to different marketing strategies.

In order to estimate the importance of product risk level and the economic development level of the country of origin each respondent was classified according to responsiveness to high risk product from developed countries, low risk products from developed countries, high risk products from less developed countries, and low risk products from less developed countries. The results of these analyses are presented in Tables 4-36, 4-37, 4-38, and 4-39, respectively.

The overall utility value for each factor is presented on the row for that factor; these values run from 1.00 to 0.0. The closer the utility value is to 1.0 the more important that factor is relative to the other factors. The individual factor level utility scores indicates the overall preference for that particular factor level. These scores run from 100.00 to -100.00; however for each factor the utility levels are required to sum to zero; the higher the positive score the more desirable that factor level is relative to other levels.

In an effort to simplify the analysis of these conjoint utilities the data were rearranged to allow for a developed country/less developed country analysis and a high unit product category/low risk product categories comparison.

The developed country versus the less developed country analysis is presented in Table 4-40 for high risk products and in Table 4-41
### TABLE 4-36
COMPARISON OF MEANS BY MARKETING STRATEGY RESPONSE GROUP
TO HIGH RISK PRODUCTS FROM DEVELOPED COUNTRIES

<table>
<thead>
<tr>
<th>MARKETING STRATEGY RESPONSE GROUP</th>
<th>Negative/Negative</th>
<th>Neutral-- Negative</th>
<th>Neutral/Neutral</th>
<th>Neutral-- Positive</th>
<th>Positive/Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Country</strong></td>
<td>.324</td>
<td>.296</td>
<td>.278</td>
<td>.323</td>
<td>.315</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>53.056</td>
<td>37.194</td>
<td>29.924</td>
<td>-3.265</td>
<td>-21.071</td>
</tr>
<tr>
<td>Japan</td>
<td>-8.610</td>
<td>18.046</td>
<td>29.924</td>
<td>45.220</td>
<td>55.652</td>
</tr>
<tr>
<td>Mexico</td>
<td>-44.444</td>
<td>-55.245</td>
<td>-59.856</td>
<td>-41.955</td>
<td>-34.577</td>
</tr>
<tr>
<td><strong>Price</strong></td>
<td>.195</td>
<td>.251</td>
<td>.251</td>
<td>.246</td>
<td>.256</td>
</tr>
<tr>
<td>High Price</td>
<td>23.082</td>
<td>11.576</td>
<td>-5.399</td>
<td>5.620</td>
<td>6.228</td>
</tr>
<tr>
<td>Medium Price</td>
<td>-2.360</td>
<td>18.605</td>
<td>28.963</td>
<td>17.942</td>
<td>12.549</td>
</tr>
<tr>
<td><strong>Store</strong></td>
<td>.227</td>
<td>.241</td>
<td>.245</td>
<td>.216</td>
<td>.215</td>
</tr>
<tr>
<td>Sears</td>
<td>-10.693</td>
<td>-13.743</td>
<td>-18.166</td>
<td>-4.564</td>
<td>11.687</td>
</tr>
<tr>
<td><strong>Promotion</strong></td>
<td>.254</td>
<td>.212</td>
<td>.227</td>
<td>.215</td>
<td>.214</td>
</tr>
<tr>
<td>Recommended by Salesman</td>
<td>-1.110</td>
<td>12.052</td>
<td>26.047</td>
<td>8.844</td>
<td>5.940</td>
</tr>
<tr>
<td>Recommended by Consumer Report</td>
<td>-27.360</td>
<td>-3.586</td>
<td>-2.344</td>
<td>6.948</td>
<td>-0.382</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total in Group</th>
<th>16</th>
<th>82</th>
<th>72</th>
<th>114</th>
<th>58</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Total</td>
<td>4.6%</td>
<td>24.0%</td>
<td>21.1%</td>
<td>33.3%</td>
<td>17.0%</td>
</tr>
</tbody>
</table>
TABLE 4-37
COMPARISON OF MEANS BY MARKETING STRATEGY RESPONSE GROUP
LOW RISK PRODUCTS FROM DEVELOPED COUNTRIES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Negative/Negative</th>
<th>Neutral-- Negative</th>
<th>Neutral/Neutral</th>
<th>Neutral-- Positive</th>
<th>Positive/Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>-17.306</td>
<td>13.247</td>
<td>31.407</td>
<td>44.755</td>
<td>55.666</td>
</tr>
<tr>
<td>Mexico</td>
<td>-41.345</td>
<td>-53.500</td>
<td>-62.623</td>
<td>-41.279</td>
<td>-35.310</td>
</tr>
<tr>
<td>Price</td>
<td>.204</td>
<td>.241</td>
<td>.250</td>
<td>.265</td>
<td>.227</td>
</tr>
<tr>
<td>Store</td>
<td>.284</td>
<td>.230</td>
<td>.231</td>
<td>.194</td>
<td>.191</td>
</tr>
<tr>
<td>K-Mart</td>
<td>58.655</td>
<td>26.068</td>
<td>27.561</td>
<td>13.452</td>
<td>22.088</td>
</tr>
<tr>
<td>Specialty Store</td>
<td>-32.691</td>
<td>-4.461</td>
<td>4.484</td>
<td>-3.955</td>
<td>-18.888</td>
</tr>
<tr>
<td>Promotion</td>
<td>.226</td>
<td>.215</td>
<td>.231</td>
<td>.223</td>
<td>.188</td>
</tr>
<tr>
<td>Recommended by</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salesman</td>
<td>-20.191</td>
<td>7.638</td>
<td>27.561</td>
<td>.658</td>
<td>-2.546</td>
</tr>
</tbody>
</table>

Total in Group 13 104 52 119 41

% of Total 4.0% 31.6% 15.8% 36.2% 12.5%
<table>
<thead>
<tr>
<th>Variable</th>
<th>Negative/Negative</th>
<th>Neutral—Negative</th>
<th>Neutral/Neutral</th>
<th>Neutral—Positive</th>
<th>Positive/Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>.307</td>
<td>.279</td>
<td>.347</td>
<td>.305</td>
<td>N/A</td>
</tr>
<tr>
<td>Japan</td>
<td>26.779</td>
<td>32.896</td>
<td>62.225</td>
<td>52.606</td>
<td>N/A</td>
</tr>
<tr>
<td>Mexico</td>
<td>-57.018</td>
<td>-51.985</td>
<td>-31.108</td>
<td>-24.536</td>
<td>N/A</td>
</tr>
<tr>
<td>Price</td>
<td>.245</td>
<td>.267</td>
<td>.240</td>
<td>.247</td>
<td>N/A</td>
</tr>
<tr>
<td>High Price</td>
<td>7.701</td>
<td>9.831</td>
<td>13.892</td>
<td>2.242</td>
<td>N/A</td>
</tr>
<tr>
<td>Medium Price</td>
<td>21.977</td>
<td>16.587</td>
<td>8.892</td>
<td>10.954</td>
<td>N/A</td>
</tr>
<tr>
<td>Low Price</td>
<td>-29.682</td>
<td>-26.419</td>
<td>-22.775</td>
<td>-13.192</td>
<td>N/A</td>
</tr>
<tr>
<td>Store</td>
<td>.224</td>
<td>.236</td>
<td>.207</td>
<td>.239</td>
<td>N/A</td>
</tr>
<tr>
<td>K-Mart</td>
<td>25.699</td>
<td>22.003</td>
<td>-19.442</td>
<td>8.460</td>
<td>N/A</td>
</tr>
<tr>
<td>Sears</td>
<td>-14.347</td>
<td>-15.140</td>
<td>17.225</td>
<td>11.122</td>
<td>N/A</td>
</tr>
<tr>
<td>Speciality Store</td>
<td>-11.356</td>
<td>-6.866</td>
<td>2.225</td>
<td>-19.579</td>
<td>N/A</td>
</tr>
<tr>
<td>Promotion</td>
<td>.223</td>
<td>.218</td>
<td>.207</td>
<td>.208</td>
<td>N/A</td>
</tr>
<tr>
<td>T.V.</td>
<td>-12.248</td>
<td>-24.634</td>
<td>2.225</td>
<td>-8.458</td>
<td>N/A</td>
</tr>
<tr>
<td>Recommended by Salesman</td>
<td>12.031</td>
<td>16.110</td>
<td>17.225</td>
<td>11.066</td>
<td>N/A</td>
</tr>
<tr>
<td>Recommended by Consumer Report</td>
<td>.212</td>
<td>8.521</td>
<td>-19.442</td>
<td>-2.604</td>
<td>N/A</td>
</tr>
<tr>
<td>Total in Group</td>
<td>219</td>
<td>28</td>
<td>10</td>
<td>85</td>
<td>0</td>
</tr>
<tr>
<td>% of Total</td>
<td>64.0%</td>
<td>8.2%</td>
<td>2.9%</td>
<td>24.9%</td>
<td>N/A</td>
</tr>
<tr>
<td>Variable</td>
<td>Negative/Negative</td>
<td>Neutral-- Negative</td>
<td>Neutral/Neutral</td>
<td>Neutral-- Positive</td>
<td>Positive/Positive</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>-------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Country</td>
<td>.311</td>
<td>.314</td>
<td>.381</td>
<td>.341</td>
<td>N/A</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>30.524</td>
<td>25.358</td>
<td>-23.147</td>
<td>-29.855</td>
<td>N/A</td>
</tr>
<tr>
<td>Japan</td>
<td>25.278</td>
<td>25.090</td>
<td>46.297</td>
<td>53.240</td>
<td>N/A</td>
</tr>
<tr>
<td>Mexico</td>
<td>-55.806</td>
<td>-50.448</td>
<td>-23.147</td>
<td>-23.379</td>
<td>N/A</td>
</tr>
<tr>
<td>Price</td>
<td>.246</td>
<td>.254</td>
<td>.219</td>
<td>.258</td>
<td>N/A</td>
</tr>
<tr>
<td>High Price</td>
<td>18.124</td>
<td>18.369</td>
<td>7.408</td>
<td>-8.857</td>
<td>N/A</td>
</tr>
<tr>
<td>Medium Price</td>
<td>15.250</td>
<td>14.068</td>
<td>7.408</td>
<td>11.525</td>
<td>N/A</td>
</tr>
<tr>
<td>Low Price</td>
<td>-33.378</td>
<td>-32.437</td>
<td>-14.815</td>
<td>-2.665</td>
<td>N/A</td>
</tr>
<tr>
<td>Store</td>
<td>.215</td>
<td>.218</td>
<td>.269</td>
<td>.205</td>
<td>N/A</td>
</tr>
<tr>
<td>K-Mart</td>
<td>25.372</td>
<td>26.434</td>
<td>7.407</td>
<td>13.096</td>
<td>N/A</td>
</tr>
<tr>
<td>Sears</td>
<td>-21.577</td>
<td>-18.728</td>
<td>21.297</td>
<td>-3.856</td>
<td>N/A</td>
</tr>
<tr>
<td>Specialty Store</td>
<td>3.798</td>
<td>-7.706</td>
<td>-28.703</td>
<td>-9.237</td>
<td>N/A</td>
</tr>
<tr>
<td>Promotion</td>
<td>.227</td>
<td>.214</td>
<td>.131</td>
<td>.196</td>
<td>N/A</td>
</tr>
<tr>
<td>T.V.</td>
<td>-12.794</td>
<td>-11.738</td>
<td>-12.037</td>
<td>-5.618</td>
<td>N/A</td>
</tr>
<tr>
<td>Recommended by</td>
<td>5.901</td>
<td>7.885</td>
<td>4.630</td>
<td>5.097</td>
<td>N/A</td>
</tr>
<tr>
<td>Salesman</td>
<td>6.889</td>
<td>3.853</td>
<td>7.407</td>
<td>.525</td>
<td>N/A</td>
</tr>
<tr>
<td>Consumer Report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total in Group</td>
<td>222</td>
<td>31</td>
<td>6</td>
<td>70</td>
<td>0</td>
</tr>
<tr>
<td>% of Total</td>
<td>67.5%</td>
<td>9.6%</td>
<td>1.8%</td>
<td>21.3%</td>
<td>N/A</td>
</tr>
</tbody>
</table>
for low risk products. To establish whether or not the differences in the utility values between developed and less developed were significant a t-test analysis was conducted for each pair of utilities.

A review of Table 4-40 reveals that for high risk products pricing preferences were different in only two instances. The negative/negative response group much preferred a medium pricing strategy for products from less developed countries; while the neutral/neutral group preferred a medium price strategy for high risk products from developed countries. Similarly the neutral/neutral response group preferred K-Mart for products from developed countries, but Sears for products from less developed countries. Finally, the negative/negative group preferred using the pull promotional strategy, T.V., for products from developed countries, but not for products from less developed countries; whereas the exact opposite was true for the neutral/neutral group. Overall there seems to be few significant differences in marketing strategy utilities for high risk products based on the economic development level of the country in question.

An analysis of the utility preferences for low risk products suggests that the selection of the appropriate marketing strategy is revealed to the economic development level of the country under consideration. Again, we find that the high or medium pricing strategy is most preferred; however, negative/negative group strongly prefers a high price strategy for products from developed countries but shows no preference if the product is from a less developed
TABLE 4-40
COMPARISON OF MEANS BY MARKETING STRATEGY RESPONSE GROUP TO PRODUCTS FROM DEVELOPED COUNTRIES (D.C.) AND LESS DEVELOPED COUNTRIES (L.D.C.) FOR HIGH RISK PRODUCTS

<table>
<thead>
<tr>
<th>Marketing Strategy</th>
<th>Group</th>
<th>High Price</th>
<th>Medium Price</th>
<th>Low Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D.C.</td>
<td>L.D.C.</td>
<td>D.C.</td>
<td>L.D.C.</td>
</tr>
<tr>
<td>Negative/Negative</td>
<td>23.882</td>
<td>7.701</td>
<td>-2.360</td>
<td>21.977*</td>
</tr>
<tr>
<td>Neutral/Neutral</td>
<td>-3.539</td>
<td>13.882</td>
<td>28.303</td>
<td>5.820**</td>
</tr>
<tr>
<td>Neutral-- Positive</td>
<td>5.620</td>
<td>2.242</td>
<td>17.942</td>
<td>10.954</td>
</tr>
<tr>
<td>Positive/Positive</td>
<td>6.228</td>
<td>N/A</td>
<td>12.549</td>
<td>-18.772</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marketing Strategy</th>
<th>Group</th>
<th>High Price</th>
<th>Medium Price</th>
<th>Low Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D.C.</td>
<td>L.D.C.</td>
<td>D.C.</td>
<td>L.D.C.</td>
</tr>
<tr>
<td>Neutral/Neutral</td>
<td>16.317</td>
<td>8.460</td>
<td>-4.564</td>
<td>11.122</td>
</tr>
<tr>
<td>Neutral-- Positive</td>
<td>2.491</td>
<td>N/A</td>
<td>11.087</td>
<td>-14.175</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marketing Strategy</th>
<th>Group</th>
<th>High Price</th>
<th>Medium Price</th>
<th>Low Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D.C.</td>
<td>L.D.C.</td>
<td>D.C.</td>
<td>L.D.C.</td>
</tr>
<tr>
<td>Negative/Negative</td>
<td>38.601</td>
<td>25.699</td>
<td>-10.693</td>
<td>-14.347</td>
</tr>
<tr>
<td>Neutral-- Positive</td>
<td>16.317</td>
<td>8.460</td>
<td>-4.564</td>
<td>11.122</td>
</tr>
<tr>
<td>Positive/Positive</td>
<td>2.491</td>
<td>N/A</td>
<td>11.087</td>
<td>-14.175</td>
</tr>
</tbody>
</table>
TABLE 4-40 (Continued)

<table>
<thead>
<tr>
<th>Marketing Strategy Group</th>
<th>Promotional Strategy</th>
<th>National T.V.</th>
<th>Recommended by Salesperson</th>
<th>Recommended by Consumer Report</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>D.C.</td>
<td>L.D.C.</td>
<td>D.C.</td>
</tr>
<tr>
<td>Positive/Positive</td>
<td>-5.554</td>
<td>N/A</td>
<td>5.940</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*significant at alpha = .10
**significant at alpha = .05
***significant at alpha = .01
N/A: Sample size too small for the analysis
## TABLE 4-41
COMPARISON OF MEANS BY MARKETING STRATEGY RESPONSE GROUP TO PRODUCTS
FROM DEVELOPED COUNTRIES (D.C.) AND LESS DEVELOPED COUNTRIES (L.D.C.) FOR LOW RISK PRODUCTS

### PRICING STRATEGY

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutral/Neutral</td>
<td>Low Price</td>
<td>3.843</td>
<td>7.408</td>
<td>31.728</td>
<td>7.408***</td>
<td>-35.580</td>
<td>-14.815***</td>
</tr>
<tr>
<td>Positive/Positive</td>
<td></td>
<td>5.340</td>
<td>N/A</td>
<td>6.397</td>
<td>N/A</td>
<td>-11.733</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### DISTRIBUTION STRATEGY

<table>
<thead>
<tr>
<th>Market Strategy</th>
<th>K-Mart</th>
<th>Sears</th>
<th>A Specialty Store</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.C.</td>
<td>L.D.C.</td>
<td>D.C.</td>
<td>L.D.C.</td>
</tr>
<tr>
<td>Positive/Positive</td>
<td>22.088</td>
<td>N/A</td>
<td>-3.197</td>
</tr>
<tr>
<td>Marketing Strategy Group</td>
<td>National T.V.</td>
<td>Recommended by Salesperson</td>
<td>Recommended by Consumer Report</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------------</td>
<td>-----------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td></td>
<td>D.C.</td>
<td>L.D.C.</td>
<td>D.C.</td>
</tr>
<tr>
<td>Negative/Negative</td>
<td>38.463</td>
<td>-12.794***</td>
<td>-20.191</td>
</tr>
<tr>
<td>Neutral-- Negative</td>
<td>-6.825</td>
<td>-11.738</td>
<td>7.638</td>
</tr>
<tr>
<td>Neutral/Neutral</td>
<td>-32.054</td>
<td>-12.037***</td>
<td>27.561</td>
</tr>
<tr>
<td>Neutral-- Positive</td>
<td>-11.248</td>
<td>-5.618</td>
<td>.698</td>
</tr>
<tr>
<td>Positive/Positive</td>
<td>-11.083</td>
<td>N/A</td>
<td>-2.546</td>
</tr>
</tbody>
</table>

*significant at alpha = .10  
**significant at alpha = .05  
***significant at alpha = .01  
N/A: Sample size too small for the analysis
country. In contrast the neutral/positive group prefers the medium pricing strategy. This suggests that this group may be more price sensitive than sensitive than the other groups. Except for the neutral/neutral group which strongly prefers Sears for less developed low risk products but prefers K-Mart for developed countries' products, it appears that the development level of the country is not a major determinant in consumer preferences except in the area of promotional strategy. Here the negative/negative group prefers T.V. for products from developed countries, but recommendations for products from less developed countries. In contrast the neutral/positive group prefers "Consumers' Report" recommendations if the product is from a developed country but values a salesperson's recommendations if the product is from a less developed country.

A similar analysis was conducted using product risk category as the the classification variable. A review of Tables 4-42 and 4-43 reveals that in general the risk category of the product did not have a significant effect on consumer utility functions. The only significant exception appears to be for the positive/positive response group which demonstrated a strong preference to purchase low risk products at K-Mart but preferred to purchase high risk products from Sears. Indeed these findings suggest that the product risk classification is important in making the correct channel decision regardless of the economic development of the country in question. However, it appears clear that the appropriate channel decision does depend on the particular country being considered.
### TABLE 4-2

**Comparison of Means by Marketing Strategy Response Group to Products**

From Less Developed Countries by Risk Classification of the Product

#### PRICING STRATEGY

<table>
<thead>
<tr>
<th>Marketing Strategy Group</th>
<th>High Price</th>
<th>Medium Price</th>
<th>Low Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Risk</td>
<td>Low Risk</td>
<td>High Risk</td>
</tr>
<tr>
<td>Negative/Negative</td>
<td>7.701</td>
<td>18.124***</td>
<td>21.977</td>
</tr>
<tr>
<td>Positive/Positive</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

#### DISTRIBUTION STRATEGY

<table>
<thead>
<tr>
<th></th>
<th>K-Mart</th>
<th>Sears</th>
<th>A Speciality Store</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Risk</td>
<td>Low Risk</td>
<td>High Risk</td>
</tr>
<tr>
<td>Positive/Positive</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Marketing Strategy Group</td>
<td>National T.V.</td>
<td>Recommended by Salesperson</td>
<td>Recommended by Consumer Report</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------</td>
<td>----------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>High Risk</td>
<td>Low Risk</td>
<td>High Risk</td>
<td>Low Risk</td>
</tr>
<tr>
<td>Negative/Negative</td>
<td>-12.248</td>
<td>12.031</td>
<td>5.901*</td>
</tr>
<tr>
<td>Neutral-- Positive</td>
<td>-8.458</td>
<td>11.066</td>
<td>5.097</td>
</tr>
<tr>
<td>Positive/Positive</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*significant at alpha = .10
**significant at alpha = .05
***significant at alpha = .01

N/A: Sample size too small for the analysis
### TABLE 4-43

**Comparison of Means by Marketing Strategy Response Group to Products**

**From Developed Countries by Risk Classification of the Product**

#### Pricing Strategy

<table>
<thead>
<tr>
<th>Marketing Strategy Group</th>
<th>High Price</th>
<th>Medium Price</th>
<th>Low Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Risk</td>
<td>Low Risk</td>
<td>High Risk</td>
</tr>
<tr>
<td>Neutral--Negative</td>
<td>11.576</td>
<td>22.021*</td>
<td>18.005</td>
</tr>
<tr>
<td>Neutral/Neutral</td>
<td>-0.539</td>
<td>3.843</td>
<td>28.963</td>
</tr>
</tbody>
</table>

#### Distribution Strategy

<table>
<thead>
<tr>
<th>Distribution Strategy</th>
<th>K-Mart</th>
<th>Seers</th>
<th>A Specialty Store</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Risk</td>
<td>Low Risk</td>
<td>High Risk</td>
<td>Low Risk</td>
</tr>
<tr>
<td>Negative/Negative</td>
<td>38.681</td>
<td>58.655**</td>
<td>-10.693</td>
</tr>
<tr>
<td>Neutral/Neutral</td>
<td>28.639</td>
<td>27.561</td>
<td>-18.166</td>
</tr>
<tr>
<td>Positive/Positive</td>
<td>2.491</td>
<td>22.088***</td>
<td>11.687</td>
</tr>
<tr>
<td>Marketing Strategy Group</td>
<td>Promotional Strategy</td>
<td>National T.V.</td>
<td>Recommended by Salesperson</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>---------------------</td>
<td>---------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High Risk</td>
<td>Low Risk</td>
</tr>
<tr>
<td>Negative/Negative</td>
<td></td>
<td>29.473</td>
<td>38.463</td>
</tr>
<tr>
<td>Neutral--Negative</td>
<td></td>
<td>-8.470</td>
<td>-6.825</td>
</tr>
<tr>
<td>Neutral/Neutral</td>
<td></td>
<td>-23.710</td>
<td>-32.054</td>
</tr>
<tr>
<td>Neutral--Positive</td>
<td></td>
<td>-15.793</td>
<td>-11.248</td>
</tr>
<tr>
<td>Positive/Positive</td>
<td></td>
<td>-5.554</td>
<td>-11.083</td>
</tr>
</tbody>
</table>

*significant at alpha = .10
**significant at alpha = .05
***significant at alpha = .01
N/A: Sample size too small for the analysis
These findings are consistent with the ANOVA findings in the previous section which found a strong country of origin, channel of distribution interaction, but found only a small percent of the variation in the data explained by the specific product being studied. However, these findings must be interpreted with caution because only two product classifications and three countries were considered by the respondents in this part of the research. As has already been demonstrated the phenomenon of foreign product bias appears to be product specific. Unfortunately, earlier in this study it was shown that this tendency is much stronger for clothing/shoes than for home appliances. Since umbrellas would be classified as clothing/shoes and microwave ovens would be classified as a home appliance the interpretation of these findings becomes more difficult. Nevertheless, it is felt that these results will prove useful in suggesting hypotheses for further research.

Testing the Effectiveness of Marketing Strategies in Overcoming Foreign Product Bias

The part of the study limits itself to an investigation of only those respondents who demonstrated a favorable shift in attitude toward foreign products when exposed to various marketing strategies. This group of respondents was identified as the neutral/positive group in the previous section; it is composed of respondents who expressed a negative or neutral attitude toward foreign products in the self-explicated section of the questionnaire but who when faced
faced with the multi-attribute purchase situation responded with a favorable shift in attitude.

Looking at Table 4-44 we see that depending on the risk classification of the product and the level of economic development of the country of origin, the percentage of respondents responding favorably to these marketing strategies range from a high of 36.2% for low risk products from developed countries to a low of 21.3% for low risk products from less developed countries.

As would be expected based on the nature of the classification scheme used, the country of origin was the most important single factor affecting a respondent's profile rankings. The next most important factor was price; which is consistent with earlier sections of this study which suggested that respondents who were price sensitive might respond favorably to foreign products. This response is consistent across all country/product classification; these respondents prefer a medium pricing strategy.

In terms of a preferred channel of distribution, they show a strong preference for K-Mart, which has established a reputation for carrying brand name products at a discount price, except when the product under consideration is a high risk product from a less developed country. When this is the case, they preferred to purchase this product from Sears who has built their reputation around guaranteeing customer satisfaction. Apparently this increased risk associated with purchasing a high risk product from a less developed country is offset by the customers confidence in Sears.
### TABLE 4-44
A COMPARISON OF MEANS OF CONSUMERS WHO RESPONDED FAVORABLY TO MARKETING STRATEGIES FOR IMPORTED PRODUCTS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Developed Country High Risk Product</th>
<th>Developed Country Low Risk Product</th>
<th>Less Developed Country High Risk Product</th>
<th>Less Developed Country Low Risk Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>America</td>
<td>.323</td>
<td>.318</td>
<td>.305</td>
<td>.341</td>
</tr>
<tr>
<td>Mexico</td>
<td>-41.955</td>
<td>-41.279</td>
<td>-24.536</td>
<td>-23.379</td>
</tr>
<tr>
<td>Price</td>
<td>.246</td>
<td>.265</td>
<td>.247</td>
<td>.258</td>
</tr>
<tr>
<td>High Price</td>
<td>5.620</td>
<td>7.529</td>
<td>2.242</td>
<td>-8.857</td>
</tr>
<tr>
<td>Medium Price</td>
<td>17.942</td>
<td>14.494</td>
<td>10.954</td>
<td>11.525</td>
</tr>
<tr>
<td>Store</td>
<td>.216</td>
<td>.194</td>
<td>.239</td>
<td>.205</td>
</tr>
<tr>
<td>Sears</td>
<td>-4.564</td>
<td>-9.498</td>
<td>11.122</td>
<td>-3.856</td>
</tr>
<tr>
<td>Promotion</td>
<td>.215</td>
<td>.223</td>
<td>.208</td>
<td>.196</td>
</tr>
<tr>
<td>Recommended by Salesperson</td>
<td>8.844</td>
<td>.658</td>
<td>11.066</td>
<td>5.097</td>
</tr>
<tr>
<td>Recommend by Consumer Report</td>
<td>6.948</td>
<td>10.589</td>
<td>-2.604</td>
<td>.525</td>
</tr>
<tr>
<td>TOTAL</td>
<td>114</td>
<td>119</td>
<td>85</td>
<td>70</td>
</tr>
<tr>
<td>% of Total in that category</td>
<td>33.3%</td>
<td>36.2%</td>
<td>24.9%</td>
<td>21.3%</td>
</tr>
</tbody>
</table>
In terms of the promotional strategy preferred by these respondents, they tended to place a high degree of importance on the recommendations of the salesperson, except when the product was a low risk item from a developed country in which case they preferred to use Consumer Report Magazine recommendations. These respondents were uniformly against letting themselves be influenced by television. This suggests that a marketer should investigate thoroughly before trying to change customers' opinions about an imported product using a "pull" promotional strategy by itself.

These findings also suggest that products from developed countries should be much more successful in using marketing strategies to invoke a positive change in consumer response than products from less developed countries. More than one out of three customers in this study responded favorably to products from developed countries while less than one out of four responded favorably to products from less developed countries.

In order to measure the statistical strength of the marketing strategy variables it was necessary to conduct a discriminate analysis to determine if these variables could be used to classify respondents into response groups. These analysis were used to test Hypotheses 10.1 to 10.3. In order to reject the null hypothesis that the level of the marketing variable had no association with the effectiveness of the marketing strategy to overcome foreign product bias it is only necessary for any one of the three levels of each factor to be a significant discriminating factor.
Examining Table 4-45 we see that for both high risk and low risk products from developed countries that price, place of purchase, and promotional methods were effective discriminators. This means that all three were effective in dividing the respondents into marketing responsiveness groups. This only means that the marketing response groups differed significantly on the value they placed on these variables.

The results for products from less developed countries was surprisingly different. Again, price and place of purchase were significant discriminators; however, the promotional method used was not. This implies that the different marketing response groups did not differ significantly on their preference of the three promotional methods considered by this study.

**Testing the Association of Market Strategy Responsiveness with Selected Demographic Variables**

Having divided consumers into the five groups previously discussed based on their degree of foreign product bias and their responsiveness to various marketing strategies, then the next task was to determine whether or not these groups could be described using variables which would be useful to the marketing manager. Eleven variables were selected based on previous studies and discussions with marketing experts. These 11 variables were age, sex,
<table>
<thead>
<tr>
<th>Marketing Variable</th>
<th>Hypothesis Tested</th>
<th>Developed Low Risk</th>
<th>Developed High Risk</th>
<th>Undeveloped Low Risk</th>
<th>Undeveloped High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Price</td>
<td>$H_{10.1}$</td>
<td>4.297**</td>
<td>5.669**</td>
<td>.026</td>
<td>2.260</td>
</tr>
<tr>
<td>Medium Price</td>
<td>$H_{10.1}$</td>
<td>1.181</td>
<td>1.849</td>
<td>.206</td>
<td>.000</td>
</tr>
<tr>
<td>Low Price</td>
<td>$H_{10.1}$</td>
<td>1.183</td>
<td>1.852</td>
<td>16.666**</td>
<td>7.372**</td>
</tr>
<tr>
<td>K-Mart</td>
<td>$H_{10.2}$</td>
<td>9.087**</td>
<td>10.745**</td>
<td>.000</td>
<td>15.808**</td>
</tr>
<tr>
<td>Sears</td>
<td>$H_{10.2}$</td>
<td>7.297**</td>
<td>3.761**</td>
<td>2.672*</td>
<td>1.047</td>
</tr>
<tr>
<td>Specialty Store</td>
<td>$H_{10.2}$</td>
<td>.000</td>
<td>.000</td>
<td>3.951**</td>
<td>1.047</td>
</tr>
<tr>
<td>Television</td>
<td>$H_{10.3}$</td>
<td>5.216**</td>
<td>6.987**</td>
<td>1.050</td>
<td>1.945</td>
</tr>
<tr>
<td>Salesman</td>
<td>$H_{10.3}$</td>
<td>9.957**</td>
<td>.000</td>
<td>.655</td>
<td>.095</td>
</tr>
<tr>
<td>Consumers' Report</td>
<td>$H_{10.3}$</td>
<td>.000</td>
<td>5.130**</td>
<td>.769</td>
<td>1.916</td>
</tr>
</tbody>
</table>

*significant at alpha = .01

**significant at alpha = .05
education, primary occupation of the household head, ethnic background, income, change in income expected in 1982, automobile ownership, union membership, spouse's union membership, geographic region the respondent considered him/herself a native of. These variables were grouped as discussed in Chapter III and then analyzed using the Chi-squared analysis contained in SAS. The results of these analyzes are contained in Table 4-46.

In order to allow for the possibility that different consumers might response differently to products from developed than they would respond to similar products from less developed countries, the analysis was conducted for each group separately. Also because the same differences in response patterns may result depending on the product class under consideration, high risk products represented in this study by microwave ovens and low risk products represented by umbrellas were analyzed separately also.

As Table 4-46 indicates four of the variables tested were found to be significantly associated with a respondent's market strategy response group membership; and only two of these variables, age and occupation, were found to be consistently associated with group membership.

Age was associated with all the groups under consideration except for high risk products from developed countries and even in that case the p-value was .1265 for the other three groups the p-values were .0472, .0005, and .0036, respectively. The results of these analyses were consistent within the product classification but markedly different across countries.
<table>
<thead>
<tr>
<th>Hypothesis Tested</th>
<th>Demographic Variable</th>
<th>Developed Country</th>
<th>Less Developed Country</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>High Risk Product</td>
<td>Low Risk Product</td>
</tr>
<tr>
<td>H10.1</td>
<td>Age</td>
<td>Don't reject</td>
<td>Reject**</td>
</tr>
<tr>
<td>H10.2</td>
<td>Sex</td>
<td>Don't reject</td>
<td>Don't reject</td>
</tr>
<tr>
<td>H10.3</td>
<td>Education</td>
<td>Don't reject</td>
<td>Don't reject</td>
</tr>
<tr>
<td>H10.4</td>
<td>Occupation</td>
<td>Reject**</td>
<td>Reject**</td>
</tr>
<tr>
<td>H10.5</td>
<td>Ethnic Background</td>
<td>Reject*</td>
<td>Don't reject</td>
</tr>
<tr>
<td>H10.6</td>
<td>Income</td>
<td>Don't reject</td>
<td>Reject**</td>
</tr>
<tr>
<td>H10.7</td>
<td>Expected Change in Income</td>
<td>Don't reject</td>
<td>Don't reject</td>
</tr>
<tr>
<td>H10.8</td>
<td>Automobile Ownership</td>
<td>Don't reject</td>
<td>Don't reject</td>
</tr>
<tr>
<td>H10.9</td>
<td>Union Membership</td>
<td>Don't reject</td>
<td>Don't reject</td>
</tr>
<tr>
<td>H10.10</td>
<td>Spouse's Union Mem- bership</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>H10.11</td>
<td>Area of Residence</td>
<td>Don't reject</td>
<td>Don't reject</td>
</tr>
</tbody>
</table>

* alpha = .10  ** alpha = .05  ***alpha = .01  N/A: not applicable due to low response rate
The response to marketing strategies for products from developed countries for both high and low risk products indicated that age was a significant factor associated with market responsiveness. The 25- and under group was much more likely to respond favorably to various marketing strategies than the over 25-consumers. However, the under-25 group was underrepresented in the response group that displayed both a positive self-explicated foreign product bias and a positive response to products from developed countries in the purchase situation; the 25-40 year old group were overrepresented in that group.

This suggests that younger consumers' attitudes toward foreign products may be more easily influenced by various marketing strategies than older consumers when the product under consideration is from a developed country. Similarly the 25-40 year old group showed the most resistance to marketing strategies.

The over 40 group was the group most likely to have a negative response to the marketing strategies. This suggests that their self-explicated expression of foreign product bias may have underestimated the true extent of their bias toward foreign products.

The results of products from less developed countries were somewhat different than the results of products from developed countries. Here the under 25 age group tended to be much less likely to respond favorably than the 25-40 year old group. The younger group was also much more likely to express a negative bias toward products from less developed countries and to allow these attitudes to dominate their
responses to various marketing strategies. Again the over 40 year
old group showed a tendency to have a much stronger, unfavorable
response to the various marketing strategies. This may be because
the over 40 group has a much stronger bias against products from
less developed countries than they are willing to admit to when
questioned directly.

The next two variables under consideration were the sex of the
respondent and the educational level of the respondent. Neither of
these variables were found to be significantly associated with the
respondents' marketing strategy response group membership pattern.
The p-value for sex were: .9156, .9662, .7961, and .5458; the p-
values for educational level were .6368, .4463, .8515, and .9130,
respectively.

The primary occupation of the household head was shown to be
significant for all of the groups except low risk products from less
developed countries which had a p-value of .3441 compared to the
other three groups of which the p-values were .0150, .0054, and
.0570. As detailed in Chapter III, occupation was collapsed into
three groups for this analysis; the groups are as follows: white
collar workers which included managers and professional workers,
blue/pink collar workers which included factory workers, clerical
workers, craftspersons, and farmers, and college students.

Similar to the pattern noted in the age variable the responses
are consistent between product groupings but are different between
country groupings. This means consumers showed a similar response
pattern when comparing the responsiveness to either ovens or umbrellas
from a developed country, but showed very different response patterns when comparing ovens from a developed country and ovens from a less developed country.

The analysis suggests that blue collar workers tend to respond much more favorably to various marketing strategies than either white collar workers or students across all three groups. This suggests that perhaps blue/pink collar workers are influenced by marketing strategies more easily than the other groups. That is if they would be willing to purchase a foreign product if it was sold through a trusted retailer like Sears, or if the product was recommended by a trusted source like Consumers' Report.

This analysis also indicates that white collar workers are more likely to react more negatively toward foreign products than their self-explicated scores would suggest. This suggests that these workers are less likely to be influenced by various marketing strategies than other workers and the extent their foreign product bias may be understated by direct measures.

Students as a group tended to be rather neutral toward products from developed countries and were not easily influenced by the marketing strategies used in this study. However, students tended to be more biased against products from less developed countries than the other groups and this bias was not overcome by the marketing strategies used.

The next demographic variable considered was ethnic background which for this analysis was defined as white American born and non-white American born. This variable was significantly associated
only with marketing strategy response group membership for high risk products from developed countries; the p-value for this group was .0621 and for low risk products from the same countries the p-value was .3742. The non-white group tended to be much more favorably biased toward products from this group, and they responded more favorably to the marketing strategies used in this study. Products from less developed countries were not found to be significant at an alpha level of .10 their p-values were .3109 for high risk products and .1268 for low risk products.

The last variable which was found to show a significant association to market strategy response group membership was income level; however, it was only significant for low risk products from developed countries. The p-value was .0321. The results of this analysis indicated that the lowest income group, $13,000 or less, was much more likely to respond favorably to the marketing strategies used. Although this analysis does not allow me to identify which part of the marketing strategy was most successful in overcoming their bias against foreign products it seems reasonable to conclude that the pricing strategy or the distribution strategy used would be very important to this group. Looking at the mean for the low price strategy from the previous section Table 4-41, we find that this group prefers to shop at a discount outlet, K-Mart, but pay medium prices.

Although the two groups representing products from less developed countries were not found to be significant at an alpha level of .10, their p-values were .1477 for the high risk products and .1353 for
the low risk products. Although not significant at the alpha level pre-selected these results are very interesting and deserve to be mentioned. These findings suggest that the response of low income groups to products from less developed countries is very different than their response to products from developed countries. The low income groups were much more likely to be biased against both high and low risk products from less developed countries than the other income groups. They also were much less likely to respond favorably to marketing strategies designed for these products. The explanation for this finding is unclear but one might speculate that low income workers see workers from the less developed countries as direct threats to their jobs as companies increasing shift production to low wage cost countries. An alternative explanation suggests that these consumers may not trust products from countries that they have not have had previous experience with and they are reluctant to try new products.

None of the remaining five variables were found to be significantly related to group membership for any of the country/product combinations. The variable spouse's union membership could not be analyzed because of the small number of responses received from respondents married to union members. The p-values for change in income expected in 1982 were .5900, .2347, .5299, and .9304 for the four groups under study. These same groups had p-values of .4976, .8620, .3584, and .5387 for type of automobile owned. Somewhat surprisingly, union membership was not found to be associated with marketing strategy response group membership with p-values of .2008,
.2882, .4103, and .9438. This may be because a disproportionate number of the respondents belong to a federal employee's union and they are not as concerned with losing their jobs to foreign competition as members of trade unions. Finally the geographic region the respondent considered him/herself a native of yielded p-values of .7149, .4656, .1148, and .1644.

Other Findings

As a side issue this study examined the appropriateness of generalizing the results of foreign product bias phenomenon studies which used only college students to consumers in general. As the literature review indicated many of the studies in this area have used only college students as their sample base and then attempted to generalize their results beyond this group to the general consuming public. Many of these studies have rationalized this procedure by saying that students represent an important market segment of foreign products or that students generally reflect the attitude of their parents who are consumers. Since a part of the sample used in this study was students, it is desirable to identify any differences in attitudes between students and consumers in general in order to determine the suitability of using students as proxies for consumers in general.

In order to identify differences in attitudes toward foreign products between students and non-students the data was divided into two groups. The first group represented data gathered in the classroom and the second group represented data gathered outside the
classroom environment. A standard T-test analysis was conducted on the attitudes of these two groups toward the quality and value offered by the nine countries considered in this study. The results of these analyses are presented in Table 4-47.

These findings indicate that in 7 of the 18 contrasts there was a significant difference between the attitudes of students and non-students. In every case the student group rated the product in question higher in quality or value than non-student respondents. This suggests that students may be less cynical than non-students; therefore a study using only student respondents would probably show less foreign product bias than was true of the general population. Consequently, the use of student only samples for this type of research is questionable if the results are to be generalized to the consuming public.

Also of interest were the responses to the open ended questions concerning feelings about foreign products or U.S. import policies. Eighty-four people or 23% of the respondents expressed themselves in this part of the questionnaire. See Appendix B for a complete listing of these responses.

Other than comments about personal experiences with foreign or domestic products, such as "I bought a Datsun in 1978, and it was a piece of junk," the responses fell into ten categories.

The largest number of responses received supported the concept of free trade. Over 27% of the respondents mentioned that a free trade policy was good for America and good for them as consumers.
They cited the importance of foreign products in providing the competition necessary to motivate domestic producers to improve their products. They also emphasized that this U.S. needed to become more competitive in world markets.

The second most common opinion, mentioned by 23% of these respondents, expressed the idea that there must be an increased effort by U.S. management and workers to increase productivity. Many cited a need for all parties to change their attitudes about quality and competition. Many cited the need of management and labor to establish a more cooperative effort in order to survive in the world marketplace. Several noted that U.S. industries were losing their technological advantages to foreign competition.

On a similar note, 21% of the respondents, expressed concern about the quality of U.S. products. They indicated that the quality of domestic products was declining while the quality of foreign products seemed to be increasing. Many expressed a similar opinion that U.S. workers lacked pride in their products and that an attitude change was imperative.

An additional 20% of respondents indicated that U.S. workers, particularly union members were overpaid. Many felt these "greedy" workers deserved to lose their jobs and they didn't feel sorry for them.

This contrasted with the opinions that 10% of the respondents who felt that it was important to support American workers by purchasing domestic products. An additional 10% of respondents urged that imports be restricted in order to save U.S. jobs. Similarly,
### TABLE 4-47

**T-TESTS OF STUDENT VERSUS NON-STUDENT ATTITUDES TOWARD THE QUALITY AND VALUE OFFERED OF FOREIGN PRODUCTS**

<table>
<thead>
<tr>
<th>Contrast</th>
<th>T-Value</th>
<th>p &gt; T</th>
<th>Conclusion (Students rated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality-S. Korea</td>
<td>-1.02</td>
<td>.306</td>
<td>No difference</td>
</tr>
<tr>
<td>Quality-France</td>
<td>4.62</td>
<td>.000</td>
<td>French higher*</td>
</tr>
<tr>
<td>Quality-Taiwan</td>
<td>1.90</td>
<td>.058</td>
<td>No difference</td>
</tr>
<tr>
<td>Quality-W. Germany</td>
<td>-0.37</td>
<td>.712</td>
<td>No difference</td>
</tr>
<tr>
<td>Quality-Japan</td>
<td>2.55</td>
<td>.014</td>
<td>Japanese higher*</td>
</tr>
<tr>
<td>Quality-Brazil</td>
<td>2.33</td>
<td>.020</td>
<td>Brazilian higher*</td>
</tr>
<tr>
<td>Quality-U.S.A.</td>
<td>3.09</td>
<td>.002</td>
<td>United States higher</td>
</tr>
<tr>
<td>Quality-Mexico</td>
<td>-1.15</td>
<td>.256</td>
<td>No difference</td>
</tr>
<tr>
<td>Quality-England</td>
<td>1.01</td>
<td>.312</td>
<td>No difference</td>
</tr>
<tr>
<td>Value-S. Korea</td>
<td>1.66</td>
<td>.099</td>
<td>No difference</td>
</tr>
<tr>
<td>Value-France</td>
<td>2.71</td>
<td>.007</td>
<td>French higher*</td>
</tr>
<tr>
<td>Value-Taiwan</td>
<td>2.41</td>
<td>.017</td>
<td>Taiwanese higher*</td>
</tr>
<tr>
<td>Value-W. Germany</td>
<td>-0.04</td>
<td>.971</td>
<td>No difference</td>
</tr>
<tr>
<td>Value-Japan</td>
<td>0.59</td>
<td>.558</td>
<td>No difference</td>
</tr>
<tr>
<td>Value-Brazil</td>
<td>2.28</td>
<td>.023</td>
<td>Brazilian higher*</td>
</tr>
<tr>
<td>Value-U.S.A</td>
<td>1.92</td>
<td>.056</td>
<td>No difference</td>
</tr>
<tr>
<td>Value-Mexico</td>
<td>1.96</td>
<td>.051</td>
<td>No difference</td>
</tr>
<tr>
<td>Value-England</td>
<td>0.33</td>
<td>.743</td>
<td>No difference</td>
</tr>
</tbody>
</table>
of the respondents urged higher tariffs in order to accomplish the same end.

Somewhat surprisingly only 4% of the respondents mentioned the effect of unfair trade practices, which have been claimed to reduce U.S. opportunities in foreign markets, as an important issue. With the large amount of publicity which has accompanied this issue one might have expected more people to mention this as a justification for more tariffs or imposition of quotas on foreign products; however, such was not the case.

In general these comments showed a good understanding of the major issues facing the United States as it attempts to address the issues of foreign competition. The theme expressed by most of the respondents suggests that the U.S. must maintain its competitive position in world markets by increasing productivity, applying new technology, changing the attitudes of workers, improving product quality, and planning for the future.
CHAPTER IV FOOTNOTES


7. Ibid., pp. 68-74.

CHAPTER V
RESEARCH FINDINGS AND CONCLUSIONS

Introduction

This chapter consists of five major parts. Each of the first three sections addresses a specific research question and the findings associated with that question. The first section "Measuring Foreign Product Bias," investigates consumers' reactions to country of origin information and its effect on ratings of product quality and value. The second section "Demographic and Attitudinal Variables Associated with Foreign Product Bias" examines the relationship of 11 demographic variables and 6 attitudinal variables with a respondent's degree of foreign product bias. The third section, "An Evaluation of the Effectiveness of Selected Marketing Strategies in Overcoming Foreign Product Bias" evaluates various pricing, promotion and distribution strategies in terms of their effectiveness in overcoming negative attitudes toward foreign products or enhancing positive attitudes toward foreign products. The fourth section "Implications of the Research," evaluates the findings of this study in terms of their importance to a better conceptual understanding of foreign product bias, in terms of their managerial implications and in terms of U.S. policy implications. The final section, "Directions for Future Research," examines alternative research procedures and topic areas where further research might be conducted.
Measuring Foreign Product Bias

The first research objective addresses the general question of "How Do American Consumers feel about foreign products compared to domestic products?" This study investigated consumer attitudes toward the quality offered by foreign products, the value offered by foreign products and whether these attitudes were product specific.

The effect of country of origin knowledge was measured by testing hypotheses $H_{1.1}$ to $H_{3.9}$. The results of these tests lead to three important findings. Finding One, country of origin information in an important determinant of product quality and value. Finding Two, there has recently been a major shift in consumers' attitudes, and American products are no longer viewed as superior to all others. Finding Three, the products from less developed countries are being viewed as good value alternatives to products from developed countries.

The first finding that country of origin information is an important determinant of product quality and value was confirmed by using an ANOVA analysis. This analysis indicated that country of origin information had an important effect on ratings of overall product quality and overall value offered. This finding was consistent with the findings of previous research.

Finding Two contradicted the findings of previous research which established a consistently strong home country bias among U.S. consumers. However, the results of this research indicate that Japanese products are viewed as significantly between the U.S. products both in terms of product quality and product value. Additionally, West German products are viewed as at least as good as U.S. products in
terms of both product quality and value. Other than these two countries domestic products were found to be rated superior to foreign products in both quality and value.

This finding suggests that the Japanese and Germans have been successful not only in penetrating the U.S. marketplace but also in changing consumers' attitudes about the quality and value offered by their products. This implies that domestic producers can no longer assume that their products are considered superior to foreign products. It also suggests that U.S. industries have a deteriorating image and that steps should be taken not only to regain market share but also to reposition themselves in the consumer's mind as the world leader in product quality and value.

The third finding indicates that products from less developed countries are beginning to establish themselves as reasonable alternatives for the value conscience market segments. Considering the phenomenal success the Japanese have had in overcoming the "cheap-made in Japan" negative stereotypes which dominated U.S. attitudes 20 years ago, the less developed countries must be viewed as potentially strong marketplace competitors in the not-too-distant future.

The issue of whether or not these attitudes were consistent for all product categories or whether they are product specific was addressed by testing hypotheses H$_{6.1}$ - H$_{6.7}$. The results of these tests lead to two additional findings. Finding Four, foreign product bias is product specific and Finding Five, consumers' attitudes about the quality offered by domestic and foreign automobiles determine their general attitudes about foreign product quality.
Finding Four was made by examining consumer rankings of the nine countries used in this study across six product categories. An analysis of these rankings revealed that the specific product category was a significant determinant of how the countries were rated. Additionally, it was found that domestic products were ranked highest in terms of product quality in four of the six categories. This indicates that U.S. consumers still have a strong home country bias, but that this bias has been overcome by both the Japanese and the Germans in automobiles and the Japanese in televisions and stereos. It is important to note that these two products represent high technology products and it is high technology products, specifically computers, which are expected to be the major areas of economic growth over the next ten years. This suggests that these two competitors have been able to position themselves in the consumer's mind as the leaders in high technology areas. If this is the case then maintaining a dominate share of the critical high technology marketplace may be increasingly difficult for domestic firms.

Finding Five, was made by comparing the quality rankings of products in general to quality ranking of specific product categories. Tests revealed a very strong consumer agreement between general product quality and the quality of automobiles/automotive parts. This suggests that consumers use their knowledge and experience with automobiles as their primary guide to judge the general product quality of products from a specific country. This implies that automobiles have a "halo effect" and a favorable or unfavorable attitude about the quality of automobile produced by a country has
an important affect on all products from that country. This seems to be especially true for product categories that the consumer has had little experience with. Again, having established a superior position in the consumer's minds by producing what are perceived to be superior cases, the Japanese have positioned themselves in an excellent position to transfer consumers' positive attitudes toward Japanese cars to other high technology areas such as computer. The logic becomes "if they can produce such great cars I guess their computers must be great also." Again, these findings suggest that the recent shifts in consumers' attitudes may have serious long range consequences for domestic firms, particularly in high technology areas.

Demographic and Attitudinal Variables Associated with Foreign Product Bias

Hypotheses $H_{4.1} - H_{4.11}$ addressed the issue of whether or not certain demographic groups respond differently to foreign products than other groups. These hypotheses tested the degree of association between the amount of foreign product bias displayed by the respondent and 11 demographic variables. The results of this analysis lead to Finding Six, overall demographics were of limited value in identifying consumer groups who were consistently biased for or against foreign products. This finding was true for both quality ratings and value ratings.

Each of these hypotheses were tested using Chi-squared analysis and many of the variables were found to be statistically significantly associated with the degree of foreign product bias displayed for
several countries. However, no variable was found to be associated with the degree of bias displayed toward all nine countries. The individual findings were reviewed and discussed in Chapter IV, and while some of them may be useful for specific situations, in general their value appears limited.

In contrast to the inconclusive findings regarding the usefulness of demographic variables in identifying groups which are biased either for or against foreign products, the results of this study suggests that attitudinal variables are useful in explaining the amount of foreign product bias demonstrated by respondents. The results of testing hypotheses $H_{5.1}$ to $H_{5.6}$ yielded Finding Seven, that attitudinal variables were useful in identifying consumers who were consistently biased for or against foreign products.

Specifically the results of this study suggest that patriotism, attitudes toward unions, attitudes toward big business, opinions about the pride American workers take in their work, and the amount union members are paid are strongly associated with a respondent's degree of foreign product bias. Using regression analysis this study found a high correlation between these five attitudinal variables and foreign product bias scores.
An Evaluation of the Effectiveness of Selected Marketing Strategies in Overcoming Foreign Product Bias

Using conjoint analysis this research effort attempted to investigate the effectiveness of various marketing strategies in overcoming foreign product bias. The results of this analysis indicated that some consumers who are biased against foreign products can be influenced to consider the purchase of a product of foreign origin if the correct marketing strategy is employed. Of the respondents studied in this investigation approximately 41% of those who expressed a negative or neutral feeling toward products from other developed countries (or 34.75% of the total number of respondents) responded positively toward these products when a particular marketing strategy mix was employed. Similarly approximately 23% of respondents who expressed a negative or neutral attitude toward products from less developed countries responded favorably to these products when an appropriate marketing strategy was employed.

An analysis of the conjoint utilities yielded several interesting findings. Finding Eight, the level of risk associated with the purchase decision did not significantly effect consumer utilities for different marketing strategies. This finding was supported by both the results from the ANOVA analysis and the results of the conjoint analysis. The notable exception to these general results was the discovery that consumers who are favorably disposed toward foreign products would prefer to purchase low risk products through discount stores and high risk products through retailers who have built their reputation on standing behind their products.
Finding Nine, revealed that the level of economic development of the country of origin is not a significant factor in determining the appropriate marketing strategy except in the area of promotion. This finding indicates that consumer magazines and perhaps other forms of non-marketing controlled sources of information were very important in overcoming negative attitudes about products from developed countries, while the recommendations of salespersons were most important for products from less developed countries.

Considering only consumers who were identified as responding favorably to foreign products during a simulated purchase situation after having expressed a negative attitude toward foreign products from these same countries, we can examine their conjoint utility values to provide some guidance in developing an effective marketing strategy for these products.

Across all product/country classification consumers expressed a preference for a medium price pricing strategy. This suggests that a successful importer should avoid pricing their products significantly above or below the going market price.

In terms of the place of retail distribution consumers demonstrated a preference for purchasing foreign products at a high quality discount retailer who has established a reputation for carrying natural brands for both high and low risk products from other developed countries and low risk products from less developed countries. However, for high risk products from less developed countries consumers expressed a preference for purchasing from a natural retailer noted for selling products under an in-house label backed by the guarantee of the retailer.
Finally, the promotional method used favored a "push" strategy because of the important emphasis placed on the recommendations of the salesperson in all product/country combination except one. In the case of low risk products from other developed countries these findings suggest that the recommendations on Consumer Report Magazine had the most influence on which product to purchase. This is probably due to both the hesitation of purchases to seek sales assistance where purchasing low risk frequently purchased items and to the lack of available sales assistance in many low risk purchase situations.

In general it appears that choosing the "correct" marketing mix is a function of understanding how the level of economic development of the country of foreign and the risk level of the product purchased effects consumers' choices. These results make it clear that there is no one best marketing strategy for different imported products from different countries; however, it does help establish the importance of considering other than traditional marketing factors in reaching this decision.

Finally an effort was made to use the demographic variables considered in Section two of this chapter to provide a useful marketing basis of identifying which consumers would respond in which ways to various marketing strategies.

The results of this analysis was somewhat better than those of section two of this chapter but were still disappointing. Using Chi-squared analysis it was found that younger consumers, with blue
collar jobs, and lower income levels were much more likely than other
groups to be influenced by marketing strategies. These results lead
to Finding Ten, demographic variables are only of marginal value in
identifying consumers who tend to respond favorably to the marketing
strategies of imported products.

**Implications of the Research**

The findings of this research have important implications for

government policy, marketing practitioners and marketing theory.

The finding that domestic products have lost their first place
standing in the consumers' mind in terms of both overall product
quality and overall value coupled with the finding that consumers' 
attitudes toward the quality of automobiles and automotive parts
produced by a country strongly influences consumers' general attitudes
about other products from that country suggests that some immediate
action to help the U.S. automotive industry regain its leadership
in product quality image is necessary. This change in image is
important not only to the automotive companies directly effect but
also to all U.S. industries who are facing increasing competition
from foreign products.

This research suggests that if the current effort to improve the
quality of domestic automobiles is not accompanied by a concerted
effort to change consumers' perceptions of domestic automobile quality
that the recent decline in overall quality ratings of domestic pro-
ducts in general will be very difficult to reverse. This campaign
could be undertaken by the auto industry, by a private across
industry group such as the U.S. Chamber of Commerce or by the U.S. government; but some effort needs to begin.

A reversal of U.S. consumer attitudes toward domestic automobiles should have a spillover effect which should make all domestic products more competitive. This would help alleviate our current merchandise trade balance deficit and instill a new pride and confidence in U.S. consumers and workers.

The findings of this research suggest several important managerial implications. In addition, the need of managers to focus attention on the problem of rebuilding America's image as the leader in product quality, management needs to understand how consumers respond to different foreign product marketing strategies. While the limitations of this study prevent me from making definitive statements about how consumers will respond to a particular product from a particular country, these findings support the idea that both the level of economic development of the country in question and the risk level of the product being considered are important factors to consider when choosing a marketing strategy.

More importantly, these findings support the idea that conjoint analysis can be a useful tool when trying to select an appropriate marketing strategy. This is particularly important when alternative marketing research facilities are very limited or not available at all; or when the market size is too small to warrant a large marketing research expenditure. However, before this methodology can be used under actual conditions it should be studied in order to determine its prediction validity under actual purchase conditions.
In terms of implications to marketing theory these findings support the consumer behavior model developed by Engel, Kollat, and Blackwell. The finding that attitudes were most important in explaining foreign product bias is consistent with the EKB model's depiction of product brand evaluations being strongly influenced by both general motivating influences and internalized environmental influences. Additionally, this research suggests the important role played by marketer-dominated information in the consumer behavior process. While this research was not designed to specifically test the validity of this model in explaining foreign product bias it appears that this model does provide an excellent basis for understanding foreign product bias and how this bias effects the marketing process.

When considered in their entirety these findings coupled with the comments made by respondents lead to development of a typology which might be useful in helping to understand foreign product bias. Since this typology was the result of this research and not what the research was designed to investigate speculative in nature and must be exposed to further study to establish whether or not this typology is accurate.

This research has lead me to conclude that there are basically six general types of consumers involved in explaining foreign product bias phenomenon. They are the following: the economically rational consumer, the hedonistic consumer, the xenophobic consumer, the reactionary consumer, the patriotic consumer, and the pseudo-cosmopolitan consumer.
The **Economically Rational Consumer** reacts toward foreign products based on his own feelings that if a product is a good value he will purchase it or if it is a poor value he will not purchase it. Country of origin per se is an irrelevant consideration. To be effective a marketing strategy need only convince this type of consumer that their product is a good value; it is not necessary to address the issue that the product is of foreign origin.

The **Hedonistic Consumer** reacts toward foreign products based on his own economic best interests. They would be quoted as saying something to the effect that "I buy American products to save my job. A strategy aimed at influencing this type of consumer could either be defensive in nature by attempting to conceal the foreign origin of the product or by being offensive and emphasizing the positive effects trade has on stimulating the domestic economy.

The **Xenophobic Consumer** is afraid of all foreign products and refuses to knowingly purchase foreign products because he does not trust them. The only effective marketing strategy to sell to this type of consumer is one that hides the foreign identity of the product. Choosing an American sounding brand name, distributing through a retailer which has a strong American image such as cards, or assembling the final product in the United States accompanied with an "assembled in the U.S." label are possible alternatives.

The **Reactionary Consumer** purchases foreign products in order to punish U.S. workers who he feels are overpaid. He seeks to teach these workers a lesson by purchasing foreign products and thereby causing them to be laid-off or fired. This feeling seems to be
particularly strong against the U.A.W. and other large highly paid
unions. Again, the best policy in marketing to this group is to
avail the issue of the foreign origin of the product by using the
defensive marketing techniques suggested above.

The Patriotic Consumer feels it is his duty to purchase American
made goods even if they are lower in quality or higher in price. This
feeling is not motivated by a fear that increased foreign competition
may jeopardize his livelihood. Rather this type of consumer might
be quoted as saying "I buy American to save another American's job."
The same type of marketing strategy aimed at the Hedonist Consumer
should be effective in marketing to this group.

Finally, the Pseudo-cosmopolitan Consumer purchases foreign pro-
ducts solely because they are foreign. They are willing to pay a
higher price or accept a lower quality because they feel that owning
foreign products is a status symbol that sets them apart from the
masses. Any marketing strategy that emphasize that the product is
imported or that makes them believe a product is imported even if it
is domestically produced will be effective with this group.

While this typology has not been empirically tested by a
methodology specifically designed to establish its validity, the
overall results of this study favor this typology. This typology
provides some new direction in the development of a sound conceptual
understanding of the foreign product bias phenomenon, and it warrants
further investigation.
Implications for Future Research

The finding that U.S. consumer attitudes have recently undergone a major shift illustrates the necessity of a continual research effort to monitor changes in consumer attitudes toward foreign products. Additionally, this research needs to be expanded to include consumers from other countries. These cross-cultural studies should also investigate the underlying constructs of foreign product bias.

While this research suggests that conjoint analysis may be helpful in designing appropriate marketing strategies these findings should be examined under actual purchase conditions. Ideally conjoint analysis could be used prior to the test marketing of an actual product and the results of this analysis compared to actual market figures to establish a measure of its predictive validity. Ideally, this research would extend over several products and several test market situations. If these results demonstrated that conjoint analysis did have an acceptable level of predictive validity in actual market conditions, then this technique would be extremely valuable in a market which could not support a more conventional marketing research effort.

Finally, a study specifically designed to test the validity of my six group typology is necessary. This study should involve a larger number of consumers who were questioned in considerably more detail about their specific attitudes surrounding the issue of foreign product bias. Should this research establish the validity of this typology our understanding of the foreign product bias phenomenon would be greatly enhanced.
BIBLIOGRAPHY

Books


Articles


Additional Sources


Shocker, Allan D. and Svinwason, V. "LINMAP VERSION III: Linear Programming Techniques for Multidimensional Analysis of Preference Judgments - USERS' MANUAL.


May 12, 1982

Dear Research Participant:

As part of a research project for a graduate degree at The Ohio State University, I am conducting a survey on consumer attitudes towards foreign products sold in the United States.

Enclosed you will find a short questionnaire (15-20 minutes to complete) concerning your attitudes towards imported products. Please answer the questions to the best of your ability; if you don't know about the quality or value offered by products from a particular country answer the question according to how you think these products would rate in terms of quality or value.

Your questionnaire response will remain completely anonymous. Your participation is very important to the success of this project. I thank you in advance for your help.

Sincerely,

Donald G. Howard
Ph.D. Candidate
The Ohio State University

DGH/keh
Here is a list of five countries which currently produce products which are sold in the United States. Please rate each country in terms of the overall quality of products produced there on a scale of 7 (excellent overall quality) to 1 (poor overall quality). There may be two or more countries with the same rating.

<table>
<thead>
<tr>
<th>Country</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>1 (11)</td>
<td>6 (48)</td>
<td>2 (57)</td>
<td>1 (7)</td>
<td>8</td>
</tr>
<tr>
<td>France</td>
<td>1 (10)</td>
<td>6 (20)</td>
<td>1 (30)</td>
<td>1 (7)</td>
<td>8</td>
</tr>
<tr>
<td>Japan</td>
<td>1 (12)</td>
<td>6 (58)</td>
<td>3 (68)</td>
<td>1 (7)</td>
<td>8</td>
</tr>
<tr>
<td>Brazil</td>
<td>1 (10)</td>
<td>6 (15)</td>
<td>3 (20)</td>
<td>1 (3)</td>
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</tr>
<tr>
<td>U.S.A.</td>
<td>1 (10)</td>
<td>6 (58)</td>
<td>3 (68)</td>
<td>1 (7)</td>
<td>8</td>
</tr>
</tbody>
</table>

Using the same procedure as above, please rate each country in terms of the overall best value for one's money of its products sold in the U.S.

<table>
<thead>
<tr>
<th>Country</th>
<th>Excellent</th>
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<td>6 (58)</td>
<td>3 (68)</td>
<td>1 (7)</td>
<td>8</td>
</tr>
</tbody>
</table>

Please circle the answer that best describes how much you agree or disagree with the following statements: SA = Strongly Agree, A = Agree, U = Undecided, D = Disagree, SD = Strongly Disagree.

1. When shopping I often make an effort to determine in which country a product was produced.  
2. I would purchase an American product even if it cost more than the same quality foreign product.  
3. American automobile workers are overpaid.  
4. Given the same tool as foreign workers, American workers can produce the highest quality products in the world.  
5. Knowing in which country a product was produced would be a major factor in determining whether or not I would purchase it.  
6. I feel it is every American's patriotic duty to purchase American made products.  
7. A product assembled in a foreign country but with U.S. made parts is probably lower in quality than the same product assembled in the U.S.

<table>
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<tr>
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<td>3 (68)</td>
<td>1 (7)</td>
<td>8</td>
</tr>
</tbody>
</table>

PART II
Here is a list of nine countries which currently sell products in the United States, and a list of six product categories in which they compete: 

 countries: Brazil Mexico Japan W. Germany USA Thailand France Korea England
 Auto/Automobiles 7.1 7.1 7.2 2.2 2.9 7.0 7.1 4.2
 TV/Titvision 7.6 7.5 1.4 3.5 2.4 5.2 5.5 6.3 5.2
 Clothing/shoes 6.8 6.8 5.2 4.4 2.1 5.5 3.3 6.1 4.2
 Food Products 5.4 5.5 5.5 4.5 1.4 7.1 3.7 7.5 4.2
 Home Appliances 7.4 7.3 2.3 3.6 1.8 5.6 5.3 6.4 4.9
 Toys/games 7.5 6.9 2.3 4.1 2.1 4.5 5.9 5.9 5.3

Means of Rankings

<table>
<thead>
<tr>
<th>Country</th>
<th>Brazil</th>
<th>Mexico</th>
<th>Japan</th>
<th>W. Germany</th>
<th>USA</th>
<th>Thailand</th>
<th>France</th>
<th>Korea</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto/Automobiles</td>
<td>7.1</td>
<td>7.1</td>
<td>7.2</td>
<td>2.2</td>
<td>2.9</td>
<td>7.0</td>
<td>7.1</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>TV/Titvision</td>
<td>7.6</td>
<td>7.5</td>
<td>1.4</td>
<td>3.5</td>
<td>2.4</td>
<td>5.2</td>
<td>5.5</td>
<td>6.3</td>
<td>5.2</td>
</tr>
<tr>
<td>Clothing/shoes</td>
<td>6.8</td>
<td>6.8</td>
<td>5.2</td>
<td>4.4</td>
<td>2.1</td>
<td>5.5</td>
<td>3.3</td>
<td>6.1</td>
<td>4.2</td>
</tr>
<tr>
<td>Food Products</td>
<td>5.4</td>
<td>5.5</td>
<td>5.5</td>
<td>4.5</td>
<td>1.4</td>
<td>7.1</td>
<td>3.7</td>
<td>7.5</td>
<td>4.2</td>
</tr>
<tr>
<td>Home Appliances</td>
<td>7.4</td>
<td>7.3</td>
<td>2.3</td>
<td>3.6</td>
<td>1.8</td>
<td>5.6</td>
<td>5.3</td>
<td>6.4</td>
<td>4.9</td>
</tr>
<tr>
<td>Toys/games</td>
<td>7.5</td>
<td>6.9</td>
<td>2.3</td>
<td>4.1</td>
<td>2.1</td>
<td>4.5</td>
<td>5.9</td>
<td>5.9</td>
<td>5.3</td>
</tr>
</tbody>
</table>
PART IV

Now please imagine yourself considering the purchase of a microwave oven. Here are nine different microwave ovens, read about each one carefully and then rank all nine in terms of how likely you would be to purchase each oven. Give the oven you would most likely purchase a 1, the second most likely a 2...until the last one receives a 9. Thank you.

<table>
<thead>
<tr>
<th>MICRO-WAVE OVEN MODEL M0</th>
<th>MICRO-WAVE OVEN MODEL M1</th>
<th>MICRO-WAVE OVEN MODEL M2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufactured in: Mexico</td>
<td>Manufactured in: Japan</td>
<td>Manufactured in: Mexico</td>
</tr>
<tr>
<td>Price: $1175</td>
<td>Price: $1175</td>
<td>Price: $1175</td>
</tr>
<tr>
<td>Sold at: K-Mart</td>
<td>Sold at: Sears</td>
<td>Sold at: K-Mart</td>
</tr>
<tr>
<td>MODEL RANK: 6.7</td>
<td>MODEL RANK: 3.6</td>
<td>MODEL RANK: 6.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MICRO-WAVE OVEN MODEL M3</th>
<th>MICRO-WAVE OVEN MODEL M4</th>
<th>MICRO-WAVE OVEN MODEL M5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufactured in: Mexico</td>
<td>Manufactured in: Mexico</td>
<td>Manufactured in: The United States</td>
</tr>
<tr>
<td>Price: $125</td>
<td>Price: $125</td>
<td>Price: $125</td>
</tr>
<tr>
<td>Sold at: Buckeye appliance specialty store</td>
<td>Sold at: Buckeye appliance specialty store</td>
<td>Sold at: K-Mart</td>
</tr>
<tr>
<td>MODEL RANK: 3.7</td>
<td>MODEL RANK: 4.3</td>
<td>MODEL RANK: 3.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MICRO-WAVE OVEN MODEL M6</th>
<th>MICRO-WAVE OVEN MODEL M7</th>
<th>MICRO-WAVE OVEN MODEL M8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufactured in: Mexico</td>
<td>Manufactured in: Mexico</td>
<td>Manufactured in: Japan</td>
</tr>
<tr>
<td>Price: $125</td>
<td>Price: $125</td>
<td>Price: $125</td>
</tr>
<tr>
<td>Sold at: Buckeye appliance specialty store</td>
<td>Sold at: Buckeye appliance specialty store</td>
<td>Sold at: K-Mart</td>
</tr>
<tr>
<td>MODEL RANK: 6.9</td>
<td>MODEL RANK: 4.1</td>
<td>MODEL RANK: 6.9</td>
</tr>
</tbody>
</table>

Means of Ranking

NOTE: This is an imaginary list which is supposed to represent any high quality store which specializes in large "hot" appliances.
How please imagine yourself considering the purchase of an umbrella. Here are nine different umbrellas, read about each one carefully and then rank all nine in terms of one letter—A would be to purchase each umbrella.

Give the umbrella you would most likely purchase a 1, the second a 2, and so on. After the last one receives a 9. Thank you.

<table>
<thead>
<tr>
<th>Umbrella Model LX</th>
<th>Umbrella Model LJ</th>
<th>Umbrella Model LK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufactured In:</td>
<td>Manufactured In:</td>
<td>Manufactured In:</td>
</tr>
<tr>
<td>The United States</td>
<td>Japan</td>
<td>Mexico</td>
</tr>
<tr>
<td>Price: $10</td>
<td>Price: $14</td>
<td>Price: $16</td>
</tr>
<tr>
<td>Sold at: Sears</td>
<td>Sold at: Sears</td>
<td>Sold at: Sears</td>
</tr>
<tr>
<td>Product Information: Shown on national TV</td>
<td>Product Information: Recommended by Consumer's Report</td>
<td>Product Information: Recommended by the salesperson</td>
</tr>
<tr>
<td>Model Rank: 4.1</td>
<td>Model Rank: 3.8</td>
<td>Model Rank: 6.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Umbrella Model LN</th>
<th>Umbrella Model LP</th>
<th>Umbrella Model LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufactured In:</td>
<td>Manufactured In:</td>
<td>Manufactured In:</td>
</tr>
<tr>
<td>Japan</td>
<td>Mexico</td>
<td>The United States</td>
</tr>
<tr>
<td>Price: $14</td>
<td>Price: $10</td>
<td>Price: $16</td>
</tr>
<tr>
<td>Sold at: Sears</td>
<td>Sold at: K-Mart</td>
<td>Sold at: Sears</td>
</tr>
<tr>
<td>Product Information: Recommended by Consumer's Report</td>
<td>Product Information: Recommended by the salesperson</td>
<td>Product Information: Recommended by the salesperson</td>
</tr>
<tr>
<td>Model Rank: 6.0</td>
<td>Model Rank: 4.4</td>
<td>Model Rank: 4.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Umbrella Model LQ</th>
<th>Umbrella Model LS</th>
<th>Umbrella Model LT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufactured In:</td>
<td>Manufactured In:</td>
<td>Manufactured In:</td>
</tr>
<tr>
<td>Mexico</td>
<td>The United States</td>
<td>Japan</td>
</tr>
<tr>
<td>Price: $16</td>
<td>Price: $14</td>
<td>Price: $10</td>
</tr>
<tr>
<td>Sold at: The Weatherstop: a specialty store</td>
<td>Sold at: Sears</td>
<td>Sold at: Sears</td>
</tr>
<tr>
<td>Product Information: Recommended by the salesperson</td>
<td>Product Information: Recommended by the salesperson</td>
<td>Product Information: Recommended by the salesperson</td>
</tr>
<tr>
<td>Model Rank: 6.3</td>
<td>Model Rank: 4.5</td>
<td>Model Rank: 7.1</td>
</tr>
</tbody>
</table>

**NOTE:** This is an imaginary store which is supposed to represent any high quality store which specializes in umbrellas and raincoats.

Means of Ranking
Please circle the category which describes you best:

- **Sex:**
  - Female
  - Male

- **Age:**
  - Under 26
  - 26 - 40
  - 41 - 66
  - Over 66

- **Education:**
  - Some college/technical, degree
  - 2-year college
  - 4-year college
  - Master's degree
  - Professional degree

- **Primary Occupation of family head:**
  - Professional, technical
  - Manager, official
  - Self-employed
  - Clerical, sales, service worker
  - Skilled craftsman
  - Factory worker, machine operator
  - Farmer, farm manager
  - Retired

- **Ethnic Background:**
  - Born in a foreign country
  - White - American born
  - Asian - American born
  - Negro - American born
  - Other - American born

- **Last Personal Income Level:**
  - Under 1000
  - 1001 - 2000
  - 2001 - 3000
  - 3001 - 4000
  - 4001 - 5000
  - 5001 - 6000
  - Over 6000

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<table>
<thead>
<tr>
<th>Total Personal Income (Change expected during 1966)</th>
<th>273</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. More than a 50% increase</td>
<td>58</td>
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<tr>
<td>2. 20 to 50% increase</td>
<td>58</td>
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<td>3. 10 to 20% increase</td>
<td>58</td>
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<td>58</td>
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<tr>
<td>5. No change</td>
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<td>6. -5 to -10% decrease</td>
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<tr>
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*The make of last new car purchased since 1959 (if no new car has ever been purchased since 1959, please indicate the last used car purchased)*

- General Motors made
- Ford made
- Chrysler made
- Other, U.S. made
- Japanese
- West German made
- Other, foreign made

- Are you a union member?
  - Yes
  - No

- Are you married to a union member?
  - Yes
  - No

- What area of the United States do you consider yourself a native of?
  - East
  - South
  - New England
  - Midwest
  - West
  - Non-U.S. native

Thank you for your cooperation.
RESPONSES TO OPEN-ENDED QUESTION: Please use the rest of the questionnaire to express your feelings about foreign products or U.S. import policies.

RESPONDENT 0002:

The U.S. labor force has over-priced itself. If a company can make a better profit with less capital in a foreign country - good! That's what our economy is based on - free enterprise.

RESPONDENT 0006:

1. Tariffs should be of equal value, commensurate of money exchange.
2. Quotas are "one-sided" - they are to benefit the setter - it is an easy way out.

RESPONDENT 0010:

Foreign producers have no unfair advantage over American producers. Given additional shipping costs, foreign products should cost more. But they cost less and, in my opinion, are of equal or better quality. I conclude from this that foreign producers are more efficient. I see no reason that American producers cannot be just as efficient. I see no reason to give special advantage to American firms that are not willing to work to keep up with their foreign competitors in the areas of research and development, automation, and market analysis.

RESPONDENT 0012:

I do not buy according to country. I buy according to quality and price. I don't necessarily buy because it's advertised on TV. I think union's demands of high wages and Americans' general lack of pride in their work are the main causes of our economic woes.

RESPONDENT 0021:

If it weren't for Japan, the U.S. cars probably wouldn't be as good as they currently are - but we all know they could be a heck of a lot better - they sure aren't Rolls Royces. I think what the U.S.'s problem is is in their creativity of the new models. Let's face it, they are ugly - and not that sporty to say the least - the other problem is in the pride that they put in their work - maybe if they put their "John Hancock" on their work then it would improve. Plus for what they make they are too expensive. The economy has a lot to do with it - it sucks - it causes depression - depression causes bad work performance - bad work performance causes bad product - overpaid to keep up with economy - depressed then poor workmanship.
RESPONDENT 0023:

Although I do not absolutely support either management or labor, it is imperative that a more cooperative effort be made between both parties. Companies existed prior to organized labor, thus they also provided the breeding grounds for the strong labor surge and power. Cooperation is the key to survival in the world marketplace and competition.

RESPONDENT 0027:

Import quotas used to protect American products that are over-priced or under-quality should be dropped. Good products, fairly priced will move in the marketplace.

RESPONDENT 0033:

We should not impose import units, because for example if U.S. auto workers' cars are all we have to choose from, the price will be sky high and the quality very low. American workers could produce more and better quality if workers and management worked together as a team instead of against each other.

RESPONDENT 0048:

I favor free trade, but should one nation have trade barriers on a broad spectrum of products, then erecting like barriers might be necessary. One must measure the affects on the entire trade package with that nation.

RESPONDENT 0050:

This country is flooded with entirely too many foreign products. We need to put Americans back to work. Unions make entirely too much money. Americans need to take more pride in the products they produce.

RESPONDENT 0052:

I feel if they don't curb the imports coming into the U.S. there is going to be a lot of hard times ahead. The auto industry makes up a large portion of our nation's income.

The auto industry has hurt themselves by not worrying about new technology. All they wanted was to make their money.

RESPONDENT 0053:

BUY AMERICAN!
RESPONDENT 0055:

I feel that the U.S. needs foreign imports to keep the quality of all products in competition. Otherwise, there would be no need for quality.

RESPONDENT 0056:

Patriotism is fine, but there is a limit. I would not buy an American product, when I could receive better quality from a foreign product at the same price.

RESPONDENT 0069:

Bigger tax on imports. More conservative pay raises for auto industry (lower profit margin for auto and big industry).

RESPONDENT 0070:

Some American made products are as good as foreign made, but the price is out of line sometimes. I think that management is as much to blame as is the union.

RESPONDENT 0076:

I feel that if the U.S. manufacturer would start using some of the technology we have given other countries and start using possibly Japan's management policies we, as Americans, could produce the best, highest quality and at the lowest priced products in the world.

RESPONDENT 0081:

The U.S. should allow unrestricted import except for small, critical industries which would be required during national emergencies. Import restrictions would be applicable if it appeared a foreign country were "dumping on the U.S. market". If an industry is over protected it will soon not be competitive in the international scene.

RESPONDENT 0085:

We live and work in a free market system. Unions have, to a large degree, outlived their usefulness.

RESPONDENT 0088:

This country was based on free enterprise. I feel if people overseas can make the same product cheaper and better, then we need a change in product to compete.
RESPONDENT 0092:

In my business, I am not afraid of competition and I believe the U.S.A. should not be afraid of competition. The emphasis of policy should not be to artificially limit competition, but rather to increase the product quality. Whether by improved management techniques or whatever method is necessary.

RESPONDENT 0093:

1. We need to produce a better work force in management and American worker.
2. I agree poor management and lack of planning are the primary cause of the economic problems today.
3. We should restrict the number of foreign products or allow the U.S.A. industries the same import amount to foreign countries.

RESPONDENT 0097:

I believe some foreign products are much better than U.S. products. I believe if the U.S. people would produce the product that the foreign market produces we wouldn't be in the shape we are. The big unions have put their people out of work. The average auto worker is overpaid by $3.00 to $5.00 per hour.

RESPONDENT 0098:

May the product with the best price/performance ratio win!

RESPONDENT 0102:

I would prefer to purchase American made products if they compare in cost and quality. I think the U.S. should cut back severely on foreign imports and stop moving their factories to other countries and stop using foreign labor because of cheaper costs.

RESPONDENT 0104:

In reference to primary cause of economic problems -

1. government intervention -
   -tax rules, especially depreciation allowances
   -EPA
   -OSHA
   -other (numerous) agencies whose requirements have forced cost increases without productivity increases.
2. Management and Unions must share responsibility for poor planning for future good economic times.
RESPONDENT '0105:

No C.C.C.P. or Warsaw Pact Countries should be given any favorable trade status.

RESPONDENT '0110:

I feel that the U.S. must somehow change the attitudes of many of the workers in industry. I think that if American workers were given the same tools and equipment as any other country, they could do just as good a job, if not better, than anyone else (That is if everyone had a positive attitude about their work!). I believe attitude is a major factor here.

Part of this is also due to upper level management and big business. So many companies push employees to their maximum output, which in turn lessens the quality of the work.

If the quality of U.S. products would get better, along with a slight reduction in pay, foreign products would not sell as easily as our own products.

Imports must also be cut to a certain extent, especially in the area of Japanese auto imports. When it comes down to where our auto industry is in deep trouble, we must make major changes in both our auto industry and in the amount of auto imports into the country.

RESPONDENT '0111:

BUY FOREIGN PRODUCTS FOR QUALITY AND PRICE.

RESPONDENT '0113:

In order to get along with other countries of the world, I feel we must import some of their products. One thing I don't like is when other countries dump a product on this country at a much reduced selling price such as steel coming into this country.

RESPONDENT '0114:

Will pay more for U.S. products if from reliable manufacturer at a quality store. Wouldn't buy foreign car because of price of repair parts and availability.

RESPONDENT '0115:

If U.S. would build quality products and prove it to the public, more people would be willing to buy U.S. goods. Since U.S. goods are usually high priced and comparable foreign goods are priced lower, I will buy the less expensive foreign good. The management and the higher up people want to make too much.
RESPONDENT 0118:

Stop U.S. import of foreign products.

RESPONDENT 0123:

Biggest propaganda is Jap cars - are better - drive one, repair it (for three year period) - compare it to U.S. car - owner is too proud and ashamed to admit he is full of *!@%. The Jap car is no damn good.

Bad practice of American business - they sell you a $400 - $1000 item - then they have the guts to ask you if you want to buy a warranty (insurance).

RESPONDENT 0127:

I feel that the American people are not getting a fair share for what they are paying for the product (autos). The produce (food stuffs) passes through too many hands from the farmer to the consumer.

RESPONDENT 0128:

Don't limit, but make us more aware of country that product is produced in.

RESPONDENT 0129:

We should place some kind of limit on goods imported from foreign sources, and should make every attempt to do purchasing on a government basis (i.e. military) from domestic sources.

Americans can build the quality products, given the materials and management decisions to do so.

Americans are used to getting too much compensation for the tasks they are required to perform, especially the repetitive, non-educated positions, such as assembly of cars, etc.

RESPONDENT 0130:

As a quality control person I can see that quality is sacrificed for production quota in American industry. Foreign products should be taxed a large enough duty to set its price close to an equivalent American product.

RESPONDENT 0139:

If American workers would take more pride in their work, and would not build articles that have short life spans, so that we wouldn't have to make large buys on such items as automobiles, stereos, etc. as often as we do. In 1936 Ford advertised a car that would "last almost indefinitely." We haven't had one since. My aunt stated quite a few years ago that it was "planned obsolescence." It is probably the only way we can keep up our economy, and our people working.
RESPONDENT 0145:
I believe we are sacrificing some of our industry, trying to help world economies.

RESPONDENT 0146:
Our whole present economic state exists because of the greed that exists in our large corporations and political system.

RESPONDENT 0153:
Most foreign autos are cheaper and in some respects higher in quality (interior, finish, etc.) but are not as mechanically reliable or as economical to repair as American autos.

RESPONDENT 0154:
With the ease of shipping of products around the world, other nations have access to our markets for almost any non-perishable product. We have to be able to meet their prices and compete with them not only in the U.S. but in the foreign markets as well. The only way we can do that is to lower our prices by dropping wages or benefits to our workers until we reach an equal level to compete on. Our production know-how should give us an edge on the competition so we do not have to drop our standard of living for a long period, but we will have to have a recession for a matter of a year or two to get our working class to respond to going back to work for a lower figure than they are used to.

Down the road 10 years, all will be better off but we have to be able to show them what we are trying to do.

RESPONDENT 0158:
While Japanese autos are often thought of as the best buy - oftentimes they are not the best in quality. U.S. cars are still expected to last longer than Japanese cars. However, their costs are too high, allowing the Japanese car sales to rise.

Good Questionnaire.

RESPONDENT 0159:
I have not noticed many products for sale from Brazil, England, France, West Germany, Mexico, S. Korea. Most products seem to be from U.S.A., Japan, Taiwan, Hong Kong.
RESPONDENT 2001:

There should be no restrictive trade tariffs.

RESPONDENT 2002:

I would prefer to purchase American made, but don't make it a big issue (contrary, probably, to what the results of the questionnaire will show).

RESPONDENT 2004:

Regulation affects only the symptoms of our foreign trade problems. We must compete realistically with other countries. We have the resources and the ability to manufacture high quality goods of all kinds. What we all need is the attitude of wanting to excel at whatever we are doing.

RESPONDENT 2009:

Clothing is the item I am most interested in. I find many things, especially blouse material, I am interested in are foreign made. I don't look for that information until I find out what I like. We're retired and don't buy as many appliances now. We just replace the ones we need and often find they are foreign made and very satisfactory.

We (a couple) believe in buying American products, but they are so much higher priced we decide on foreign products. Cost is important to the retired.

RESPONDENT 2012:

I buy a product based only on its quality. For major purchases - car, ovens, etc. I look at Consumer Reports.

RESPONDENT 2013:

My concern for the unemployed U.S. auto, steel, or construction worker is very limited. They helped get themselves into this position. They should learn to create their own jobs, as the unemployed do in the 3rd, 4th, and 5th world countries.

RESPONDENT 4001:

I feel Americans continue to rip themselves off with over-priced domestic goods and over-taxed imports. I feel unions guarantee that the longer you work for a place, the less that becomes expected of you and the more you get paid. I believe our whole economic system has self-destruction built into it.
RESPONDENT 5008:

Depending on the product price is not always the major factor. Country of manufacturer is also a secondary concern. In many cases, such as clothing, form follows function.

RESPONDENT 5009:

I feel you get what you pay for and in general American-made products cost the most and are the best.

Cars may be the exception.

RESPONDENT 4009:

America has to make better things. Even though it would help the economy to buy American, it is not always the best buy. Americans at present need to get the best value for their $.

RESPONDENT 0051:

U.S. imports are necessary for the balance of trade to hover near equilibrium. It is good diplomatic policy to allow imports without undue tariffs and restrictions. Although it sounds like good economic policy to buy only U.S. made goods, in actuality it may hurt because if foreign imports are reduced by law, the reciprocity effect may hurt U.S. exports.

RESPONDENT 4005:

I don't really believe there is that much difference between American products and foreign ones. America is responsible for her own economy, not unions. If Americans are going to buy American, they should do so because of the quality of the product, not just its "made in America" tag.

RESPONDENT 7001:

I must admit that some ratings biased against Mexico or South Korea will be due to a lesser knowledge of products produced there.

RESPONDENT 7009:

The United States is dragging its feet too much in relation to the rest of the world. Other countries have had products out for years that can't be imported because we don't have anything to compete with them. American workers have lost all their pride in their jobs too. They're not concerned about making a good product, they just want a lot of money to do nothing.
With a good knowledge of the market, anyone can find work, even in areas of high unemployment. Last summer I was making $50,000 per year in Washington, D.C. doing a job that nobody else wanted to learn.

RESPONDENT 7012:

I feel that the quality of goods being made overseas, especially in Japan, is improving greatly. However, I also like to buy American-made products to help the American economy. But, especially in the auto industry, if the U.S. manufacturers continue to be out-priced to a great extent, I could quite possibly buy a foreign-made auto.

RESPONDENT 7014:

Unions are out of control; they need to be kicked in the *?!. I love the U.S.A., but let's face it; our blue collars are lazy and very unproductive when compared to Japan. I feel we should tax the Jap imports heavily (making them pay for it, not the consumer). What the productive forces of this country needs is a real economic scare. I think they can be turned around.

RESPONDENT 7025:

I feel foreign competition is good in that it makes American companies be responsive to the demands of the consumer. I feel that American industry will be healthier in the long run both in domestic and international business if they are forced to compete.

RESPONDENT 7034:

Products produced in Japan are the best in the world. Japan's workers make less and take more pride in their work than U.S. workers. Also, Japanese technology is now as great as U.S. technology.

West German products will soon pass U.S. product quality. The West German's can concentrate their efforts on improving technology, since the U.S. is always there to defend their freedom.

If the U.S. unions will continue to take pay decreases to make available more jobs, then U.S. products can reduce in price to a reasonable rate. If unions will continue to care more about their jobs than keeping ahead of inflation, the U.S. could once again gain control of the best quality products.

RESPONDENT 7036:

I think the U.S. should put more effort into exporting U.S.-made goods in order to maintain a favorable trade balance - as opposed to trying to restrict foreign importation.
RESPONDENT 7045:

If the U.S. stopped importing foreign cars, for example, which sell for a lower price than U.S. made cars the U.S. citizen would be forced to spend a lot more money for a car and receive less quality! I believe prices for American cars would still be increasing also.

RESPONDENT 7048:

I feel Americans' should be more concerned about buying American-made products; however, I know when I buy things I don't concern myself with where the product was made even though I should. I feel U.S. should try to cut down heavily on imports for a designated period of time.

RESPONDENT 7053:

I'm a firm believer in free trade, also a staunch supporter of Milton Friedman.

RESPONDENT 7056:

I bought a Datsun in '78. I felt bad after I did this because many of my friends' parents are auto workers. I didn't feel bad enough to sell it. I want the best possible for my $.

RESPONDENT 7061:

I will only buy a foreign product based on quality and price. The national origin of a product is of no concern to me. I strongly support free competition because I believe it is an incentive for U.S. manufacturers to become more efficient.

RESPONDENT 7066:

Although as a student in an introductory international business course, I have been shown intellectually the need for imports as a part of balance of payments, comparative advantage of trade, etc., it is still difficult for me to overcome feelings that to buy American is somehow better and more patriotic. My father worked for Ford Motor for 25 years and was a union member. It is largely because of the benefits he received from both organizations that he could send his 4 children to college. Also, I was able to pay for college tuition by working at Ford during summers.
RESPONDENT 7076:

I think it's good we trade for economic reasons (which, unfortunately, not enough people know the truth about) and because people of other nations are equally qualified to make and produce products. But the U.S. doesn't need other countries' products to take jobs from us. Therefore, I feel there is good and bad. I pick the best in my price range, no matter where it's from. Who knows what country I'll be working?!

RESPONDENT 7088:

Dumping should be controlled; otherwise, import is fine.

RESPONDENT 7089:

South Korea is excelling quickly in clothing manufacture. Restricting imports makes buying American products a necessity - decreases quality and productivity of U.S.A.

RESPONDENT 7092:

I feel that the U.S. industries must start having quality control. AMC is the worst car dealer, in my mind. They, the U.S., do not compare to the foreign dealers, except for maybe GM. The quality in American-made products better increase in the long-run, because people want quality!!

RESPONDENT 7094:

Recently, Japan seems to have the best reputation for quality products in the automotive, stereo systems product line. I used to think I would never buy a foreign car because it was "unAmerican", but now I have doubts about the American quality.

RESPONDENT 7097:

U.S. has to get off their (rear) ends!

RESPONDENT 7118:

Japan should either lift its trade restrictions it currently has on U.S. products or the U.S. should impose similar restraints on Japanese goods.
RESPONDENT 8008:

Product qualities, as well as price, differs considerably. I have never given much thought or attention to where a particular product is made or its impact on the economy. I do believe Americans should help the economy in any way possible.

RESPONDENT 8010:

I look at price, generally, first. It all depends on the product. If I'm buying china or nice dinnerware many are made in Japan; so, I'll purposely look for some made in England, Ireland, or the U.S.

RESPONDENT 8018:

I feel that U.S. should not allow those many foreign products in U.S.

RESPONDENT 8019:

I prefer many foreign products to U.S.-made, but I do feel that too many foreign products can hurt the U.S. economy.

RESPONDENT 8021:

Theoretically, Americans should buy more U.S. products in order to help our economy and fellow American workers. However, the U.S. is not doing a whole lot for the individuals in this country (i.e. economically), so I believe we should have a wide range of choices of foreign products in order to satisfy our personal needs first, and pray that the government will be able to work out its own economic problems.

RESPONDENT 5018:

Until the U.S. catches up to Japan's craftsmanship, efficiency and technology (and low prices), it doesn't stand a chance in the economy.
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Imports must also be cut to a certain extent, especially in the area of Japanese auto imports. When it comes down to where our auto industry is in deep trouble, we must make major changes in both our auto industry and in the amount of auto imports into the country.

RESPONDENT 0111:

BUY FOREIGN PRODUCTS FOR QUALITY AND PRICE.

RESPONDENT 0113:

In order to get along with other countries of the world, I feel we must import some of their products. One thing I don't like is when other countries dump a product on this country at a much reduced selling price such as steel coming into this country.

RESPONDENT 0114:

Will pay more for U.S. products if from reliable manufacturer at a quality store. Wouldn't buy foreign car because of price of repair parts and availability.

RESPONDENT 0115:

If U.S. would build quality products and prove it to the public, more people would be willing to buy U.S. goods. Since U.S. goods are usually high priced and comparable foreign goods are priced lower, I will buy the less expensive foreign good. The management and the higher up people want to make too much.
RESPONDENT 0118:

Stop U.S. import of foreign products.

RESPONDENT 0123:

Biggest propaganda is Jap cars - are better - drive one, repair it (for three year period) - compare it to U.S. car - owner is too proud and ashamed to admit he is full of *!@. The Jap car is no damn good.

Bad practice of American business - they sell you a $400 - $1000 item - then they have the guts to ask you if you want to buy a warranty (insurance).

RESPONDENT 0127:

I feel that the American people are not getting a fair share for what they are paying for the product (autos). The produce (food stuffs) passes through too many hands from the farmer to the consumer.

RESPONDENT 0128:

Don't limit, but make us more aware of country that product is produced in.

RESPONDENT 0129:

We should place some kind of limit on goods imported from foreign sources, and should make every attempt to do purchasing on a government basis (i.e. military) from domestic sources.

Americans can build the quality products, given the materials and management decisions to do so.

Americans are used to getting too much compensation for the tasks they are required to perform, especially the repetitive, non-educated positions, such as assembly of cars, etc.

RESPONDENT 0130:

As a quality control person I can see that quality is sacrificed for production quota in American industry. Foreign products should be taxed a large enough duty to set its price close to an equivalent American product.

RESPONDENT 0139:

If American workers would take more pride in their work, and would not build articles that have short life spans, so that we wouldn't have to make large buys on such items as automobiles, stereos, etc. as often as we do. In 1936 Ford advertised a car that would "last almost indefinitely." We haven't had one since. My aunt stated quite a few years ago that it was "planned obsolescence." It is probably the only way we can keep up our economy, and our people working.
RESPONDENT 0145:

I believe we are sacrificing some of our industry, trying to help world economies.

RESPONDENT 0146:

Our whole present economic state exists because of the greed that exists in our large corporations and political system.

RESPONDENT 0153:

Most foreign autos are cheaper and in some respects higher in quality (interior, finish, etc.) but are not as mechanically reliable or as economical to repair as American autos.

RESPONDENT 0154:

With the ease of shipping of products around the world, other nations have access to our markets for almost any non-perishable product. We have to be able to meet their prices and compete with them not only in the U.S. but in the foreign markets as well. The only way we can do that is to lower our prices by dropping wages or benefits to our workers until we reach an equal level to compete on. Our production know-how should give us an edge on the competition so we do not have to drop our standard of living for a long period, but we will have to have a recession for a matter of a year or two to get our working class to respond to going back to work for a lower figure than they are used to.

Down the road 10 years, all will be better off but we have to be able to show them what we are trying to do.

RESPONDENT 0158:

While Japanese autos are often thought of as the best buy - oftentimes they are not the best in quality. U.S. cars are still expected to last longer than Japanese cars. However, their costs are too high, allowing the Japanese car sales to rise.

Good Questionnaire.

RESPONDENT 0159:

I have not noticed many products for sale from Brazil, England, France, West Germany, Mexico, S. Korea. Most products seem to be from U.S.A., Japan, Taiwan, Hong Kong.
RESPONDENT 2001:

There should be no restrictive trade tariffs.

RESPONDENT 2002:

I would prefer to purchase American made, but don't make it a big issue (contrary, probably, to what the results of the questionnaire will show).

RESPONDENT 2004:

Regulation affects only the symptoms of our foreign trade problems. We must compete realistically with other countries. We have the resources and the ability to manufacture high quality goods of all kinds. What we all need is the attitude of wanting to excel at whatever we are doing.

RESPONDENT 2009:

Clothing is the item I am most interested in. I find many things, especially blouse material, I am interested in are foreign made. I don't look for that information until I find out what I like. We're retired and don't buy as many appliances now. We just replace the ones we need and often find they are foreign made and very satisfactory.

We (a couple) believe in buying American products, but they are so much higher priced we decide on foreign products. Cost is important to the retired.

RESPONDENT 2012:

I buy a product based only on its quality. For major purchases - car, ovens, etc. I look at Consumer Reports.

RESPONDENT 2013:

My concern for the unemployed U.S. auto, steel, or construction worker is very limited. They helped get themselves into this position. They should learn to create their own jobs, as the unemployed do in the 3rd, 4th, and 5th world countries.

RESPONDENT 4001:

I feel Americans continue to rip themselves off with over-priced domestic goods and over-taxed imports. I feel unions guarantee that the longer you work for a place, the less that becomes expected of you and the more you get paid. I believe our whole economic system has self-destruction built into it.
RESPONDENT 5008: Depending on the product price is not always the major factor. Country of manufacturer is also a secondary concern. In many cases, such as clothing, form follows function.

RESPONDENT 5009: I feel you get what you pay for and in general American-made products cost the most and are the best. Cars may be the exception.

RESPONDENT 4009: America has to make better things. Even though it would help the economy to buy American, it is not always the best buy. Americans at present need to get the best value for their $.

RESPONDENT 0051: U.S. imports are necessary for the balance of trade to hover near equilibrium. It is good diplomatic policy to allow imports without undue tariffs and restrictions. Although it sounds like good economic policy to buy only U.S. made goods, in actuality it may hurt because if foreign imports are reduced by law, the reciprocity effect may hurt U.S. exports.

RESPONDENT 4005: I don't really believe there is that much difference between American products and foreign ones. America is responsible for her own economy, not unions. If Americans are going to buy American, they should do so because of the quality of the product, not just its "made in America" tag.

RESPONDENT 7001: I must admit that some ratings biased against Mexico or South Korea will be due to a lesser knowledge of products produced there.

RESPONDENT 7009: The United States is dragging its feet too much in relation to the rest of the world. Other countries have had products out for years that can't be imported because we don't have anything to compete with them. American workers have lost all their pride in their jobs too. They're not concerned about making a good product, they just want a lot of money to do nothing.
With a good knowledge of the market, anyone can find work, even in areas of high unemployment. Last summer I was making $50,000 per year in Washington, D.C. doing a job that nobody else wanted to learn.

RESPONDENT 7012:

I feel that the quality of goods being made overseas, especially in Japan, is improving greatly. However, I also like to buy American-made products to help the American economy. But, especially in the auto industry, if the U.S. manufacturers continue to be out-priced to a great extent, I could quite possibly buy a foreign-made auto.

RESPONDENT 7014:

Unions are out of control; they need to be kicked in the *?!. I love the U.S.A., but let's face it; our blue collars are lazy and very unproductive when compared to Japan. I feel we should tax the Jap imports heavily (making them pay for it, not the consumer). What the productive forces of this country needs is a real economic scare. I think they can be turned around.

RESPONDENT 7025:

I feel foreign competition is good in that it makes American companies be responsive to the demands of the consumer. I feel that American industry will be healthier in the long run both in domestic and international business if they are forced to compete.

RESPONDENT 7034:

Products produced in Japan are the best in the world. Japan's workers make less and take more pride in their work than U.S. workers. Also, Japanese technology is now as great as U.S. technology.

West German products will soon pass U.S. product quality. The West German's can concentrate their efforts on improving technology, since the U.S. is always there to defend their freedom.

If the U.S. unions will continue to take pay decreases to make available more jobs, then U.S. products can reduce in price to a reasonable rate. If unions will continue to care more about their jobs than keeping ahead of inflation, the U.S. could once again gain control of the best quality products.

RESPONDENT 7036:

I think the U.S. should put more effort into exporting U.S.-made goods in order to maintain a favorable trade balance - as opposed to trying to restrict foreign importation.
RESPONDENT 7045:

If the U.S. stopped importing foreign cars, for example, which sell for a lower price than U.S. made cars the U.S. citizen would be forced to spend a lot more money for a car and receive less quality! I believe prices for American cars would still be increasing also.

RESPONDENT 7048:

I feel Americans' should be more concerned about buying American-made products; however, I know when I buy things I don't concern myself with where the product was made even though I should. I feel U.S. should try to cut down heavily on imports for a designated period of time.

RESPONDENT 7053:

I'm a firm believer in free trade, also a staunch supporter of Milton Friedman.

RESPONDENT 7056:

I bought a Datsun in '78. I felt bad after I did this because many of my friends' parents are auto workers. I didn't feel bad enough to sell it. I want the best possible for my $. 

RESPONDENT 7061:

I will only buy a foreign product based on quality and price. The national origin of a product is of no concern to me. I strongly support free competition because I believe it is an incentive for U.S. manufacturers to become more efficient.

RESPONDENT 7066:

Although as a student in an introductory international business course, I have been shown intellectually the need for imports as a part of balance of payments, comparative advantage of trade, etc., it is still difficult for me to overcome feelings that to buy American is somehow better and more patriotic. My father worked for Ford Motor for 25 years and was a union member. It is largely because of the benefits he received from both organizations that he could send his 4 children to college. Also, I was able to pay for college tuition by working at Ford during summers.
RESPONDENT 7076:

I think it's good we trade for economic reasons (which, unfortunately, not enough people know the truth about) and because people of other nations are equally qualified to make and produce products. But the U.S. doesn't need other countries' products to take jobs from us. Therefore, I feel there is good and bad. I pick the best in my price range, no matter where it's from. Who knows what country I'll be working?!

RESPONDENT 7088:

Dumping should be controlled; otherwise, import is fine.

RESPONDENT 7089:

South Korea is excelling quickly in clothing manufacture. Restricting imports makes buying American products a necessity - decreases quality and productivity of U.S.A.

RESPONDENT 7092:

I feel that the U.S. industries must start having quality control. AMC is the worst car dealer, in my mind. They, the U.S., do not compare to the foreign dealers, except for maybe GM. The quality in American-made products better increase in the long-run, because people want quality!!

RESPONDENT 7094:

Recently, Japan seems to have the best reputation for quality products in the automotive, stereo systems product line. I used to think I would never buy a foreign car because it was "unAmerican", but now I have doubts about the American quality.

RESPONDENT 7097:

U.S. has to get off their (rear) ends!

RESPONDENT 7118:

Japan should either lift its trade restrictions it currently has on U.S. products or teh U.S. should impose similar restraints on Japanese goods.
RESPONDENT 8008:

Product qualities, as well as price, differs considerably. I have never given much thought or attention to where a particular product is made or its impact on the economy. I do believe Americans should help the economy in any way possible.

RESPONDENT 8010:

I look at price, generally, first. It all depends on the product. If I'm buying china or nice dinnerware many are made in Japan; so, I'll purposely look for some made in England, Ireland, or the U.S.

RESPONDENT 8018:

I feel that U.S. should not allow those many foreign products in U.S.

RESPONDENT 8019:

I prefer many foreign products to U.S.-made, but I do feel that too many foreign products can hurt the U.S. economy.

RESPONDENT 8021:

Theoretically, Americans should buy more U.S. products in order to help out our economy and fellow American workers. However, the U.S. is not doing a whole lot for the individuals in this country (i.e. economically), so I believe we should have a wide range of choices of foreign products in order to satisfy our personal needs first, and pray that the government will be able to work out its own economic problems.

RESPONDENT 5018:

Until the U.S. catches up to Japan's craftsmanship, efficiency and technology (and low prices), it doesn't stand a chance in the economy.