# A Comparison of Quality and Retail Price of Domestically Produced and Imported Blazers

## Pamela S. Norum Lee Ann Clark

#### Abstract

There has been increasing interest in the relationships among country of origin and the price and quality of apparel items. The purpose of this study was to investigate price and quality differences from one category of domestic and imported apparel—women's blazers. The perfect information frontier framework provided a theoretical context for this research. Empirically, t-tests were used to determine whether statistically significant differences exist between the mean price and quality of domestic and imported jackets, while Spearman rank correlations were used in describing the relationship between retail price and quality for these samples. Regression analysis was used to investigate further the effect of additional variables on the relationship between price and quality. The results indicated no significant difference between imported and domestic jackets with respect to price and quality and a weak significant difference between the price-quality correlations. Jacket quality, fiber content, store type, and store location were found to influence significantly price.

These results imply that country-of-origin labeling may not be an accurate signal of quality or "best value" for consumers to use when shopping for women's jackets. Additionally, the results suggest that neither retailers nor manufacturers may be on strong grounds in arguing that country of origin makes a difference in the retail prices consumers pay or in the "value" that consumers obtain. Further research could improve upon the limitations of this study by examining additional categories of apparel in a variety of markets during other times of the year. A comparison of quality scores with and without subjective criteria would also be of interest.

There has been increasing interest among manufacturers, retailers, and academicians in the relationships among country of origin and the price and quality of apparel items. This interest arises from concern with satisfying the needs of American consumers as well as the loss of jobs in the textile and apparel industry which may be resulting from increased import competition. Between 1980 and 1986, the dollar value of textile imports increased 130% while the dollar value of apparel imports increased 171%. During the same period 139,000 jobs were lost in the textile industry and 148,000 jobs were lost in the apparel industry (American Textile Manufacturers Institute, 1987). Although job losses may be the result of other factors such as technological change, it is the increased imports that have drawn attention to the country-of-origin issue. Besides arguing that imports negatively affect domestic jobs, domestic apparel manufacturers have questioned whether lower wholesale prices

Authors' Address: Department of Textile & Apparel Management, University of Missouri-Columbia, Columbia, MO 65211.

Acknowledgments: The authors would like to thank Barbara Slusher and George Sproles for their useful comments on early drafts of the paper.

obtained by retailers for imported apparel are passed on to consumers. Quality differences between imported and domestically produced apparel, as well as the extent to which price and quality are related, are also relevant issues when discussing differences between imported and domestically produced apparel.

The purpose of this study was to investigate price and quality differences for comparable domestic and imported apparel. Women's blazers were selected since they comprise an apparel category which is both imported and domestically produced. Also, women's apparel has not generally been the focus of previous research on either price and quality differences between imported and domestically produced apparel or price-quality studies using published product quality ratings (Cline, 1979; Dardis, Spivak, & Shih, 1985; Dickerson, 1982; Geistfeld, 1982; Gerstner, 1985; Maynes, 1976; Morris & Bronson, 1969; Riesz, 1978, 1979; Sproles, 1977; Yamada & Ackerman, 1984). One recent study (Sternquist & Davis, 1986) did use women's sweaters as the unit of analysis. Besides investigating differences in the price and quality of imported and domestic blazers, the correlation between price and quality will also be examined.

Selected factors that influence price besides quality or country of origin, such as brand name and store type, will also be considered. This information should be of interest to manufacturers and retailers, both of whom have a vested interest in the country-of-origin issue, as well as consumer educators concerned with clothing and textile subject matter.

#### **Background**

The growth of imported apparel is related to the lower wholesale prices of apparel in developing countries. The lower prices are the result of lower production costs, primarily less expensive labor. Average hourly wages in the U.S. textile and apparel industries in 1984 were listed at \$8.60 as compared to \$1.65 in Hong Kong, \$1.64 in Taiwan, and \$.56 in Thailand (United States International Trade Commission, 1985). Thus, at the wholesale level, retailers are able to obtain lower prices by purchasing imports (Gilman, 1985; Santora, 1985). There is, however, some question regarding the extent to which the savings from the lower prices are passed on to consumers ("The New Textile/Apparel Trade Act," 1985).

There are a number of reasons why the markup taken on imported goods may offset the savings realized in the wholesale price. First, quotas placed on imports limit the quantity of apparel that may be imported to the U.S. As Dardis et al. (1985) pointed out, "retailers may take advantage of this imposed scarcity and capture the scarcity rent from quotas by charging the same price for domestic and imported apparel. This practice would mean higher profits for retailers who sell imported merchandise at higher markups" (p. 392). Second, larger markups on imported goods may be necessary to cover higher operating costs and greater risks. Examples of these costs include the longer lead time associated with imports and greater problems with delivery (Ehrlich, 1985; Frings, 1987). Regardless of whether the savings are passed on to the consumer, imports do provide competition for domestic products, thereby keeping the wholesale prices of domestic goods lower than they would be in the absence of such competition (Cline, 1979).

Research on price differences between imported and domestic apparel has indicated that, on average, imports have a lower market price. Dardis et al. (1985) found that the mean price of imported men's shirts was 11% less than domestic shirts, while the sale price of the imported shirts was 4% less than the sale price of domestic shirts. Additionally, Cline (1979) found that, overall, imports were 10.8% less expensive than domestic products. For apparel, imports from western Europe, Japan, and Canada (industrialized nations) were more expensive than domestic apparel when no other factors were controlled for. When store type, location, and other variables were held constant, apparel from these areas was less expensive, on average, than apparel made in the U.S. Apparel from countries in Latin America and Asia (developing nations) was found to be cheaper than U.S.-made apparel regardless of whether other factors were held constant (Cline, 1979). Sternquist and Davis (1986) found that country of origin did not have a significant influence on consumers' perceptions of sweater prices.

Besides price differences, another issue is possible quality differences between domestic and imported apparel. Laboratory tests on men's shirts indicated that there were no major differences in quality due to country of origin (Dardis et al., 1985). However, previous research has shown that consumers have not only stated a preference for Americanmade apparel but that they also perceive it to be of higher quality (Dickerson, 1982). Wall and Heslop (1986) also found that Canadians perceived apparel made in Canada, the United States, and western Europe to be of higher quality than apparel made in Oriental and eastern European countries. On the other hand, research on one specific category, women's sweaters, indicated that country of origin did not have a significant effect on consumers' perceptions of sweater quality (Sternquist & Davis, 1986). Whether consumer perceptions are an accurate reflection of actual market conditions is not clear. There are reasons, however, why imported apparel may actually be of similar or higher quality than domestic apparel.

American manufacturers argue that the U.S. has the highest production standards in the world, resulting in the highest quality apparel. U.S. retailers, on the other hand, can specify standards and production techniques to be used in overseas production as well as in domestic production. Consequently, retailers' influence over quality control can result in goods of similar quality but lower price. Furthermore, if labor intensive construction techniques that increase quality are substituted for traditional techniques, the result could be apparel of higher quality but similar price (Gilman, 1985; Moin, 1985; Santora, 1985). It should be noted that, although retailers can develop production specifications, it can be difficult for them to monitor quality control due to lack of geographic proximity. Additionally, communication problems can also pose difficulties (Frings, 1987).

Price and quality have typically been analyzed separately in previous research on country of origin. One exception is the research by Sternquist and Davis (1986) in which the correlation between price and quality ratings, based on consumer perceptions, was calculated for imported and domestic sweaters. The correlation coefficients ranged from .19 to .52.

On the other hand, previous price-quality research has focused on consumer goods for which there exist published quality ratings as well as manufacturers' list prices for the goods. Consequently, apparel has been ignored since testing organizations, such as Consumers' Union, have avoided evaluation of this type of consumer product. Generally, researchers have found a low-to-moderate correlation between price and quality for the consumer goods which have been studied (Geistfeld, 1982; Gerstner, 1985; Maynes, 1976; Morris & Bronson, 1969; Riesz, 1978, 1979; Sproles, 1977; Yamada & Ackerman, 1984). These studies, however, did not examine differences in the price-quality correlation due to country of origin.

Since published quality ratings for apparel are nonexistent, it was necessary to develop a measure of quality appropriate to this research. Quality was defined as the extent to which a product exhibited selected characteristics. The quality score was a weighted average of the ratings on these objective characteristics. Price was defined as the original retail price of the garment.

Besides country of origin, other factors such as brand name, fiber content, garment design, store type, and location may affect the relationship between price and quality. Prior research has generally not considered the effect of these variables simultaneously on the price, quality, and country-of-origin relationship. Dardis et al. (1985) did examine the effect of brand name (proxied by store type) and Sternquist and Davis (1986) did experimentally control for sweater design and fiber content in their efforts to examine the influence of store prestige. Additionally, factors related to the production process, such as production specifications, operator skills, and quality control programs will also affect the price-quality relationship. However, the focus of this study has been limited to product and store characteristics.

The effect of product characteristics, such as brand name, fiber content, and garment design, on the price-quality relationship is difficult to ascertain a priori. Not only does the direction of the effect depend on consumer preferences but also on whether a retailer uses a cost-based or demandoriented pricing strategy. Based on consumer willingness to pay higher prices for brand name merchandise, a difference in the price of brand name and similar private label merchandise can be expected. Differences in quality may or may not be found. Dardis et al. (1985) used store type to proxy brand name. When brand name was controlled for, a difference in the price of imported and domestic shirts was found but not a difference in their quality. The fiber content of an apparel item can be expected to influence the price of that item. Garments made from natural fibers can be expected to have a higher price than those made from manmade fibers due to the higher prices of natural fibers. Thus, if retailers use a cost-based strategy, one would expect the higher wholesale prices associated with natural fibers to be passed on to the consumer. Finally, the design of a garment—that is, whether it is a basic or fashion good—may also have some influence on the price. However, the direction of the effect is not clear. Consumers may be willing to pay a higher price for basic goods since they can get a return on their investment over a longer period of time; it will not be "out of fashion" as quickly. On the other hand, a fashion garment may be priced higher in response to greater demand for fashionable apparel.

The level of store services and store location may also influence the relationship between price and quality. Since specialty stores and department stores are considered to be more service oriented than mass merchandisers or discounters, store type is expected to proxy services offered. One would expect, holding quality constant, that stores which offer greater services would charge higher prices. Supportive of this expectation, Cline (1979) found variation in price due to store type for goods of similar quality. Sternquist and Davis (1986) found that, when holding country of origin constant, store prestige had a significant effect on consumers' perceptions of both sweater quality and

price. However, when quality was also held constant, store prestige did not have a significant effect on sweater price. Store location can be expected to have an effect on price separate from store type due to differences in operating costs (e.g., rent or Merchants' Association fees).

#### Theoretical Framework

An appropriate framework for examining the relationship between price and quality has been developed by Maynes (1976) and involves the identification of the perfect information frontier (PIF). The perfect information frontier is defined as "the positively sloped line segments connecting those points representing price and quality, for which a given quality may be purchased for the lowest price" (p. 65). Theoretically, if consumers have perfect information about prices and quality in the market, they will select a specimen or variety which lies on or near the PIF. Consumers might purchase an item that is near the frontier, but not on it, if they expect to receive characteristics that are not reflected in the quality score. One example would be personal attention from the sales associates in a store (Maynes, 1976). Using Maynes' terminology, a specimen differs from a product variety in that the quality assessment of a specimen reflects the characteristics of both the good itself and the retailer. The quality score for a product variety does not include the characteristics of the seller (Maynes, 1976). Thus, the quality score used in this research is for varieties of women's blazers.

The existence of price-quality combinations above the PIF indicates the extent to which price dispersion exists within a specific product category in a particular market. Extensive price dispersion indicates a low correlation between price and quality. It occurs presumably because consumers have a lack of information about quality and price. This lack of information stems from the technical complexity of products, product differentiation, marketing factors, and the high costs of search (Maynes, 1976). If consumers took the time for price comparison and had the knowledge necessary to make an informed choice, price dispersion would be reduced.

Previous product studies investigating the relationship between price and quality have typically been done at the macro level (Geistfeld, 1982; Gerstner, 1985; Morris & Bronson, 1969; Riesz, 1978, 1979; Sproles, 1977; Yamada & Ackerman, 1984). These investigators have focused on the price-quality relationship for product varieties rather than specimens. This is because these researchers have relied on quality ratings provided by product testing organizations (e.g., Consumers Union), which provide information on product varieties, not specimens. Additionally, these studies have not been specific to any particular market. Sproles (1977) suggested that the investigation of price-quality relationships at the micro (local market) level is important. He further stated that "Maynes' approach to analysis of price-quality relations in local markets appears to be especially relevant" (p. 76). This approach was taken in this study at the micro level.

Additionally, Sproles (1977) has cited the need for

price-quality research in which the quality ratings were based on objective criteria. Thus, subjective characteristics, although important to consumer choice, were not included since they are dependent on consumers' tastes and preferences. Examples of subjective characteristics include color and fit. Additionally, other factors that could influence price or quality, such as brand name and store characteristics, were not included in the quality score but were included in the regression analysis.

In this research the PIF was used to depict graphically the relationship between price and quality for imported and domestic women's jackets. T-tests were used to test statistically for differences between the mean price and quality score of domestic and imported jackets, while Spearman rank correlations were used to measure the relationship between price and quality within each sample. Additionally, regression analysis was used to determine the relationship between price and quality while holding other factors constant.

#### **Data Collection**

The unit of analysis was missy-sized women's blazers. Data on 119 blazers were collected in a medium-sized midwestern town in January 1986. Blazers representing budget, moderate, and better price lines were included. Within a specific store, one jacket of each unique style was included in the sample—that is, if more than one size of a given jacket style was available, one jacket size was used.

The blazers were found in discount stores, general merchandise stores, department stores, and specialty stores<sup>1</sup> (see Table 1). These stores were either part of national or regional chains or privately owned.

Table 1. Distribution of blazers by store type.

Store type	Frequency
Discount	9
General merchandiser	. 11
Department	20
Specialty	79
TOTAL	119

The locations of the stores were regional shopping centers, community shopping centers, or the central business district<sup>2</sup> (see Table 2).

Jackets were selected and data were collected in the stores. Data were collected on the price of the garments, characteristics of the garment that affect product quality, brand name, country of origin, and store characteristics. A discussion of each of these variables follows (see Table 3).

#### Price

Information on price was recorded directly from the price tag attached to the garment. Both the original and sale price were recorded for those jackets that had a reduced price.

Table 2. Distribution of blazers by store location.

Store location	Frequency
Regional mall	45
Community shopping center	52
Central business district	22
TOTAL	119

Table 3. Variable definitions

Variable		
name	Definition	Unit of analysis
PRICE	Retail price of the jacket	Dollars
QUALITY	Level of jacket quality	An index
IMPORT	The jacket's country of origin	1=import 0=otherwise
BRAND	National brand or private label	1=brand name 0=otherwise
DESIGN	Styling of the jacket	1=non-traditional 0=otherwise
WOOL	Wool content of the jacket	Actual percentage
Store Type	The type of store in which the jacket was found	
SPECIALTY	Specialty store	1=specialty store 0=otherwise
DEPT.	Department store	1=dept. store 0=otherwise
GENERAL	General merchandiser	1=gen. merch. 0=otherwise
DISCOUNT	Discount	Omitted category
Store Location	Location of the store in which the jacket was found	
REGIONAL	Regional mall	1=regional mall 0=otherwise
COMMUNITY	Community shopping center	1=comm. mall 0=otherwise
CBD	Central business district	Omitted category

### Only the original price was used in this analysis, since not all jackets had sale prices.

#### Quality

The quality score used in this research was a weighted average of the ratings on selected objective characteristics (Maynes, 1976):

$$Qi = \underbrace{\text{sum of } (Wj^*Xij)}_{\text{sum of } (Wj)} \qquad i=1 \text{ to n}$$

$$j=1 \text{ to 6}$$

where:

Qi=quality score

Wj=a number from 0.00 to 1.00 representing the relative importance assigned to a particular characteristic.

Xij=a score with values from 1 to 7 denoting the extent to which a particular variety exhibits the characteristic as compared with the best conceivable variety.

The ratings for Xij were determined by two clothing and textile "experts." Only those objective characteristics that

could be evaluated in the store prior to purchase were included. The inclusion of objective characteristics that could only be evaluated prior to purchase and the use of marketplace evaluations were expected to be more representative of the conditions consumers actually face when buying a jacket relative to other approaches (e.g., laboratory evaluations). The actual jacket characteristics that were evaluated included the lining, fiber content, stitching, seam allowances, interfacing, roll of the lapel, the method used to attach the buttons, the presence of extra buttons, and the type and size of the buttonholes. All ratings related to buttons and buttonholes were averaged together to obtain one overall score related to this characteristic.

The ratings on these selected objective characteristics are only one component of a jacket's overall quality score. It is also necessary to determine specific weights for each characteristic. Theoretically, the specific weights used in developing the quality scores should not have a significant impact on the overall results (Curry & Faulds, 1986). Consequently, a value of 1 was assigned to each weight, according each characteristic equal value. Further analysis was done in which different weights were assigned to each characteristic. The results using the unequally weighted quality scores lead to essentially the same conclusions as presented in this article.<sup>4</sup>

#### Country of Origin

In 1984 existing textile legislation was amended to clarify and improve country-of-origin labeling requirements. Consequently, data on country of origin could be reliably obtained directly from the garments. The actual country of origin was recorded. However, for the purposes of this paper, the jackets were classified as either domestically produced or imported. This variable (IMPORT) received a value of 1 if the jacket was imported and a 0 otherwise.

#### **Brand Name**

The brand name was obtained from the jacket label. This variable (BRAND) received a value of 1 if it was a national brand name and a 0 otherwise. National brand names were defined as those brands marketed nationally and not sold exclusively in one store (private label merchandise).

#### Store Type

The categories for store type included discount, general merchandise, department, and specialty store. Dummy variables were used in the regression analysis with discount store being the omitted category.

#### Store Location

The categories for store location were regional mall, community shopping center, and central business district. Dummy variables were used in the regression analysis with central business district being the omitted category.

#### Fiber Content

Given the time of the year that the data were collected, there were a large number of 100% wool or wool blend jackets (35% and 30% of the sample, respectively). Consequently, the actual percentage of wool content

(WOOL) was used to measure fiber content.

#### Design

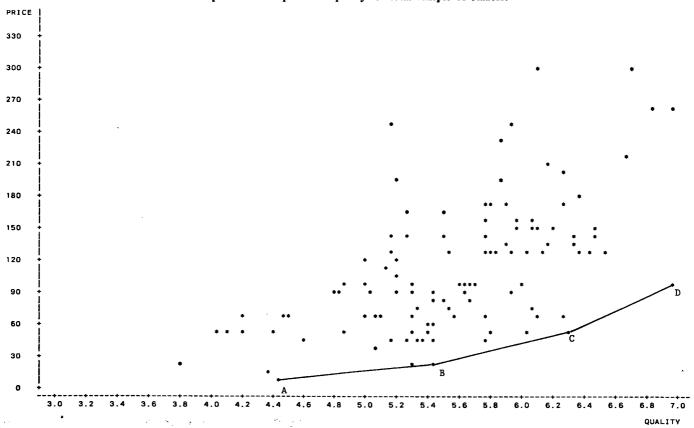
This variable (DESIGN) received a value of 1 if the blazer was of basic styling and a 0 if the styling was fashionable. Traditional styles were those styles with a classic look and detailing. Fashion forward styles were those styles that had a unique appearance because of either the cut or detailing.

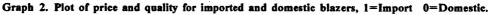
#### Results and Discussion

The perfect information frontier framework (PIF) was used to examine the data graphically. The PIF provides a graphic representation of price and quality ranges, the existence of price dispersion, and the relationship between price and quality. T-tests were used to test for differences in the mean price and quality score between imported and domestically produced blazers. Graph 1 depicts the relationship between price and quality for the complete sample of jackets used in this study. The prices for the jackets ranged from \$10.00 to \$300.00. The quality scores ranged from 3.796 to 6.96. The mean price and quality score for the total sample were \$110.91 and 5.57, respectively (see Table 4). The PIF consists of points A, B, C, and D. The PIF indicates the existence of price dispersion, suggesting that there may be a limited correlation between price and quality. A high correlation coefficient would reflect high (low) quality scores being associated with high (low) prices. while a low correlation coefficient would reflect high (low) quality scores being associated with low (high) prices. To measure the association between price and quality for the whole sample, a Spearman rank correlation coefficient was computed.<sup>5</sup> The  $r^2$  value was equal to 0.58 and was significantly different from zero (see Table 5). This indicates that there is a significant association between price and quality for this sample of jackets. This value is higher than that found by other researchers (.26 to .28) for non-apparel consumer goods (Morris & Bronson, 1970; Sproles, 1977). It is slightly higher than the correlation found for women's sweaters identified as being domestic and from a high prestige store (.52) and almost twice the size found for sweaters identified as domestic and from a low prestige store (.29) (Sternquist & Davis, 1986).

The price-quality relationship was compared for imported and domestically produced goods, as visually represented in Graph 2. The PIF for imported jackets consists of points A, B, C, D, and E, while the PIF for domestically produced jackets consists of points F, G, H, and I. The price-quality combinations are represented by a 1 or 0 for foreign or domestic jackets, respectively. In Table 4 the mean price for the 44 imported jackets was \$101.95, while for the 75 American-made jackets it was \$116.17. A t-test (1.23) indicated that the difference in price between domestic and imported blazers was not significant. The mean quality score for imported jackets was 5.56, while jackets made in the USA had a greater mean quality score of 5.58. A t-test (0.17) again indicated that the quality difference between the two groups was not significant.

Graph 1. Plot of price and quality for total sample of blazers.





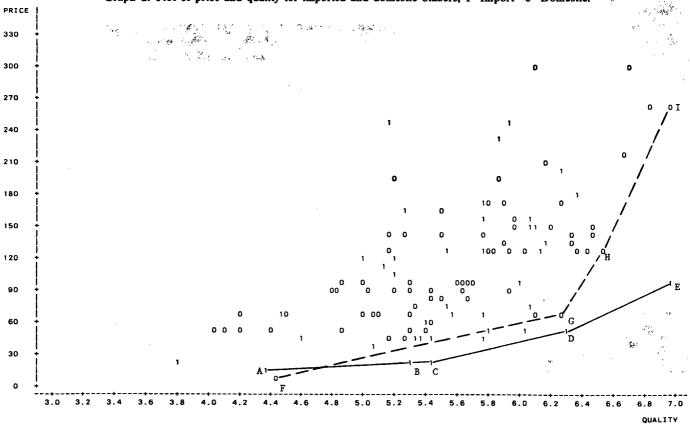


Table 4. Retail price and quality mean values for the total sample and country-of-origin subsamples.

	Mean values		
_	Price	Quality	N
Total sample	110.91	5.57	119
Imports	101.95	5.56	44
Domestic	116.17	5.58	75
t-value	1.23	0.17	

Table 5. Correlation of price and quality for the total sample and country-of-origin subsamples.

	Correlation of price and quality	Significance
Total sample	0.58	.0001
Imports	0.43	.0038
Domestic	0.68	.0001
t-value	1.89**	

<sup>\*\*</sup> significant at  $\alpha = .10$ .

Besides examining price and quality separately the relationship between these two variables was also investigated. Correlation coefficients were calculated to measure the degree of association between price and quality of both groups of jackets. As seen in Table 5, the  $r^2$  value was .43 for jackets produced outside of the United States and .68 for American-made jackets. A t-test (1.89) indicated a weak significant difference in the correlation between price and quality due to country of origin (Snedecor & Cochran, 1967).

The PIF and correlation coefficient between price and quality for imports and American-made clothing both indicate a moderate correlation between price and quality. The  $r^2$  values are larger than those found in other studies (Morris & Bronson, 1969; Sproles, 1977; Sternquist & Davis; 1986). The discrepancy between the correlations may reflect differences in the types of goods being examined in each study. The correlation found in this research is closest to one found for women's sweaters. Although the correlations in this study are higher than those found in previous research, they are still low enough to suggest that price dispersion exists in this market for jackets. The correlation coefficients indicate that price and quality are not as closely associated for imports as they are for domestic blazers.

Since there are additional factors besides country of origin that may influence the relationship between price and quality, further analysis using ordinary least squares (OLS) regression was conducted. The dependent variable was the price of the jacket (PRICE). The independent variables included the jackets' quality (QUALITY), whether or not the blazer was imported (IMPORT), brand name (BRAND), design classification (DESIGN), and wool content (WOOL), as well as dummy variables for store type

Table 6. Parameter estimates for the ordinary least squares regression, price dependent.

Independent variable	В	Standard error of B
INTERCEPT	-20.65	41.86
QUALITY	25.31*	6.834
IMPORT	-6.85	7.94
BRAND	-15.98	12.90
GENERAL	18.62	18.791
DEPT	65.57*	20.929
SPECIALTY	54.85*	15.64
REGIONAL	-72.83	12.602
COMMUNITY	-60.55*	10.64
WOOL	0.39*	0.094
DESIGN	-9.835	10.331

<sup>\*</sup> significant at  $\alpha = .01$ .  $R^2 = 0.65$ .

(SPECIALTY, GENERAL, and DEPT) and store location (REGIONAL and COMMUNITY) from which the blazer came (see Table 6).

As with the previous results, country of origin did not have a significant effect on the price. The variables that had a statistically significant effect were the jackets' quality rating and fiber content, as well as store type and location. As expected, price and quality were positively related. A 1-unit change in quality is expected, ceteris paribus and on average, to result in a \$25.31 change in price in the same direction. Holding other factors constant, a consumer could expect to pay at least \$50 more, on average, for a jacket from a department or specialty store relative to a discount store. Furthermore, everything else being equal, a consumer could expect to pay at least \$60 less, on average, for a jacket from a store in a regional or community shopping center relative to a jacket from a store in the central business district. The results indicate that factors other than inherent product quality affect a product's price. The statistical significance of store characteristics also helps explain the presence of price dispersion in the market for jackets.

#### Conclusions

This research examined the relationship between country of origin, price, and quality for a sample of women's jackets. In comparison with earlier country-of-origin studies it does focus on the conditions in the actual marketplace. Furthermore, the relationship between price and quality was examined, as well as each of these factors separately. No significant difference was found for the mean price and quality due to country of origin. There was a weak significant difference in the coefficient for price and quality between imports and domestic blazers. This research went beyond previous price-quality research in that factors other than country of origin that may affect the price-quality relationship were taken into consideration. Jacket quality, fiber content, store type, and store location were found to influence price significantly.

Contrary to what consumers may perceive about the price

and quality of American-made apparel, the results of this study indicated that, for this sample of women's blazers, there was no statistical difference in these factors between imported and American-made blazers. This difference between consumer perceptions and actual marketplace conditions suggests 1) that consumers may not know how to discern quality in apparel products; 2) that consumers may utilize some combination of objective characteristics that differs from those used in this study; 3) that consumers place relatively greater emphasis on subjective characteristics (e.g., color or fit) rather than on objective characteristics in their assessment of quality; 4) that consumers are simply unaware of what exists in the marketplace with respect to price, quality, and country of origin; or 5) that the conditions in the marketplace have changed to such an extent in the past few years that prior consumer perceptions may have accurately reflected the market at that time but not the current marketplace.

Based on the mean price and quality values, it appears that, on average, for similar quality consumers can expect to pay a higher price for domestic blazers. Consequently, one might be tempted to conclude that, on average, imported blazers offer consumers a better "value." However, it would be inappropriate to draw such conclusions based on only one sample and on a level of significance equal to only .10 rather than .05 or .01.

Besides implications for consumers this research also has implications for retail buyers and manufacturers. Retail buyers argue that they can provide the consumer with a better value by purchasing apparel that is made outside of the U.S. American manufacturers argue that they are able to offer a better value to the consumer. If imports are actually a better value and the savings are passed on to the consumer, then one would expect the correlation coefficient to be significantly lower for imported jackets (high quality and low price). The converse would be true if American-made jackets were a significantly better value. These results suggest that there is only a weak difference in the pricequality relationship between imported and domestically produced jackets. Since there was not a significant difference in the price of the garments, it is possible that savings obtained at the wholesale level for imported jackets are not passed on to the consumer.

Limitations of this study include the use of one apparel category in one market at a specific point in time. Additional studies on other categories of apparel in other markets at various times of the year would be useful. Additional research that indicates a lack of relationship between country of origin, price, and quality would suggest that American apparel manufacturers may want to find ways to differentiate their products from imports. For example, fit is often cited as an important consideration in consumer purchases of apparel (Wall & Heslop, 1986). It may be necessary for American apparel manufacturers to develop standardized sizes that are appropriate to current U.S. populations and emphasize this aspect in promotional efforts such as the "Buy America" campaign. Additional research that incorporates subjective characteristics, such as fit, in developing quality scores may also prove useful. Finally, it would also be interesting to examine the effects of the

individual components of quality on price.

#### Footnotes

<sup>1</sup>Discount stores are defined as outlets presenting a discount image and handling a variety of merchandise lines. Examples include Wal-Mart and K-Mart. General merchandise stores are defined as retail outlets carrying an extensive variety of product lines to satisfy family and household needs. Examples include Sears and J.C. Penney. Department stores are defined as large retail institutions that offer a variety of merchandise lines and are organized by department. An example would be Dillards. Specialty stores are defined as outlets which specialize in selling specific merchandise categories, such as women's apparel. Seiferts and Casual Corner are examples (Burstiner, 1986).

<sup>2</sup>A regional mall is defined as the largest of planned shopping centers, often 30 to 100 acres, that serves 100,000 to 200,000 shoppers. It may include as many as 100 retail stores and service businesses and is anchored by one or more department stores. A community shopping center is defined as a smaller version of the regional shopping center. It is anchored by a large variety store or junior department store. The central business district is defined as the downtown shopping area in the core of the city (Burstiner, 1986).

<sup>3</sup>One of the experts was a faculty member who teaches textile science, while the other was an instructor who was previously a department store buyer and has taught clothing construction.

<sup>4</sup>The results of the weighted regression using unequal weights in the calculation of the quality scores are available from the authors. The only test for which there was a difference in the results using the equally and unequally weighted quality scores was for the *t*-value used to test for a difference between the correlation coefficients for imported and domestic blazers. Instead of a weak significant difference there was no significant difference at all.

<sup>5</sup>Kendall rank correlations were also calculated, but the Spearman was used to compare with previous research (Morris & Bronson, 1969; Sproles, 1977). Both the Spearman and Kendall coefficients lead to an identical interpretation of the data, although the Kendall coefficient has a lower value due to the computational method.

#### References

American Textile Manufacturers Institute, Inc. (1987, June). Textile HI-Lights. Washington, DC: Author. Burstiner, I. (1986). Basic retailing. Homewood, IL: Irwin.

Cline, W.R. (1979). Imports and consumer prices: A survey analysis. *Journal of Retailing*, 55(1), 3-24.

Curry, D.J., & Faulds, D.J. (1986, June). Indexing product quality: Issues, theory and results. *Journal of Consumer Research*, 13, 134-145.

Dardis, R., Spivak, S.M., & Shih, C.-M. (1985). Price and quality differences for imported and domestic men's dress shirts. Home Economics Research Journal, 13(4), 391-399.

- Dickerson, K.G. (1982). Imported versus U.S.-produced apparel: Consumer views and buying patterns. *Home Economics Research Journal*, 10(3), 241-252.
- Ehrlich, P.C. (1985, June 25). Sourcing in the Far East—Esprit's way. Women's Wear Daily, pp. 1, 17.
- Frings, G.S. (1987). Fashions from concept to consumer. New York: Prentice-Hall.
- Geistfeld, L.V. (1982). The price-quality relationship—revisited. *Journal of Consumer Affairs*, 16(2), 334-346.
- Gerstner, E. (1985, May). Do higher prices signal higher quality? *Journal of Marketing Research*, 22, 209-15.
- Gilman, H. (1985, May 9). More apparel makers turn abroad. The Wall Street Journal, p. 6.
- Maynes, E.S. (1976). Decisionmaking for consumers. New York: Macmillan.
- McLean, F.P., Roper, L.L., & Smothers, R. (1986). Imported versus domestic blouses: Women's preferences and purchase motives. *Home Economics Research Journal* 14(3), 306-313.
- Moin, D. (1985, June 17). The retailers: Defending their sources. Women's Wear Daily, p. 5.
- Morris, R.T., & Bronson, C.S. (1969). The chaos of competition indicated by Consumer Reports. Journal of Marketing, 33, 26-34.
- The new textile/apparel trade act: How would it affect retailers: (1985, June). Earnshaw's Infants, Girls and Boys Wear Review, pp. 52-53.

- Riesz, P. (1978). Price versus quality in the marketplace, 1961-1975. Journal of Retailing, 54(4), 15-28.
- Riesz, P. (1979). Price-quality correlations for packaged food products. *Journal of Consumer Affairs*, 13(2), 236-247.
- Santora, J.E. (1985, May). Sales reps rap. *Bobbin*, pp. 147-150.
- Snedecor, G.W., & Cochran, W.G. (1967). Statistical methods. Ames: The Iowa State University Press.
- Sproles, G.B. (1977). New evidence on price and product quality. *Journal of Consumer Affairs*, 11(1), 63-77.
- Sternquist, B., & Davis, B. (1986). Store status and country of origin as information cues: Consumer's perception of sweater price and quality. *Home Economics Research Journal*, 15(2), 124-131.
- United States International Trade Commission. (1985). Emerging textile-exporting countries, 1984: Report on investigation no. 332-184 under section 332 of the tariff act of 1930, USITC publication 1716. Washington, DC: Author.
- Wall, M., & Heslop, L.A. (1986). Canadian consumer attitudes toward the quality of Canadian, U.S. and foreign made apparel. ACPTC Proceedings: National Meeting 1986. Monument, CO: Association of College Professors of Textiles and Clothing.
- Yamada, Y., & Ackerman, N. (1984). Price-quality correlations in the Japanese market. *Journal of Consumer Affairs*, 18(2), 251-265.