

섬유 및 의류 수입이 국내 생산에 미치는 영향

The Effect of Textile and Apparel Import on Competing Domestic Production

삼성물산주식회사, Samsung Art & Design Institute

교무실장 홍재경

Samsung Art & Design Institute, Samsung Corporation

Academic Director: Jae Kyung Hong

〈목 차〉

I. Introduction	IV. Research Method & Data
II. Hypotheses	V. Empirical Models and Estimated Results
III. Review of Literature	VI. Conclusions
	List of References

〈Abstract〉

본 연구는 Pelzman and Martin (1981)의 불균형 국내 산출 방정식 (disequilibrium domestic output equation) 을 이용하여 수입 섬유 및 의류 제품이 미국 내에서 생산되는 섬유 및 의류 제품의 생산량에 미치는 영향을 통계적으로 분석하였다.

불균형 국내 산출 방정식에서 Pelzman and Martin (1981)은 특정 기간 동안 미국 내의 생산량은 7가지의 변수 즉, (1) 생산 근로자의 평균시간 임금, (2) 자본의 사용 가격, (3) 수입품의 비교 가격, (4) 실질 여유 소득, (5) 섬유 및 의류 제품의 국내 가격, (6) 섬유 및 의류 제품의 재고량, (7) 섬유 및 의류 제품의 수입량에 의해 영향을 받는다고 가정하였다. 그러나 불균형 국내 산출 방정식을 만족하는 정부 기관의 통계자료가 다 없기 때문에 수정된 국내 산출 방정식을 만들어서 분석하였다.

이 수정된 국내 산출 방정식을 이용하여 수입 섬유 및 의류 제품이 미국 내에서 생산되는 섬유 및 의류 제품의 생산량에 미치는 영향을 통계적으로 처리하여 그 결과를 분석하였다. 그 분석된 결과로는 국내 의류 및 섬유 생산 수준은 재고 변화보다는 가격 변화에 더 민감하게 반응한다. 그리고 국내 의류 및 섬유 생산 수준은 수입 의류 및 섬유의 수입량과는 역관계이다. 이것은 수입 의류 및 섬유의 증가는 국내 의류 및 섬유 생산의 감소를 야기시킨다. 이 불균형 국내 산출 방정식이 다른 나라의 분석에도 유용할 것이다.

I. Introduction

Imported textile and apparel items have become increasingly popular at the United States marketplace in recent years. Within the past decade these imports from low-wage, developing countries have increased drastically in many textile and apparel categories. Today, textile and apparel imports compete with items produced in the United States that are very similar in fiber content and style. For example, imported apparels are present in virtually all categories and price lines, including those carrying expensive, prestigious brand names. According to the Textile Hi-Lights (1993), more imported items are sold in the markets than comparable domestic apparels. It is estimated that 61.3% of the apparel in the U.S. marketplace is now imported.

Today, Asian textile and apparel manufacturers are establishing production facilities in Caribbean countries such as Haiti, Jamaica, Dominican Republic and Costa Rica. These Caribbean Basin Initiative countries enjoy duty-free and quota-free access to the United States markets.

Domestic textile and apparel manufacturers and labor unions have helped enact three major steps to counteract the problems mentioned above. First, all textile and apparel products are required by law to be labeled conspicuously as to the country of origin. This has made American-made products more easily identifiable since they were not previously required to carry such a label prior to December 1984.

Second, "Made in U.S.A." and "Buy American" campaigns promoting domestically-made merchandise have been developed. These campaigns, directed at retailers as well as consumers, are some of the advertising campaigns in the apparel industry.

Third, U.S. textile and apparel industry leaders have fought for tariffs, quotas, and other measures to protect the domestic sector from the influence of imports.

Thus, intense pressure has been put on legislators to take restrictive action against imports. Economists, on the other hand, suggest that trade barriers should be minimized because they believe that free trade benefits the consumer. Many economic experts believe that lower income Americans in particular benefit from the availability of low-cost imported products. There is no easy answer to the issue of limiting imports; it is a complex matter which involves not only economic considerations but also many global political and social concerns. The United States is concerned both with maintaining political goodwill as well as an altruistic stance in assisting developing countries - along with the maintenance of its own domestic industries.

II. Hypotheses

H1: The level of domestic textile output is positively related to textile employment, positively to weekly average spindle hours, positively to the ratio of domestic textile price in time period t to domestic textile price in time period $t-1$, negatively to the ratio of textile inventories in time period t to textile inventories in time period $t-1$, positively to capacity, and negatively to the level of textile imports in time period t and time period $t-3$.

H2: The level of domestic apparel output is positively related to apparel employment, positively to weekly average spindle hours, positively to the ratio of domestic apparel price in time period t to domestic apparel price in time period $t-1$, to the ratio of apparel inventories in time period t to apparel inventories in time period $t-1$, positively to capacity, and negatively to the level of apparel imports in time period t and time period $t-3$.

III. Review of Literature

1. Consumers' Views toward Imported Apparel

The increasing flow of textile and apparel imports into the United States marketplace over the years has injured domestic textile and apparel producers. One method used by domestic American producers to counter the large influx of imports was with a labelling program that was initiated in the early 1980s. Labels stating "Made in U.S.A." are now more widely used by domestic producers, and consumers have been coached by media promotions to look for these labels in the textile and apparel items they purchase as symbols of quality. In the U.S. marketplace, consumers of apparel have indicated their opinion by purchasing either imported or domestic products. The consumers' views toward imported apparel have interested many researchers (Dickerson, 1982; McLean, Roper and Smothers, 1986; Atkins and Jenkins, 1988; Bergeron and Carver, 1988; Dardis, Spivak and Shih, 1985).

In putting these several studies together, we can observe the following conclusions. A majority of the consumers were aware of the penetration of imported apparel into the U.S. markets, perceived correctly that a trade deficit existed in the this commodity area, and also knew that there was a comparative wage advantage for importing countries. Similarly, a majority of the consumers saw imported apparel as damaging to the United States industry and expressed concern over this. A majority also favored passing stronger laws to limit imported apparel. The consumers' views that laws should further restrict imports were related to concerns for the U.S. industry rather than to perceptions of unbalance of trade status.

A majority of the consumers also indicated that their purchases of apparel were influenced by their concern for the domestic industry and that they considered it important that items they bought had been produced

in the U.S. These views were contrary to the theory of comparative advantage, which suggests that consumers benefit from buying goods produced where they can be made least expensively. The economists may very well say that the consumers' views of loyalty and preference for the U.S. goods may be not be in the consumers' best interest. There is also a chance that consumers' views expressed in the studies show that consumers were actually less concerned than they indicated they were because they thought they should answer in a manner favorable to domestically produced textiles and apparel.

Although the U.S. consumers preferred domestically produced apparel, a majority of the consumers had obviously encouraged the influx of imported apparel products by buying them. It is possible that the consumers' actual buying patterns are not consistent with the preference the majority expressed for the U. S. products.

Actually, consumers did not have a definite preference for apparel made domestically over imported apparels. Most consumers did not read country of manufacture labels before a purchase, they did not consider country of manufacture a significant factor in the buying of apparel, and they did not perceive a difference between domestic goods and imports. Also, most did not prefer to buy domestically produced apparels for any particular reason.

On the bright side, consumer buying habits seemed to be characterized by neutrality. Consumers were no more predisposed to buy imports than they were to buy domestically produced apparels. It should encourage producers that consumers had a positive view of the quality of domestically produced apparel, while they remained neutral toward imports. Furthermore, consumers were aware of the trade deficit in textile and apparel, felt that it was harmful to the domestic industries, and, most importantly, would consider buying more domestically produced apparel in order

to help the U.S. industry.

2. Effects of "Made in U.S.A." and "Buy American" Campaigns

A number of producers are now promoting their goods as American-made. Two examples of this strategy are Plymouth's "Born in America" and Miller's "Made the American Way" campaigns. Perhaps the most extensive effort has been the "Made in U.S.A." campaign, sponsored by the Crafted With Pride in the U.S.A. Council. The purpose of this campaign is to convince consumers to look for and purchase apparel "Made in U.S.A." Several researchers have examined the effects of "Made in U.S.A." and "Buy American" campaigns (Knitting Times, 1988; Ettenson, Wagner and Gaeth, 1988; Tolbert, Sternquist and Davis, 1988).

In summing up these studies, the following conclusions emerged. American producers could bring about change of consumers' buying patterns by capitalizing on the consumers' perception of domestic apparel as high quality, their desire to have a healthy domestic textile and apparel industries, and their apparent willingness to contribute toward that purpose by the purchase of more domestically produced apparels. Consumer education by means of the most effective media is a very important tool that producers will want to use in order to let consumers know how much their support is needed. An appeal to patriotism should be considered, but producers will also have to remain committed to satisfying the consumer's primary needs for quality, fit and style of apparel.

3. Studies of Domestic Output Model

In recent years the behavior of the relationships between quantity of imports and domestic output, employment, and domestic price has become the

subject of many interesting theoretical and empirical investigations. Morkre and Tarr (1980, 1984), Pelzman and Martin (1981), Morke (1984) and Hamilton (1990) have analyzed employment effects and elaborated the implications of increased imports, domestic output, domestic price, etc. Research has designed to provide these estimates of the influence of increased imports on domestic production and employment have utilized a partial equilibrium approach. The partial equilibrium approach of these studies has as one of its basic premises that increased expenditure on imports reduces the expenditure on the domestic substitute by the full amount. These researches has developed and tested a partial equilibrium model where the direct impact of increased imports on domestic production and employment of the competing domestic industry can be measured without restricting the changes in expenditure on the domestic good to equal that of the foreign good. Moreover the direct impact on employment is estimated through the use of a derived output demand function.

IV. Research Method & Data

1. Empirical Output Model

The output theory is derived from a disequilibrium domestic output equation presented by Pelzman and Martin (1981). As is usual in most economic studies, the ideal data were unavailable and various compromises had to be made. Therefore, we revise some variables to estimate the effect of textile and apparel imports on competing domestic products in this study. The revised domestic output function is as follows:

$$Q_t = f\{LE_t, CU_t, (P_t/P_{t-1}), (I_t/I_{t-1}), CP_t, M_{t-1}\}$$

Where,

Q_t = domestic output in time period t ,

LE_t = level of employment in time period t ,

CU_t = capital utilization rate in time period t ,

P_t/P_{t-1} = ratio of domestic price of output in time period t to domestic price of output in time period $t-1$,

I_t/I_{t-1} = ratio of product inventory in time period t to product inventory in time period $t-1$,

C_{Pt} = capacity in time period $t-1$,

M_{t-n} = quantity of import demanded in time period $t-n$,

t = subscript denoting time period, and

n = length of the time lag.

As we would expect, the level of output will vary directly with the level of employment, capital utilization rate, ratio of domestic price to time-lagged domestic price, and capacity. On the contrary, the level of output will vary indirectly with the levels of ratio of product inventory to time-lagged product inventory, and time-lagged quantity of imports demanded.

2. Data

The data used in this study were monthly time series for the period from January 1970 to September 1991. Most series were taken directly from published sources, and some were collected from unpublished data provided by U.S. Government agencies.

(1) Quantity of Imports

The quantity of textile imports are reported in the Textile Hi-Lights Monthly Supplements. The monthly supplements are published by the American Textile Manufacturers Institute (ATMI). The data are reported in square meter equivalents after January 1989, and thus U.S. Department of Commerce conversion factors were used to convert units to square meter equivalents (SME). To obtain the quantity of textile imports, we need to set up the following equation:

Quantity of Textile Imports = Total Textile and Apparel Imports (SME) - Cotton Apparel (SME) -

Man-Made Apparel (SME) - Wool Apparel (SME). The quantity of apparel imports were calculated by totaling the cotton apparel, man-made apparel and wool apparel imports.

(2) Producer Price of Domestic Textiles

The selected textile mill products index (1982=100) in the special commodity groupings was used for the producer price index. The special commodity groupings are tabulated in the Supplement to Producer Price Indexes. The selected textile mill products commodity does not exist prior to 1976; therefore, the textile products (excluding hard and bast fiber products) category is used for the period 1970 to 1975. This category (1967=100) is multiplied by a conversion factor to revise the index to a 1982 year base. The data was published by U.S. Department of Labor.

(3) Consumer Price of the Domestic Apparel

The Apparel and Upkeep category (1982-1984=100) in the consumer price index was used for the domestic price of apparel. The consumer price index is released in the CPI Detailed Report. This report is a monthly report on consumer price movements and is published by the Bureau of Labor Statistics in the U.S. Department of Labor.

(4) Domestic Output

The Industrial Production Index (1987=100) was used for domestic output. The textile mill products index was used for domestic textile output, and the apparel products index represented domestic apparel output. This data was reported on the Federal Reserve Bulletin and was collected by Board of Governors of the Federal Reserve System.

(5) Weekly Average Spindle Hours

This variable was used as a proxy variable for capital utilization rate and was collected by using the

Textile Hi-Lights. The Textile Hi-Lights was prepared and published quarterly by the ATMI Economic Information Division.

(6) Total Inventories

These variables were collected from the Current Industrial Reports (M3-1): Manufacturers' Shipments, Inventories, and Orders. The total inventories of textile mill products were represented for textile inventories, and the total inventories of home goods and apparel were used for apparel inventories. The Current Industrial Reports are published by the U.S. Department of Commerce, Bureau of the Census.

(7) Capacity

The capacity data were collected by using the Federal Reserve Bulletin. This variable was tabulated under the output, capacity, and capacity utilization heading in the Financial and Business Statistics. The bulletin is issued monthly under the direction of the Board of Governors of the Federal Reserve System.

(8) Employment

This variable was reported in the Supplement to Employment and Earnings. The total employees of textile mill products were used for textile employment, and the total employees of apparel and other textile products represented apparel employment. The Supplement is published by the U.S. Department of Labor, Bureau of Labor Statistics.

V. Empirical Models and Estimated Results

1. Textile Output Models

The log linear form of output equation for textiles is generally specified as:

$$\log \text{TMpt} = \beta_0 + \beta_1 \log \text{TEt} + \beta_2 \log \text{WAST} + \beta_3 \log (\text{PUSt}/\text{PUS}_{t-1}) + \beta_4 \log (\text{It}/\text{I}_{t-1}) + \beta_5 \log \text{Cpt} + \beta_6 \log \text{IMQt-n} + u_t$$

where,

TMpt = domestic textile output in period t,

TEt = textile employment in period t,

WAST = weekly average spindle hours in period t,

PUSt = producer price index of the domestic textiles in period t,

It = textile inventories in period t,

Cpt = capacity in period t,

IMQt-n = quantity of textile imports in period t-n,

ut = an error term in period t,

t = subscript denoting time period, and

n = length of the time lag.

The expected signs of the coefficients are:

$$\beta_1, \beta_2, \beta_3, \beta_5 > 0; \beta_4 < 0; \beta_6 > 0 \text{ or } \beta_6 < 0.$$

According to production theory, the domestic textile output will increase as textile employment, weekly average spindle hours, and capacity increase, respectively. It is assumed above that β_1 , β_2 , and β_5 are positive. The positive sign for β_3 indicates that a rise in domestic price causes an increase in domestic production. The negative sign for β_4 suggests that an increase in inventories will induce a decrease domestic output. The sign for β_6 has more than one meaning. If imports serve to replace domestic production, then $\beta_6 < 0$. However, if both imports and domestic production are augmenting a response to a general growth in domestic demand, then $\beta_6 > 0$. In either case, the import elasticity of output would provide an estimate of the direct impact of increased imports on domestic production.

The estimated parameters of output equations for textiles were:

$$\begin{aligned} \log\text{TMPt} = & - 3.6937 + 0.7861\log\text{TEt} + 0.2028\log\text{WASt} \\ & (0.0001) \quad (0.0001) \\ & + 3.0534\log(\text{PUSt}/\text{PUSt-1}) - 0.1714\log(\text{It}/\text{It-1}) \\ & (0.0001) \quad (0.0001) \\ & + 0.9370\log\text{Cpt} - 0.0485\log\text{IMQt} \\ & (0.0001) \quad (0.0001) \end{aligned}$$

$$R^2 = 0.8479$$

$$\begin{aligned} \log\text{TMPt} = & - 3.2292 + 0.6517\log\text{TEt} + 0.2054\log\text{WASt} \\ & (0.0001) \quad (0.0001) \\ & + 3.0001\log(\text{PUSt}/\text{PUSt-1}) - 0.1814\log(\text{It}/\text{It-1}) \\ & (0.0001) \quad (0.0001) \\ & + 0.9323\log\text{Cpt} - 0.0387\log\text{IMQt-3} \\ & (0.0001) \quad (0.0001) \end{aligned}$$

$$R^2 = 0.8422$$

where the levels of significance are shown in parentheses.

The import elasticities of output (-0.0485 and -0.0387) had negative signs and were statistically significant. If it is given that imports serve to replace domestic production, then an increase in textile imports leads to decreasing domestic output. But, the impact of imports on domestic textile production was quite small because the import elasticities of output were very small. The estimated parameters for the inventory change (-0.1714 and -0.1814) were negative and were significant at the 0.0001 level. The estimated coefficients for the change in domestic textile price (3.0534 and 3.0001) were positive and were statistically significant. These results indicate that the textile output is very responsive to changes in the producer price of domestic textiles. The parameter estimates for the textile employment (0.7861 and 0.6517) were of the correct sign and were statistically significant. Likewise, the estimated coefficients for the weekly average spindle hours (0.2028 and 0.2054) were significant and had positive signs, and the estimated parameters on the capacity variables (0.9370 and 0.9323) were statistically very significant and had the

correct signs.

On the whole, the estimated coefficients for the textile output equations are significant at the acceptable level and of the correct sign as anticipated.

2. Apparel Output Model

The log linear equation for the apparel output model is generally specified

as:

$$\begin{aligned} \log\text{APt} = & \beta_0 + \beta_1\log\text{AEt} + \beta_2\log\text{WASt} + \beta_3\log(\text{PUSt}/\text{PUSt-1}) \\ & + \beta_4\log(\text{It}/\text{It-1}) + \beta_5\log\text{Cpt} + \beta_6\log\text{IMQt-n} + \text{ut} \end{aligned}$$

where,

APt = domestic apparel output in period t,

AEt = apparel employment in period t,

WASt = weekly average spindle hours in period t,

PUSt = consumer price index of the domestic apparel in period t,

It = apparel inventories in period t,

Cpt = capacity in period t,

IMQt-n = quantity of apparel imports in period t-n,

u_t = an error term in period t ,

t = subscript denoting time period, and

n = length of the time lag.

The expected signs of the parameters are:

$\beta_1, \beta_2, \beta_3, \beta_5 > 0$; $\beta_4 < 0$; $\beta_6 > 0$ or $\beta_6 < 0$.

The expected signs follow the same views as in the previous sections on textiles.

The estimated coefficients for the apparel output equations were:

$$\begin{aligned} \log AP_t = & -11.7280 + 0.9925 \log AE_t + 0.2684 \log WAS_t \\ & (0.0001) \quad (0.0001) \\ & + 2.5335 \log(PUS_t/PUS_{t-1}) - 0.7571 \log(I_t/I_{t-1}) \\ & (0.0001) \quad (0.0001) \\ & + 2.6028 \log CP_t - 0.0688 \log IMQ_t \\ & (0.0001) \quad (0.0001) \end{aligned}$$

$$R^2 = 0.8350$$

$$\begin{aligned} \log AP_t = & -11.0711 + 0.8386 \log AE_t + 0.2674 \log WAS_t \\ & (0.0001) \quad (0.0001) \\ & + 2.4982 \log(PUS_t/PUS_{t-1}) - 0.7515 \log(I_t/I_{t-1}) \\ & (0.0001) \quad (0.0001) \\ & + 2.5625 \log CP_t - 0.0513 \log IMQ_{t-3} \\ & (0.0001) \quad (0.0001) \end{aligned}$$

$$R^2 = 0.8214$$

where the probability values are shown in parentheses.

The estimated coefficients for the price change (2.5335 and 2.4982) had positive signs and were significant at the 0.0001 level. These consequences suggest that the apparel output is very sensitive to changing the consumer price of domestic apparel. The estimated parameters for the change in inventory (-0.7571 and -0.7515) had negative signs and were statistically significant. The import elasticities of output (-0.0688 and -0.0513) were negative and were statistically significant. These results show that apparel imports serve to replace domestic products. Thus, increasing imports induces a decrease in domestic output. However, the magnitude of import elasticity in each equation is given the fact that the impact of imports on domestic apparel production is quite small. The parameter estimates on the capacity variables (2.6028 and 2.5625) were statistically very significant and of the correct sign. In the same way, the estimated

coefficients for the apparel employment (0.9925 and 0.8386) were significant and had positive signs, and the estimated parameters for the weekly average spindle hours (0.2684 and 0.2674) were of the correct sign and were statistically significant.

By and large, the parameter estimates in the apparel output equations are statistically significant at 0.0001 level, and have the correct signs as expected.

VI. Conclusions

The primary objective of this paper was to set up and test an alternative model designed to estimate the direct effect of increased imports on domestic output and employment. The empirical evidence with respect to the textile and apparel industry presented in Section V demonstrates that such a procedure is in fact valid. Moreover, the results are encouraging in so far as they suggest that this approach may easily be applied to analyze these kinds of questions for other industries.

With respect to the textile and apparel output equations, the results demonstrate that the levels of domestic textile and apparel output had a negative relation with the level of textile and apparel imports. One interpretation of this is that imports serve to replace domestic production, so an increase in textile and/or apparel imports would lead to decreased domestic output. However, the impact of imports on domestic production was quite small in the short-run because the short-run import elasticities of output were very small.

One should note, however, that the levels of domestic textile and apparel output had a negative relation with the ratio of inventories and positive with the ratio of domestic prices. The estimated elasticity coefficients for the ratio of domestic prices were larger than that for the ratio of inventories. This suggests that the levels of domestic output may be more sensitive to price changes than inventory changes.

Finally, the levels of domestic textile and apparel output had a positive relation with total employment, positive with weekly average spindle hours (a proxy variable for capital utilization rate), and positive with capacity. The estimated elasticity parameters of the capacity variable for domestic apparel output were almost three times that of domestic textile output. This suggests that the level of domestic apparel output may be influenced more by the capacity than the level of the domestic textile output.

In conclusion, the examination of our data has suggested that the capacity, the ratio of domestic price and the level of import all appear to have a significant part to play in the domestic output function.

[List of References]

- 1) American Textile Manufacturers Institute (1970-1991). Textile Hi-Lights Monthly Supplement. Washington, DC: ATMI Economic Information Division.
- 2) American Textile Manufacturers Institute (1993, June). Textile Hi-Lights Washington, DC: ATMI Economic Information Division.
- 3) Atkins, T. Virginia & Jenkins, Martha C. (1988, Spring). Imported Versus U.S.-Produced Ladies' Sportswear: Retail Buyers' Attitudes and Practices. *Clothing and Textiles Research Journal*, 6(3), 65-72.
- 4) Bergeron, Denise P. & Carver, Marie N. (1988, March). Student Preferences for Domestic-made or Imported Apparel as Influenced by Shopping Habits. *Journal of Consumer Studies and Home Economics*, 12(1), 87-94.
- 5) Dardis, Rachel, Spivak, Steven M. & Shih, Chi-Mei (1985, June). Price and Quality Differences for Imported and Domestic Men's Dress Shirts. *Home Economics Research Journal*, 13(4), 391-399.
- 6) Dickerson, Kitty G. (1982, March). Imported Versus U.S.-Produced Apparel: Consumer Views and Buying Patterns. *Home Economics Research Journal*, 10(3), 241-252.
- 7) Ettenson, Richard, Wagner, Janet & Gaeth, Gary (1988, Spring). Evaluating the Effect of Country of Origin and the "Made in the USA" Campaign: A Conjoint Approach. *Journal of Retailing*, 64(1), 85-100.
- 8) Knitting Times (1988, April). Quality Reason to Buy American. *Knitting Times*, 57(4), 64-69.
- 9) Knitting Times (1988, September). Consumers Seen Aware of Label. *Knitting Times*, 57(9), 96.
- 10) McLean, Frances P., Roper, Lydia L. & Smothers Rhonda (1986, March). Imported Versus Domestic Blouses: Women's Preferences and Purchase Motives. *Home Economics Research Journal*, 14(3), 306-313.
- 11) Pelzman, Joseph & Martin, Randolph C. (1981, October). Direct Employment Effects of Increased Imports: A Case Study of the Textile Industry. *Southern Economic Journal*, 48(2), 412-425.

- 12) Tolbert, Sheila, Sternquist, Brenda & Davis, Bonnie (1988, Summer). Retail Buyers: Perceptions of the Apparel Industry "Buy American" Campaign. *Clothing and Textiles Research Journal*, 6(4), 1-5.
- 13) United States Department of Commerce, Bureau of Economic Analysis (1970-1991). *Survey of Current Business*. Washington, DC: U.S. Government Printing Office.
- 14) United States Department of Commerce, Bureau of the Census (1970-1976). *Manufacturers' Shipments, Inventories, and Orders: M3-1.8*. Washington, DC: U.S. Government Printing Office.
- 15) United States Department of Commerce, Bureau of the Census (1977). *Manufacturers' Shipments, Inventories, and Orders: M3-1.12*. Washington, DC: U.S. Government Printing Office.
- 16) United States Department of Commerce, Bureau of the Census (1978-1981). *Manufacturers' Shipments, Inventories, and Orders: M3-1.14*. Washington, DC: U.S. Government Printing Office.
- 17) United States Department of Commerce, Bureau of the Census (1982-1991). *Manufacturers' Shipments, Inventories, and Orders: M3-1(91)*. Washington, DC: U.S. Government Printing Office.
- 18) United States Department of Commerce, Bureau of the Census (1970-1987). *U.S. General Imports and Imports for Consumption: Schedule A Commodity by Country (FT 135)*. Washington, DC: U.S. Government Printing Office.
- 19) United States Department of Commerce, Bureau of the Census (1988-1991). *U.S. General Imports of Cotton, Wool, Man-made Fiber, and Vegetable Fiber (Except Cotton) and Silk Blend Textiles (TQ 2496)*. Washington, DC: U.S. Government Printing Office.
- 20) United States Department of Commerce, International Trade Administration (1989, November). *Correlation: Textile and Apparel Categories with Harmonized Tariff Schedule of the United States Annotated*. Washington, DC: Office of Textiles and Apparel, Trade Data Division.
- 21) United States Department of Labor, Bureau of Labor Statistics (1970-1991). *CPI Detailed Report*. Washington, DC: U.S. Government Printing Office.
- 22) United States Department of Labor, Bureau of Labor Statistics (1970-1973). *Employment and Earnings*. Washington, DC: U.S. Government Printing Office.
- 23) United States Department of Labor, Bureau of Labor Statistics (1974-1991). *Supplement to Employment and Earnings*. Washington, DC: U.S. Government Printing Office.
- 24) United States Department of Labor, Bureau of Labor Statistics (1970-1978). *Wholesale Prices and Price Indexes*. Washington, DC: U.S. Government Printing Office.
- 25) United States Department of Labor, Bureau of Labor Statistics (1978-1981). *Producer Prices and Price Indexes*. Washington, DC: U.S. Government Printing Office.
- 26) United States Department of Labor, Bureau of Labor Statistics (1982-1984). *Supplement to Producer Prices and Price Indexes*. Washington, DC: U.S. Government Printing Office.
- 27) United States Department of Labor, Bureau of Labor Statistics (1985-1991). *Supplement to Producer Price Indexes*. Washington, DC: U.S. Government Printing Office.