

# THE IMPACT OF PROJECTED CHANGES IN THE TEXTILE AND APPAREL INDUSTRIES ON THE ECONOMY OF THE SOUTHEAST

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## I. INTRODUCTION

The decades of the 1950's and 1960's constituted a period of transition for the Southeastern United States, during which the Region's economy greatly reduced its dependence upon the agricultural sector.<sup>1</sup> Agricultural employment declined by 52 percent, reducing its relative importance to the Region from 24 percent of total employment in 1950 to only 9 percent in 1967.<sup>2</sup>

Since regional employment expansion in the textile and apparel industries had an important positive impact in providing employment for many of those displaced by the declining agricultural sector, an examination of historical and future industry trends is relevant. In this paper we will identify the causal factors that have influenced the growth and regional allocation of textile and apparel employment in the United States since 1950 and examine possible national and regional industry growth trends to 1980.

### EMPLOYMENT GROWTH TRENDS IN THE TEXTILE AND APPAREL INDUSTRIES, 1950-1970

Although United States textile employment declined between 1950 and 1970, industry employment was expanding in the Southeast. The data contained in Table 1 and Figure 1 show that national textile employment fell from 1,260,000 in 1950 to 986,000 in 1970; the number of Southeastern textile jobs increased from 620,793 to 666,077 during the same period.

The absolute regional increase was accomplished by attracting textile jobs from other areas, the Region's percentage of total industry employment increasing from 49 percent to 70 percent between 1950 and 1970. The largest absolute and relative regional losses, on the other hand, were suffered by the New England region, where textile employment declined from 255,859 to 87,288.

National employment in apparel manufacturing increased between 1950 and 1970, although the rate of expansion was very small. Analysis of Table 2 and Figure 2 indicates the United States industry employment grew from 1,236,000 in 1950 to 1,387,000 in 1970; during these two decades, Southeastern apparel jobs increased dramatically from 157,879 to 435,572.

The Southeast's portion of apparel industry employment rose from 13 percent in 1950 to 32 percent in 1970. Most of this increase in the Region's relative share may be explained by the corresponding relative losses occurring in the Mideast region, whose share of the national total fell from 57 percent to 40 percent.

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### National Industry Growth Factors

Three factors are paramount in explaining the recent national employment growth trends of the textile and apparel industries.

1. changes in relative demand patterns
2. changes in technology, and
3. changes in the quantity and quality of imported textile and apparel products

Personal consumption expenditures on clothing and accessories, items for which demand is somewhat inelastic, are the primary source of demand for the textile and apparel industries.<sup>3</sup> Accordingly, as incomes have risen, the proportion devoted to this type of expenditure has fallen. Table 3 documents this fact, showing that clothing and accessories expenditures have declined from 7.7 percent of disposable personal income in 1950 to only 6.4 percent in 1970.

The level of employment in the textile and apparel industries has also been affected by changes in technological development. Value added per textile production worker, while still quite low, has been increasing at a slightly greater rate than for manufacturing as a whole.<sup>4</sup> This increasing productivity per worker, coupled with the relatively slow growth in textile products consumption, resulted in absolute industry employment declines during the period. Despite the relatively slow growth in the consumption of apparel products, productivity gains in the industry were quite low, necessitating a rate of employment increase approximating the all-manufacturing industry average.

The very low output per worker that is characteristic of the textile and apparel industries has made the two industries very susceptible to import competition. Since 1957 the United States has had an unfavorable textile products trade balance in every year but 1961, and the deficit has been continually widening. By 1970 it had grown to \$1,286.3 million, the equivalent of 140,000 to 150,000 domestic textile jobs.<sup>5</sup> The data displayed in Figure 3 shows that in 1970 imports captured 11.5 percent of the apparent domestic market for cotton textiles, 27.9 percent of the wool textile market, and 8.2 percent of the market for man-made fiber textiles.

### Regional Industry Growth Factors

The Southeast's ability to attract an increasing share of textile and apparel employment during the 1950's and 1960's can be attributed to three principal factors. These were: (1) changing technology that necessitated the rebuilding of many antiquated facilities, (2) the availability in the region of a large supply of workers willing to work at relatively low wages, (3) a "favorable labor climate," that is, a small percentage of unionized workers.

The adaptability of newer textile technology to sprawling single-level structures hastened to obsolescence of the multi-level mills built in earlier years. Many of these facilities were relocated in the Southeast rather than in the New England and Mideast Regions because of the relatively cheap and plentiful land supply, the relatively low wage scale, and the absence of union activity.

The high labor-to-capital ratio characteristic of the two industries makes the existence of a large supply of relatively low wage labor an essential element in the location process. Textile industry wages averaged only 71 percent of the average for all manufacturing industry in 1971, and for apparel

workers the comparable figure was only 62 percent.<sup>6</sup> An ample supply of workers willing to accept these wages was available in the Southeast because of the decline in agricultural employment and because of the Region's traditional underemployment.

The importance of a near absence of unionized workers in the textile and apparel industries of the Southeast as a locational factor is difficult to document. All evidence seems to indicate, however, that the ability of textile firms to leave their unions behind was an important factor in their relocation decisions.

#### EMPLOYMENT GROWTH IN THE TEXTILE AND APPAREL INDUSTRIES:

The outlook for national employment growth in the textile and apparel industries during the 1970's does not appear bright. Furthermore, in contrast to the earlier periods, it seems unlikely that the Southeast's industry growth will be appreciably different from that of the Nation.

##### National Industry Growth Factors

The demand for textile and apparel products as a percentage of disposable personal income remained relatively constant during the 1960's. It seems probable that this trend will continue during the present decade, resulting in a projected annual growth in sales of approximately four percent for each of the industries.

Although certain of the apparel manufacturing processes such as sewing operations appear to offer little opportunity for further productivity gains in the near future, the technology already exists to greatly increase output per worker in many sectors of the textile and apparel industries. The application of this technology, coupled with the expected modest growth in demand, means that the apparel industry's labor needs are likely to grow very slowly during the period; and those of the textile industry will probably decline.

The anticipated growth of imported textile products reinforces this rather pessimistic projection. Since 1961, imports have increased at an annual compound rate of 15.5 percent and had captured 10.5 percent of the apparent domestic market by 1970. Agreements have been signed with Japan, Hong Kong, Korea, and Taiwan that will attempt to limit the growth in textile imports to 7.5 percent annually, beginning in 1972.<sup>7</sup> Table 4 shows that if these limitations are achieved, which appears unlikely, imports will still rise to 14.7 percent of the apparent domestic market by 1980. If imports increase at a more realistic 10 percent annually,<sup>8</sup> their share of the apparent domestic market will increase to 18.4 percent.

##### Regional Growth Factors

The Southeast was able to attract a greatly increasing share of total employment in the textile and apparel industries during the study period because of competitive advantages arising primarily from its ample supply of low wage labor. Indications are that this favorable regional industry growth trend will moderate considerably during the present decade.

The large supply of under-employed workers in the Southeast had largely disappeared by 1970, and the labor participation rate will probably rise to at least the national average by 1980. This diminution in the excess labor supply will undoubtedly accelerate the trend towards convergence to national industry wage rates, thereby reducing competitive advantage in both the tex-

tile and apparel industries. It might also be expected that increased unionization would contribute to this trend.

Technological advances, relatively small increases in demand, and probably import trends will likely combine during the 1970's to reduce textile and apparel employment to very modest gains. The Southeast's rapid employment and income growth in recent years has greatly diminished the supply of workers willing to work for relatively low wages, thereby reducing the Region's ability to attract an increasing share of employment in these two industries. In contrast to the past two decades, therefore, the textile and apparel industries will probably provide very few additional jobs for Southeastern workers.

The diminished relative importance of the textile and apparel industries in the future growth of the Southeast should be viewed as part of the regional development process. The elimination of much of the Region's under-employment suggests that the time may well be past when per capita incomes in the Southeast can be significantly improved by adding low wage jobs. Further improvement in the Southeast's relative income position will require expansion in higher wage manufacturing, trade, service, and government employment, and the upgrading of the education and productivity of the labor force to attract this type of employment.

TABLE 1. TEXTILE EMPLOYMENT BY REGION  
1950-1970

	EMPLOYMENT				PERCENT OF NATIONAL TOTAL			
	<u>1950</u>	<u>1959</u>	<u>1967</u>	<u>1970</u>	<u>1950</u>	<u>1959</u>	<u>1967</u>	<u>1970</u>
United States	1,260,000	952,000	967,000	986,000	100.0	100.0	100.0	100.0
New England	255,859	127,718	95,247	87,288	20.3	13.4	9.9	8.9
Mideast	304,967	188,582	161,138	152,647	24.2	19.8	16.7	15.5
Great Lakes	48,161	34,319	25,837	24,056	3.8	3.6	2.7	2.4
Plains	8,782	5,359	6,395	4,909	.7	.6	.7	.5
Southeast	621,971	577,603	657,122	693,762	49.4	60.7	67.9	70.4
Southwest	9,416	8,645	9,377	9,196	.8	.9	.9	.9
Rocky Mountain	632	370	250	277	.1	.0	.0	.0
Far West	10,212	9,404	11,593	13,865	.8	.9	1.2	1.4

Source: Charles F. Floyd, The Changing Structure of Employment and Income in the Regions of the United States, prepared for the Office of Economic Research, Economic Development Administration, U.S. Department of Commerce and U.S. Department of Commerce, County Business Patterns, 1970.

TABLE 2. APPAREL EMPLOYMENT BY REGION  
1950-1970

	EMPLOYMENT				PERCENT OF NATIONAL TOTAL			
	<u>1950</u>	<u>1959</u>	<u>1967</u>	<u>1970</u>	<u>1950</u>	<u>1959</u>	<u>1967</u>	<u>1970</u>
United States	1,236,000	1,243,000	1,413,000	1,387,000	100.0	100.0	100.0	100.0
New England	92,960	91,987	83,707	76,759	7.5	7.4	5.9	5.5
Mideast	705,554	613,740	582,115	556,110	57.1	49.4	41.2	40.1
Great Lakes	126,390	99,642	103,593	94,746	10.2	8.0	7.3	6.8
Plains	59,824	52,957	54,540	51,219	4.8	4.3	3.9	3.7
Southeast	159,439	268,731	433,670	439,091	12.9	21.6	30.7	31.7
Southwest	29,723	42,665	67,441	75,706	2.4	3.4	4.8	5.5
Rocky Mountain	2,986	3,347	5,500	7,008	.2	.3	.4	.5
Far West	59,035	67,671	79,642	83,212	4.8	5.4	5.6	6.0

Source: Charles F. Floyd, The Changing Structure of Employment and Income in the Regions of the United States, prepared for the Office of Economic Research, Economic Development Administration, U.S. Department of Commerce and U.S. Department of Commerce, County Business Patterns, 1970.

TABLE 3. PERSONAL CONSUMPTION EXPENDITURES ON  
CLOTHING AND ACCESSORIES AS A PERCENT OF  
DISPOSABLE PERSONAL INCOME  
(Billions of Dollars)

Year	Disposable Personal Income (Dollars)	Clothing Expenditures (Dollars)	Ratio: EC/DPI (Percent)
1950	206.9	16.0	7.7
1955	275.3	19.4	7.0
1960	350.0	22.8	6.5
1961	364.4	23.2	6.4
1962	385.3	24.8	6.4
1963	404.6	25.7	6.4
1964	438.1	28.2	6.4
1965	473.2	30.4	6.4
1966	511.9	34.1	6.7
1967	546.3	35.9	6.6
1968	591.0	38.9	6.6
1969	634.2	42.0	6.5
1970	687.8	43.9	6.4

Source: Office of Business Economics, U. S. Department of Commerce

TABLE 4. PROJECTED TEXTILE IMPORT TRENDS

Year	Cotton, Wool, and Man-Made Textile Products (Millions of Pounds) Imports	Apparent Domestic Market	Ratio: I/ADM (Percent)
1970	1,047	9,952	10.5
1980 (7.5% annual import growth)	2,158	14,731	14.7
1980 (10.0% annual import growth)	2,716	14,731	18.4
1980 (15.5% annual import growth)	4,424	14,731	30.0

Source: Adapted from data supplied by the Office of Textiles, Market Analysis Division, U.S. Department of Commerce.

## FOOTNOTES

<sup>1</sup>The Southeast is defined as the twelve states of Virginia, West Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Arkansas.

<sup>2</sup>Data are from Charles F. Floyd, The Changing Structure of Employment and Income in the Regions of the United States, prepared for the Office of Economic Research, Economic Development Administration, U. S. Department of Commerce, 1971. Individual state data are available from the authors upon request.

<sup>3</sup>Of the \$8,153.2 million value added in textile manufacturing in 1968, 9.4 percent was in floor covering (\$599.4 million), paddings and upholstery fillings (\$78.0 million), and tire cord and fabric (\$91.5 million).

<sup>4</sup>Census of Manufactures, U. S. Department of Commerce.

<sup>5</sup>Office of Textiles, Trade Analysis Division, U. S. Department of Commerce. The job loss was estimated by the authors.

<sup>6</sup>The similar figures for the Southeast were 67 percent for textiles and 49 percent for apparel. Charles F. Floyd, Op. Cit.

<sup>7</sup>"Textile Agreements with Republic of China, Japan, Korea, and Hong Kong," mimeographed (Washington, D. C.: U. S. Department of State, 1971-72). It is interesting to note that since the signing of the agreements, some goods are reportedly being finished in Singapore and, therefore, are not subject to the limitation even though the remainder of their manufacture was accomplished in one of the four countries.

<sup>8</sup>The textile agreements, of course, are not the only factors affecting the growth of imports. The narrowing of United States and foreign wage differences and the recent devaluation of the dollar are only two of the factors that might be mentioned.