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## **CONCENTRATION, VULNERABILITY AND ADJUSTMENT: RURAL TEXTILE AND APPAREL EMPLOYMENT AND THE EXPIRATION OF IMPORT QUOTAS<sup>a</sup>**

Abstract: The paper documents the degree of concentration of textile and apparel employment in rural counties, assesses the vulnerability to job loss by detailed industry in light of the expiration of import quotas, and assesses the potential for adjustment of displaced workers.

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## **Introduction**

The import quotas that currently shield a large number of domestic textile and apparel firms will expire at the end of 2004 under the Agreement on Textiles and Clothing (ATC). This expiration is likely to fundamentally re-orient world-wide production and trade in fibers, yarn, fabric, and clothing. The impact on worldwide trade in textiles and fibers and the gains from freer international trade for US consumers are likely to be substantial. The purpose of this paper is to develop an approach to link the spatial distribution of the textile/apparel industry to information on trade provisions. The characteristics of local labor markets are of particular concern in assessing the ability of textile and apparel workers who may be displaced to find alternative work.

Trade reform in textiles and apparel provides the sharpest case of the need to balance societal gains from freer trade with costs that are geographically concentrated. As Finger and Harrison (1996) note, “[a]lthough textiles and apparel account for less than 2 percent of total employment in the U.S. economy, protecting them against import competition accounts for 83 percent of the net cost to the U.S. economy of all import restrictions.” Unfortunately, half of textile and apparel employment is located in labor markets that make up only 5 percent of U.S. employment. Thus, the modest adjustment required of the national economy increases by a degree of magnitude in labor markets more dependent on the sector. This strong geographic concentration—evoking images of Southern rural mill towns—employing workers presumed unqualified for alternative employment has provided the justification for maintaining trade protection (Field and Graham 1997).

The hard question is whether those rural counties vulnerable to job loss are capable of adjusting to worker displacement following trade liberalization. Addressing this question will proceed in three steps. First, the study will identify which rural areas are most heavily concentrated in textile and apparel employment. Second, it will assess the vulnerability to substantial job loss based on the extent of trade protection afforded to detailed industries. Counties specializing in those industries deriving the most protection from the quota system are presumed to be most vulnerable to job loss. Third, the capability for dis-

placed workers to adjust will be assessed given proximity to large diversified labor markets that can provide alternative employment opportunities and the skill and educational attainment of textile and apparel employment in vulnerable counties. Empirically assessing the ability of local labor markets to adjust to the new trade regime will be essential to arguments for special trade remedies or safeguards to allow a more orderly adjustment and for the effective allocation of trade adjustment assistance.

### **Geographic Concentration of the Textile and Apparel Industry**

Two aspects of the geographic distribution of industry employment are of concern. The first relates to how the entire industry is distributed across the United States. Examining industry employment across Census regions and divisions provides insight to this concern. The second relates to the importance of the industry to local economies, expressed as a share of total private employment. There is a strong tendency for similar industries to locate near each other either to exploit the comparative advantages of particular places or to benefit from economies of localization. The degree of clustering of textile and apparel employment is an empirical question examined at state and local level and in a comparison with the geographic concentration of other manufacturing industries.

### ***Regional Distribution of Employment***

Table 1 shows the regional distribution of textile and apparel employment in the United States.<sup>2</sup> The South clearly emerges as the region with the majority of textile and apparel employment with close to 58 percent of the national total. This predominance results from the much heavier concentration of the textile industry relative to the apparel industry in the South. While the South maintains a plurality in apparel employment (39.1 percent) it possesses an overwhelming majority of textile employment (79.1 percent). The table shows that textiles comprise a regionally centered industry while apparel is distributed more evenly throughout the country. This characterization of the apparel industry as a nationally distributed in-

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<sup>2</sup> All data used to assess the distribution and concentration of textile and apparel employment are from July 2000 using the Quarterly Census of Employment and Wages (ES-202). This is the last period before the onset of large manufacturing employment losses and plant closings beginning in the latter half of 2000.

dustry is somewhat misleading as will be made apparent when we examine local economies and see that apparel employment in the West and East is concentrated in a small number of places.

**Table 1: Regional Distribution of Textile and Apparel Employment, July 2000**

Region	Census Division <sup>3</sup>	Share of National Textile and Apparel Industry	Share of National Textile Industry	Share of National Apparel Industry
South		57.58%	79.64%	39.10%
	South Atlantic	39.38%	65.70%	17.33%
	E South Central	12.21%	11.76%	12.59%
East	W. South Central	5.99%	2.18%	9.18%
		17.66%	12.17%	22.26%
	New England	3.78%	4.92%	2.83%
West	Middle Atlantic	13.88%	7.25%	19.43%
		16.57%	6.01%	25.42%
	Pacific	15.47%	5.61%	23.74%
Midwest	Mountain	1.10%	0.40%	1.68%
		8.19%	2.18%	13.22%
	E. North Central	5.70%	1.62%	9.13%
	W. North Central	2.48%	0.56%	4.09%

Source: Unpublished Bureau of Labor Statistics *Quarterly Census of Employment and Wages 2000*

The concentration of the textile industry and the relative dispersion of apparel employment is even more pronounced when looking at Census divisions within Regions. The South Atlantic (Maryland, Delaware, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida) is the Census division that contains more textile and apparel employment than any other division. However, the South Atlantic division contains the majority (65.7 percent) of textile employment. The division only ranks third in its share of apparel employment, behind the Pacific and Middle Atlantic divisions. Across all divisions we see that East South Central (Kentucky, Tennessee, Mississippi, Alabama) is the only other division that has more than 10 percent of national textile employment. By contrast, four of the 9 divisions contain at least 10 percent of national apparel employment and no division has more than a quarter of this employment.

<sup>3</sup> The states comprising each Census Division are as follows: South Atlantic—WV, MD, DE, VA, NC, SC, GA, FL; E. South Central—KY, TN, MS, AL; W. South Central—OK, AR, LA, TX; New England—ME, VT, NH, MA, CT, RI; Middle Atlantic—NY, PA, NJ; Pacific—WA, OR, CA, AK, HI; Mountain—ID, MT, WY, NV, UT, CO, AZ, NM; E. North Central—WI, MI, IL, IN, OH; W. North Central—ND, SD, NE, KS, MN, IA, MO.

***The Textile and Apparel Industry as a Share of State Employment***

Table 2 lists the states that derive at least 1 percent of private non-farm wage and salary employment (henceforth referred to as “private employment”) from textile and apparel industries. The Carolinas are the most dependent, both states deriving more than 5 percent of private employment from textiles and apparel. Alabama, Georgia, and Mississippi round out the top 5, with between 2 to 4 percent of employment in the industry. More than 80 percent of this employment is in textiles in South Carolina, North Carolina, and Georgia; declining to 60 percent for Alabama and to 20 percent for Mississippi. Three other Southern states (TN, KY, and VA) are in the top 10 that also includes Rhode Island and California. The surprising inclusion of Rhode Island owes to the persistence of some textile production in a state with a relatively small labor force. The other non-Southern state in the top ten is California, which is surprising given the size of the state economy. In fact, California has the second largest number of employees in textile and apparel of any state, concentrated in Los Angeles, surpassed only by North Carolina.

**Table 2: States Deriving More than 1 Percent of Private Employment from Textile and Apparel Industries, July 2000**

STATE	Textile and Apparel as Share of Private State Employment	Percent in Textiles	Percent in Apparel
South Carolina	5.6%	80.6%	19.4%
North Carolina	5.4%	80.1%	19.9%
Alabama	4.1%	60.5%	39.5%
Georgia	3.8%	81.2%	18.8%
Mississippi	2.1%	22.2%	77.8%
Tennessee	1.6%	41.5%	58.5%
Rhode Island	1.5%	86.2%	13.8%
Kentucky	1.5%	19.2%	80.8%
California	1.3%	16.7%	83.3%
Virginia	1.2%	72.8%	27.2%
New York	1.2%	14.4%	85.6%
Maine	1.0%	55.6%	44.4%
Pennsylvania	1.0%	36.6%	63.4%
Arkansas	1.0%	46.9%	53.1%

Source: Unpublished Bureau of Labor Statistics Quarterly Census of Employment and Wages 2000

### ***Local Concentration***

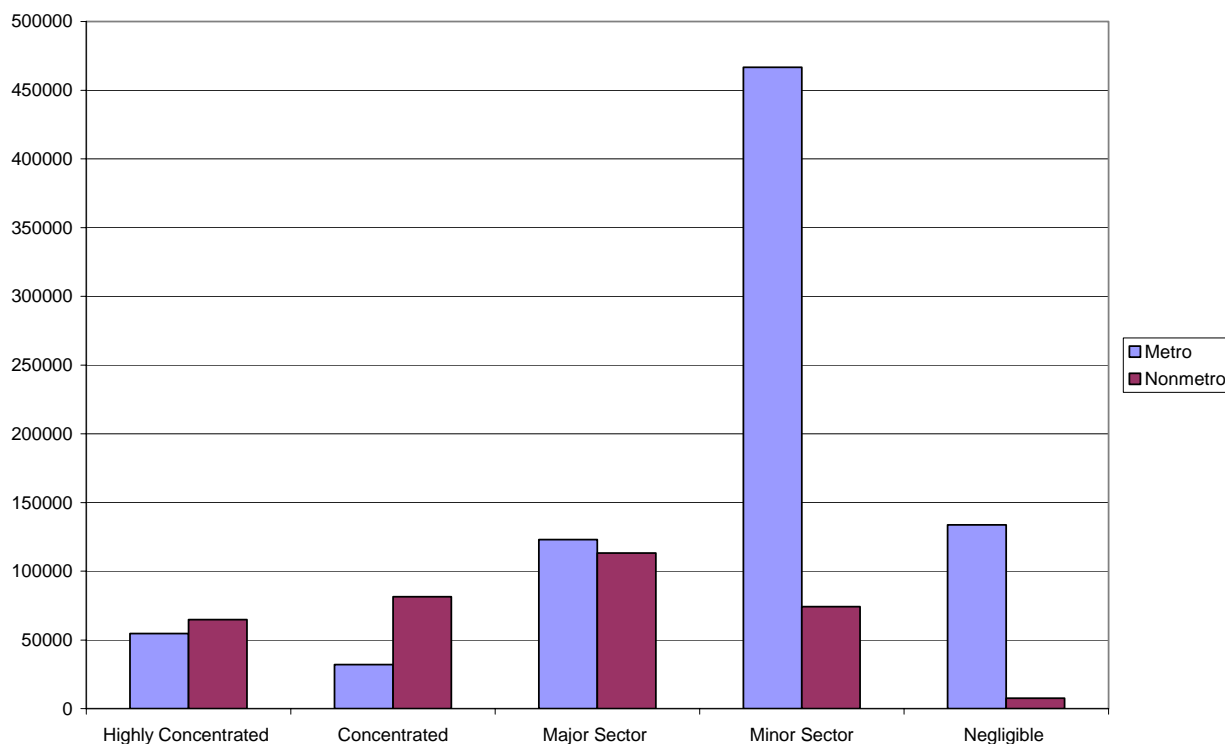
The spatial distribution of textile and apparel employment at the county level reflects the pattern of state specialization. Two-thirds of all rural counties have little (less than 0.5 percent of private employment) or no textile and apparel employment. In contrast, a swath of counties deriving more than 15% of private employment from the sector extends from the southern tier of Virginia counties, through the North Carolina Piedmont, across South Carolina through to the counties on either side of the Georgia/Alabama border. As noted above, much of the employment in this crescent is in the textile industry. The periphery of this crescent also contains a number of counties concentrated in the sector in Mississippi, Tennessee and Kentucky. Other Southern states further west (Arkansas and Oklahoma) contain a handful of concentrated counties. Missouri is the only non-Southern state containing any counties concentrated in the sector, predominantly in apparel. Although a few rural counties in the East, Midwest and Great Plains contain counties deriving 5% to 15% of employment from the sector, the phenomenon of local concentration at the county level is overwhelmingly Southern.

This description challenges the impression from the earlier analysis of the regional distribution of sector employment where only slightly more than half (57.8%) of all textile and apparel employment was located in the South. The explanation comes from the large absolute number of apparel workers in both Los Angeles and New York City. Employment in these two cities alone (152,500) comes close to the total number of jobs in textile and apparel in North Carolina (178,700). Still, textiles and apparel comprise a minor sector in both Los Angeles County (3.3% of private employment) and New York City (1.9%). Of more concern is that many of the metropolitan counties in North and South Carolina also contain large numbers of textile and apparel jobs. These metropolitan areas may be hard pressed to create alternative job opportunities for both displaced metro and nonmetro workers.

Figure 1 helps to reconcile the description of concentration in rural southern counties with more widely dispersed national employment. Since 40% of all textile and apparel jobs are located in Minor Sector metropolitan areas that derive less than 5% of private employment from the sector, a significant share of employment is found in better diversified labor markets. This finding is encouraging regarding the abil-

ity for these local economies to adjust to job loss that may result from the new trade regime. However, the graph also confirms that more than 20% of industry employment is located in counties that derive more than 15% of private employment from the sector.

**Figure 1: Textile and Apparel Employment By County Dependency**



Source: Unpublished Bureau of Labor Statistics Quarterly Census of Employment and Wages 2000

*Geographic Concentration of Textile and Apparel Employment Relative to Other Manufacturing Industries*

Manufacturing industries as a whole tend to be much more spatially concentrated than services (Barkley and Henry 1997). As a result, adverse shocks affecting particular industries are likely to be concentrated in particular places. The evidence provided below suggests that textile employment is arguably the most spatially concentrated major manufacturing industry.<sup>4</sup> Apparel employment is significantly less concentrated relative to textiles.

Table 3 provides information on the cumulative industry employment share by degree of industry specialization for Textiles and Apparel and other industries that tend to be spatially concentrated. Nearly



twenty percent of all textile employment is located in counties deriving at least 25 percent of total private employment from the sector. No other industry demonstrates this degree of concentration in highly specialized counties. By contrast, counties highly specialized in Apparel account for only 1 percent of industry employment. In fact, the great majority of apparel employment is located in counties that derive less than 5 percent of private employment from the sector. This reflects the large absolute number of apparel jobs in very large labor markets such as Los Angeles and New York City.

**Table 3: Share of National Industry Employment in Specialized Counties**

Industry	Sector > 25%	Sector > 15%	Sector > 5%	Sector > 0.5%
All Manufacturing	0.326	0.723	0.991	1.000
Textiles	0.181	0.319	0.606	0.869
Apparel	0.010	0.026	0.157	0.778
Food Processing	0.080	0.132	0.365	0.967
Furniture	0.075	0.186	0.326	0.713
Primary Metals	0.021	0.069	0.271	0.832
Transportation	0.046	0.135	0.470	0.956

*Source: Unpublished Bureau of Labor Statistics Quarterly Census of Employment and Wages 2000*

The Lorenz Curve is an alternative measure of geographic concentration that is not sensitive to the size of the local labor market as it graphs the ranked cumulative share of industry employment against the cumulative share of private employment. Thus, an industry with the majority of employment in a few very large counties might still be highly concentrated. By examining the distribution of industry employment across all counties, it provides a more comprehensive measure than that provided in Table 3.

We begin by comparing the Lorenz curves for Textile and Apparel employment in Figure 2. The data points indicate whether they pertain to nonmetropolitan or metropolitan counties. The 45 degree line from the origin represents equally dispersed employment. Lorenz curves farther from that line represent more geographically concentrated employment. The Textile curve is everywhere below the Apparel curve, confirming that textile employment is much more geographically concentrated. The 95<sup>th</sup> percentile line provides some indication of the difference in geographic concentration, the top counties in Apparel comprising 5% of total private employment account for 35% of industry employment; the top Textile counties

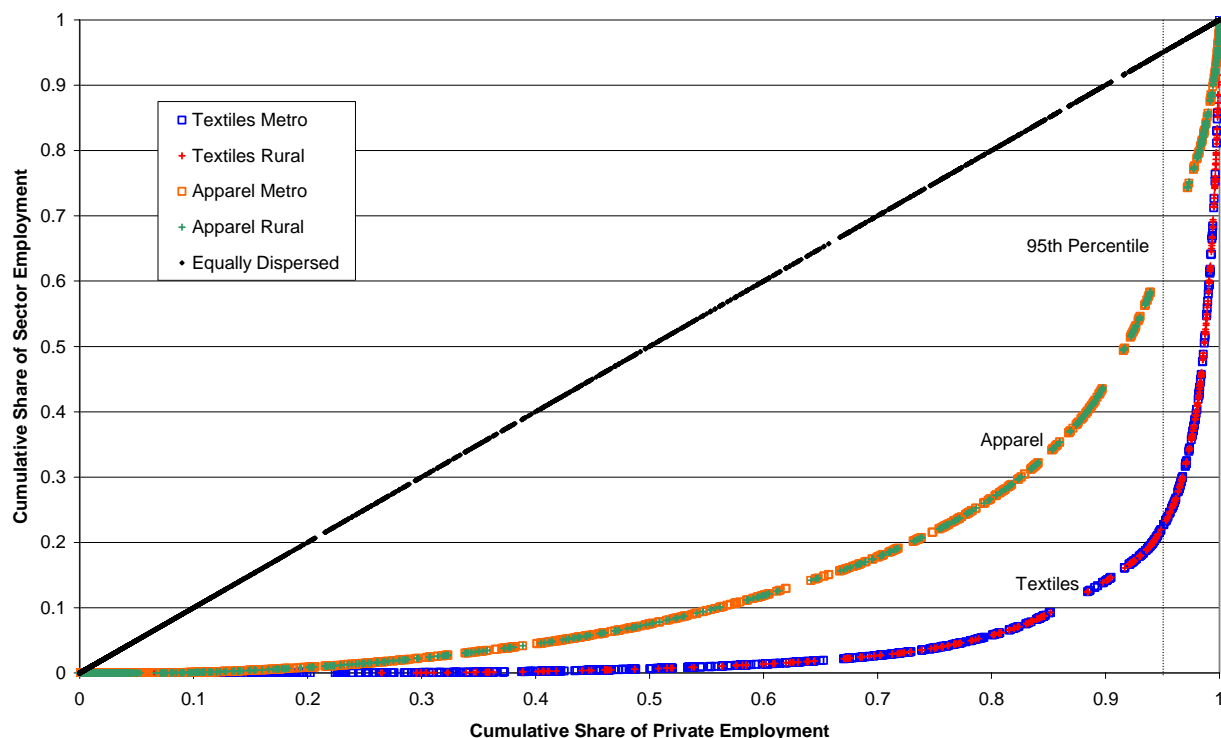
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<sup>4</sup> Tobacco Products is more geographically concentrated but employment in this industry is minor—about 32,000 workers.

claiming the same percent of total private employment account for close to 80% of industry employment.

Both metro and rural counties are represented throughout the distribution for both industries, although metropolitan counties are less prevalent at the top of both distributions.

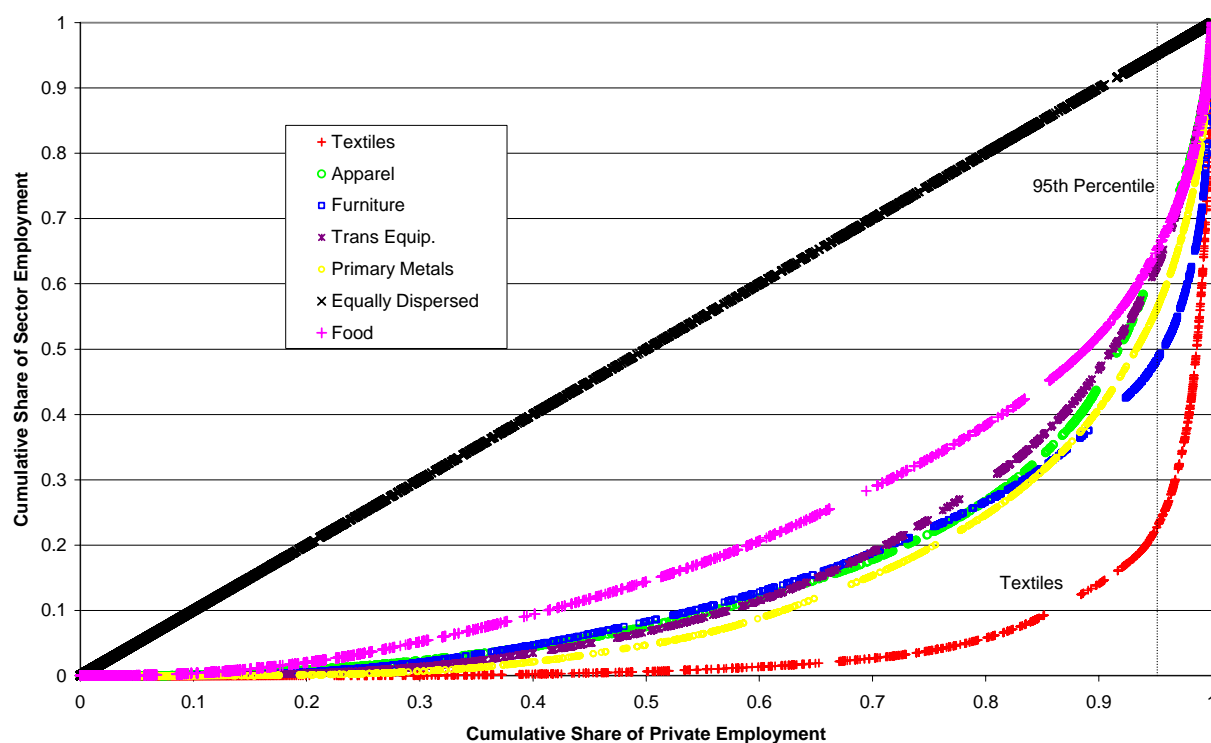
**Figure 2: Geographic Concentration of Textile and Apparel Employment**



Source: Unpublished Bureau of Labor Statistics Quarterly Census of Employment and Wages 2000

Comparison with other industries in Figure 3 confirms that Textile employment is much more geographically concentrated relative to other industries. The figure provides Lorenz curves from the other major industries that are most unequally distributed across local economies. Apparel, Furniture, Transportation Equipment, and Primary Metals industries are roughly similar while employment in Food and Kindred Products is less geographically concentrated. However, if the major concern is with the share of industry employment in the most specialized counties, then both Furniture and Primary Metals are slightly more concentrated than either Transportation Equipment or Apparel. The figure makes clear that the degree of geographic concentration of the textile industry is indeed exceptional.

Figure 3: Geographic Concentration in Textiles, Apparel and Other Concentrated Industries



Source: Unpublished Bureau of Labor Statistics Quarterly Census of Employment and Wages 2000

The analysis of geographic concentration confirms that trade liberalization of the textile industry is not only notable due to the large degree of trade protection to date, but also due to the tendency for employment to amass in particular locales. However, before concluding that the incidence of costs to trade liberalization will be as concentrated as textile employment, it is first necessary to assess the vulnerability of detailed industries within both textile and apparel to the expiration of import quotas. To the extent that apparel industries tend to be much more labor intensive than textiles, one might assume that apparel industries are generally more vulnerable to job loss after liberalization. The gradual phasing out of import quotas beginning in 1995 has resulted in a complex allocation of trade protection within the textile and apparel sector. Determining which detailed industries still benefit from protection—and the level of protection that detailed industries derive from import quotas—is required to ascertain the geographic concentration of employment in industries most vulnerable to job loss due to trade liberalization.

## **Examining Potential Employment Impacts of Trade Liberalization**

The previous focus on textile and apparel concentration abstracts from the complexity of the trade protections afforded to the “industry.” Import quotas are provided on a commodity basis, not on an industry basis, so it is technically incorrect to refer to industry protection. Roughly 3,500 commodities make up the output of 57 detailed textile and apparel industries, using the 4-digit Standard Industrial Classification (SIC) codes. Thus, it is difficult to link trade provisions for different commodities and the industry employment to which it pertains. The procedures used to connect import quota information on commodities to detailed industries are, by necessity, indirect.

The paper first examines changes associated with the phased implementation of liberalization of textile and apparel trade. Integrating the textile and apparel sector into World Trade Organization trade rules proceeds in four phases, with import quotas eliminated in roughly 40% of the value of US textile and clothing imports (based on the 1990 benchmark) as of January 1, 2002. Attention then turns to the relative degree of trade protection afforded by the remaining quotas by examining the degree to which import quotas were binding in 2003.

### ***Four Phase Integration of Textile and Apparel Industries to WTO Rules***

The procedure for linking commodities to the industries producing them is outlined below. The correspondence between commodities and detailed industries is imperfect as several detailed industries may produce a given detailed commodity. Using a crosswalk connecting 6-digit Harmonized Trade System commodity codes to Standard Industry Classification and NAICS codes (<http://www.globaltradestatistics.com/state/faq.html#faqb>), multiple entries were included where several industries produced more than a negligible share of the commodity. With information on the integration of detailed commodities by phase, it was then possible to calculate the share of industry production by phase. Industries were classified into the latest phase that the industry enjoyed non-negligible quota protection. The allocation of industries into the 4 phases is provided in Table 4.

**Table 4: Detailed Textile and Apparel Industry by Phase of WTO Integration**

SIC	Description	Share 1990 US T&A Production
Phase 4 Integration January 1, 2005		
2211	Broadwoven Fabric Mills, Cotton	9.83%
2221	Broadwoven Fabric Mills, Manmade Fibers and Silk	4.91%
2231	Broadwoven Fabric Mills, Wool	0.18%
2253	Knit Outerwear Mills	0.05%
2281	Yarn Spinning Mills	2.67%
2284	Thread Mills	0.17%
2298	Cordage and Twine	0.24%
2311	M&B Suits, Coats, and Overcoats	0.32%
2321	M&B Shirts, except Work Shirts	10.34%
2322	M&B Underwear and Nightwear	1.06%
2323	M&B Neckwear	0.03%
2325	M&B Separate Trousers and Slacks	3.31%
2329	M&B Clothing, nec	4.44%
2331	W&G Blouse and Shirts	2.61%
2335	W&G Dresses	1.74%
2337	W&G Suits, Skirts and Coats	1.83%
2339	W&G Outerwear, nec	0.14%
2341	W/G&Infants Underwear and Nightwear	4.34%
2353	Hats, Caps and Millinery	1.13%
2369	Girls, Children and Infants Outerwear, nec	6.26%
2381	Dress and Work Gloves, exp Knit and All-Leather	0.21%
2385	Waterproof Outerwear	0.19%
2389	Apparel and Accessories, nec	0.37%
2392	Homefurnishings, exc. Curtains and Draperies	2.57%
2396	Automotive Trimmings, Apparel Finding and Related	0.17%
	<b>Phase 4 Total</b>	<b>59.12%</b>
	<b>Phase 4 Industry Commodities Integrated in Previous Phases</b>	<b>14.04%</b>
Phase 3 Integration January 1, 2002		
2252	Hosiery, nec	0.20%
2257	Weft Knit Fabric Mills	1.09%
2299	Textile Goods, nec	0.48%
2342	Brassieres, Girdles and Allied Garments	0.48%
2391	Curtains and Draperies	0.51%
2393	Textile Bags	1.31%
2394	Canvas and Related Products	0.88%
2399	Fabricated Textile Products, nec	0.04%
2823	Cellulosic Manmade Fibers	1.19%
2824	Manmade Organic Fibers, exc. Cellulosic	2.64%
	<b>Phase 3 Total</b>	<b>8.83%</b>
	<b>Phase 3 Industry Commodities Integrated in Previous Phases</b>	<b>6.09%</b>
Phase 2 Integration January 1, 1998		
2241	Narrow Fabric and Other Smallwares Mills	3.69%
2254	Knit Underwear and Nightwear Mills	0.00%
2258	Lace and Warp Knit Fabric Mills	0.06%
2273	Carpets and Rugs	0.89%

**Table 4: Detailed Textile and Apparel Industry by Phase of WTO Integration**  
(cont.)

SIC	Description	Share 1990 US T&A Production
2295	Coated Fabrics, not Rubberized	0.88%
2296	Tire Cord and Fabrics	0.58%
2395	Pleating, Decorative and Novelty Stitching	0.07%
2679	Converted Paper and Paperboard Products	0.00%
3069	Fabricated Rubber Products, nec	0.12%
<b>Phase 2 Total</b>		<b>6.28%</b>
Phase 1 Integration January 1, 1995		
2259	Knitting Mills, nec	
2261	Finishers of Broadwoven Fabrics of Cotton	
2262	Finishers of Broadwoven Fabrics of Manmade Fibers and Silk	
2269	Finishers of Textiles, nec	
2282	Yarn Texturizing, Throwing, Twisting and Winding Mills	
2297	Nonmoven Fabrics	
2326	M&B Work Clothing	
2361	Girls, Children and Infants Dresses, Blouses and Skirts	
2371	Fur Goods	
2384	Robes and Dressing Gowns	
2386	Leather and Sheep-lined Clothing	
2387	Apparel Belts	
2397	Schiffli Machine Embroideries	
<b>Phase 1 Total</b>		<b>5.64%</b>

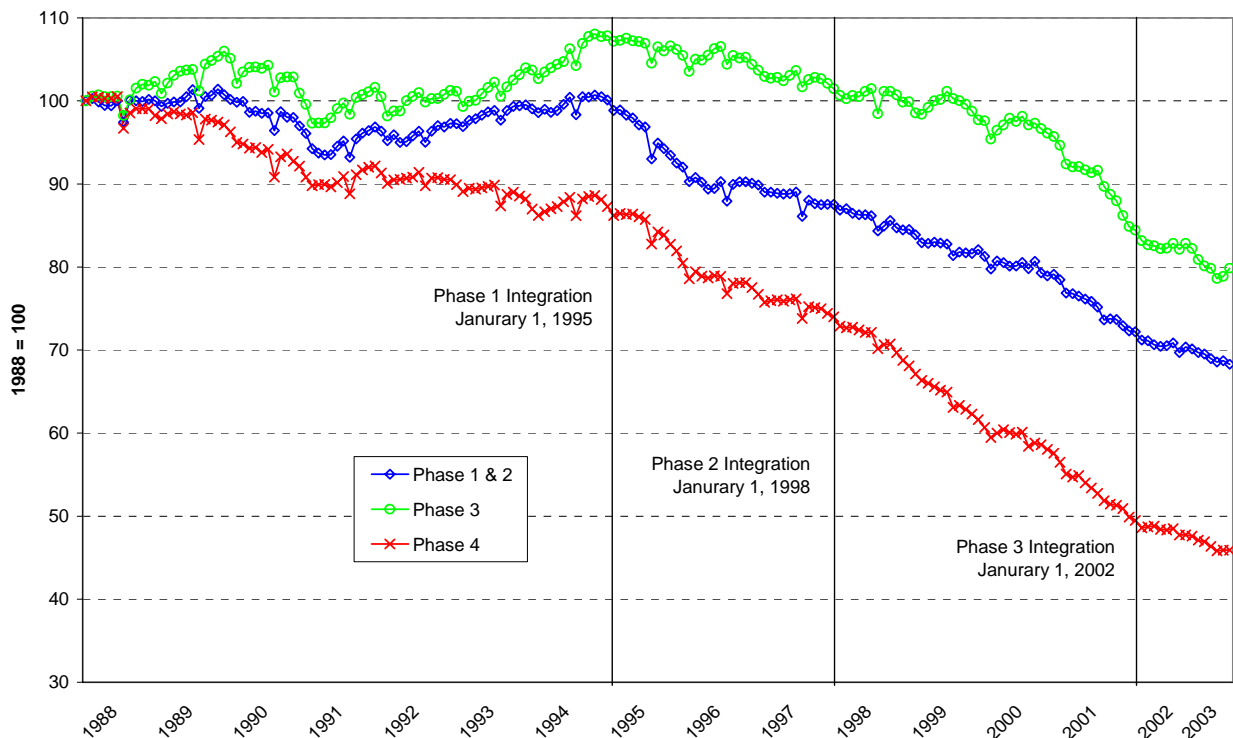
Source: OTEXA .report on United States Final Integration by Phase

Although both Apparel and Textile industries were integrated in each phase, the 2000 employment associated with textile industries integrated in the first three phases (310,000) was more than twice that of apparel industries (141,300). By contrast, employment in Phase 4 industries is skewed to Apparel (455,600) that is more than twice the employment size of Phase 4 textile industries (214,000). Given the labor-intensiveness of apparel relative to textiles, the initial impression that emerges from Table 4 is that the sequence of integration has been backloaded, maintaining protection for industries that may be most vulnerable to import penetration.

Figure 4, which examines industry employment trends by trade liberalization phase, supports this conjecture. Despite benefiting from trade protection throughout the entire period, employment in Phase 4 industries fell much faster than either Phase 1 and 2 industries that lost import quota protection by 1998 or in Phase 3 industries that lost import quota protection by 2002. Closer examination of the period surrounding these earlier integrations provides little insight as to the response of industry employment to trade lib-

eralization. In the Phase 1 integration, there was a substantial decline in Phase 1 and 2 industry employment as would be expected. However, this employment loss may have also been affected by the rising foreign exchange value of the dollar against major currencies beginning in 1995, the large devaluation of the Mexican peso in December 1994, and the ratification of NAFTA in 1994. A steeper decline in Phase 4 industry employment over this same period is consistent with this interpretation. Likewise, Phase 3 industry employment demonstrated a steep decline prior to Phase 3 integration in January 2002 that would be consistent with market anticipation of the coming liberalization. However, this same period corresponds with the prolonged recession in manufacturing, and employment losses in Phase 1, Phase 2 and Phase 4 industries also accelerated towards the end of 2000. In no instance did continued protection to Phase 4 industries provide notably greater resilience to job loss relative to Phase 1-3 industries.

**Figure 4: Index of U.S. Textile and Apparel Employment by Trade Liberalization Phase**



Source: Bureau of Labor Statistics Current Employment Statistics

In aggregate, Figure 4 demonstrates that Phase 4 industries have been at least as vulnerable to job loss as industries that lost trade protection in previous rounds, but all Phase 4 industries may not be vulner-

able to substantial job loss. Attention now turns to the fill rates of import quotas by industry to get a clearer indication of the importance of trade protection to detailed Phase 4 industries.

### ***The Amount of Trade Protection Afforded Phase 4 Industries***

The problems of linking commodity to industry are made even more difficult by the commodity information provided in the bilateral agreements that govern textile and apparel trade. Quotas are allocated and monitored using a classification system distinct from the Harmonized Trade System or NAICS codes. Most import quotas are defined for commodity categories that contain similar Harmonized Trade System (HTS) commodities. Some of these quotas group two to four commodity categories together, complicating the connection back to the detailed industries that produced them. Since no information is provided on how quotas are allocated among the detailed HTS commodities, information on quota limits and quota released are ascribed to all industries that produce commodities in that category or group of categories. As a result, calculations of aggregate and constrained fill rates by industry are best described as suggestive given the available information. These rates are provided in Table 5.

**Table 5: Aggregate and Constrained Fill Rates of Phase 4 Industries, 2003**

SIC	NAICS	SIC Description	Bilateral Agreements	Aggregate Fill Rate	Constrained Fill Rate
2392	314129	Homefurnishings, exc. Curtains and Draperies	47	0.745	0.311
2325	315224	M&B Separate Trousers and Slacks	80	0.597	0.276
2321	315223	M&B Shirts, except Work Shirts	201	0.612	0.274
2369	315291	Girls, Children and Infants Outerwear, nec	242	0.587	0.217
2322	315221	M&B Underwear and Nightwear	42	0.637	0.193
2341	315231	W/G & Infants Underwear and Nightwear	42	0.637	0.193
2331	315232	W&G Blouse and Shirts	89	0.584	0.176
2337	315234	W&G Suits, Skirts and Coats	200	0.564	0.165
2396	315999	Automotive Trimmings, Apparel Finding and Related	59	0.556	0.162
2329	315228	M&B Clothing, nec	168	0.463	0.152
2353	315991	Hats, Caps and Millinery	20	0.494	0.145
2385	315999	Waterproof Outerwear	52	0.552	0.134
2311	315222	M&B Suits, Coats, and Overcoats	92	0.538	0.129
2339	315239	W&G Outerwear, nec	25	0.467	0.120
2389	315999	Apparel and Accessories, nec	25	0.467	0.120
2381	315992	Dress and Work Gloves, exp Knit and All-Leather	18	0.276	0.086
2335	315233	W&G Dresses	27	0.493	0.080



**Table 5: Aggregate and Constrained Fill Rates of Phase 4 Industries, 2003 (cont.)**

SIC	NAICS	SIC Description	Bilateral Agree- ments	Aggregate Fill Rate	Con- strained Fill Rate
2281	313111	Yarn Spinning Mills	36	0.412	0.060
2221	313210	Broadwoven Fabric Mills, Manmade Fibers and Silk	106	0.260	0.037
2211	313210	Broadwoven Fabric Mills, Cotton	107	0.246	0.020
2284	313113	Thread Mills	9	0.509	0.000
2298	314991	Cordage and Twine	1	0.333	0.000
2231	313210	Broadwoven Fabric Mills, Wool	19	0.103	0.000

*Source: Computed from U.S. Customs and Border Protection reports*

Using data available in the 2003 Year-end Textile Status Report for Absolute Quotas

([http://www.customs.gov/xp/cgov/import/textiles\\_and\\_quotas/archived/2003\\_year\\_rpt/](http://www.customs.gov/xp/cgov/import/textiles_and_quotas/archived/2003_year_rpt/)) the aggregate fill rate is the ratio of the sum of released quotas for agreements with all countries over the sum of quota limits for all countries.<sup>5</sup> The aggregate fill rate gives one indication of tightness of the import restrictions. However, since quotas are non-transferable between countries, aggregate fill rates significantly below one do not indicate that the quotas are not restricting trade from a particular country. A more accurate indication of the tightness of import restrictions is a constrained fill rate computed as the ratio of the sum of released quota for all agreements having a fill rate of more than 85% over the sum of quota limits for all agreements. Even though 85% is still below the maximum, experts contend that it may be difficult to consistently fill quotas given the complexities of the quota management system (USITC 2002). This measure gives some indication of the share of imports in an industry that might be expected to expand after the import restrictions expire.

Table 5 is ranked by the constrained fill rate and the clear indication in the table is that Apparel industries are deriving more protection from the import restrictions than Textile industries. A more difficult judgement is determining whether quotas for Phase 4 industries at the bottom of the table are not constrain-

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<sup>5</sup> This table excludes bilateral agreements that are defined as “GROUPS”—a quota limit that includes 10, 15, or 20 commodity categories but with no indication of how the quota is allocated among categories or detailed HTS commodities. This problem is most serious for the largest bilateral agreements with China and India. A more detailed examination of the fill rates of these two countries includes information from these groups of commodity categories, presented below.

ing trade. An argument could be made that the very low constrained fill rate for all textile industries in Table 5 indicates that the effect of trade liberalization on these industries will be minor.

The somewhat optimistic impression from Table 5 abstracts from the dominant role that China, and to a lesser extent India, is expected to play in the post-MFA world (USITC 1999; USITC 2004), as the table does not include the large bilateral agreements labelled “Groups” (see footnote 5). It is anticipated that some production from other developing countries may be supplanted or completely replaced by textile and apparel products from these two countries.

Table 6 provides information on the aggregate and constrained fill rates for India and China that includes the problematic commodity category “Groups” that were not included in Table 5. Since there is no information on how the quota subject to Group limits is allocated to various commodity categories, and since 5 or 10 industries may produce commodities included in the Group, utilizing this information may tend to overestimate the extent to which any particular industry may face significantly greater import penetration after the expiration of quotas. However, the available information from Table 6 does suggest that nearly all Phase 4 industries, including the textile industries, may see imports increase after the expiration of import quotas.<sup>6</sup> More prudently, we cannot conclude that any of the Phase 4 industries will not be affected after January 1, 2005, and thus include employment from all of Phase 4 industries in determining which counties are most vulnerable to job loss as a result of the MFA phaseout.

**Table 6: Aggregate and Constrained Fill Rates of Phase 4 Industries for Chinese and Indian Import Quotas, 2003**

SIC_	NAICS	SIC Title	Bilateral Agreements	Aggregate Fill Rate	Constrained Fill Rate
2298	314991	Cordage and Twine	2	0.971	0.971
2281	313111	Yarn Spinning Mills	10	0.968	0.965
2322	315221	M&B Underwear and Nightwear	9	0.962	0.960
2341	315231	W/G&Infants Underwear and Nightwear	10	0.961	0.960
2284	313113	Thread Mills	2	0.962	0.959
2381	315992	Dress and Work Gloves, exp Knit and All-Leather	4	0.961	0.956
2321	315223	M&B Shirts, except Work Shirts	22	0.960	0.954

<sup>6</sup> The detailed industries that appear to derive least protection from the quota regime include SIC 2339, 2385, 2396 and 2211 (W&G Dresses, Waterproof Outerwear, Automotive Trimmings and Broad Woven Cotton Textile Mills, respectively).

**Table 6: Aggregate and Constrained Fill Rates of Phase 4 Industries for Chinese and Indian Import Quotas, 2003 (cont.)**

SIC	NAICS	SIC Title	Bilateral Agreements	Aggregate Fill Rate	Constrained Fill Rate
2311	315222	M&B Suits, Coats, and Overcoats	10	0.954	0.953
2231	313210	Broadwoven Fabric Mills, Wool	4	0.973	0.949
2329	315228	M&B Clothing, nec	21	0.954	0.946
2253		Knit Outerwear Mills	2	0.946	0.946
2389	315999	Apparel and Accessories, nec	5	0.945	0.944
2325	315224	M&B Neckwear	9	0.943	0.933
2353	315991	Hats, Caps and Millinery	6	0.934	0.933
2369	315291	Girls, Children and Infants Outerwear, nec	23	0.951	0.931
2337	315234	W&G Suits, Skirts and Coats	12	0.950	0.928
2331	315232	W&G Blouse and Shirts	11	0.948	0.912
2221	313210	Broadwoven Fabric Mills, Manmade Fibers and Silk	13	0.934	0.888
2392	314129	Homefurnishings, exc. Curtains and Draperies	14	0.919	0.757
2211	313210	Broadwoven Fabric Mills, Cotton	23	0.782	0.539
2396	315999	Automotive Trimmings, Apparel Finding and Related	2	0.735	0.334
2335	315233	W&G Dresses	4	0.751	0.230
2385	315999	Waterproof Outerwear	1	0.842	0.000

Source: U.S. Customs and Border Protection

### ***Geographic Concentration of Phase 4 Industries***

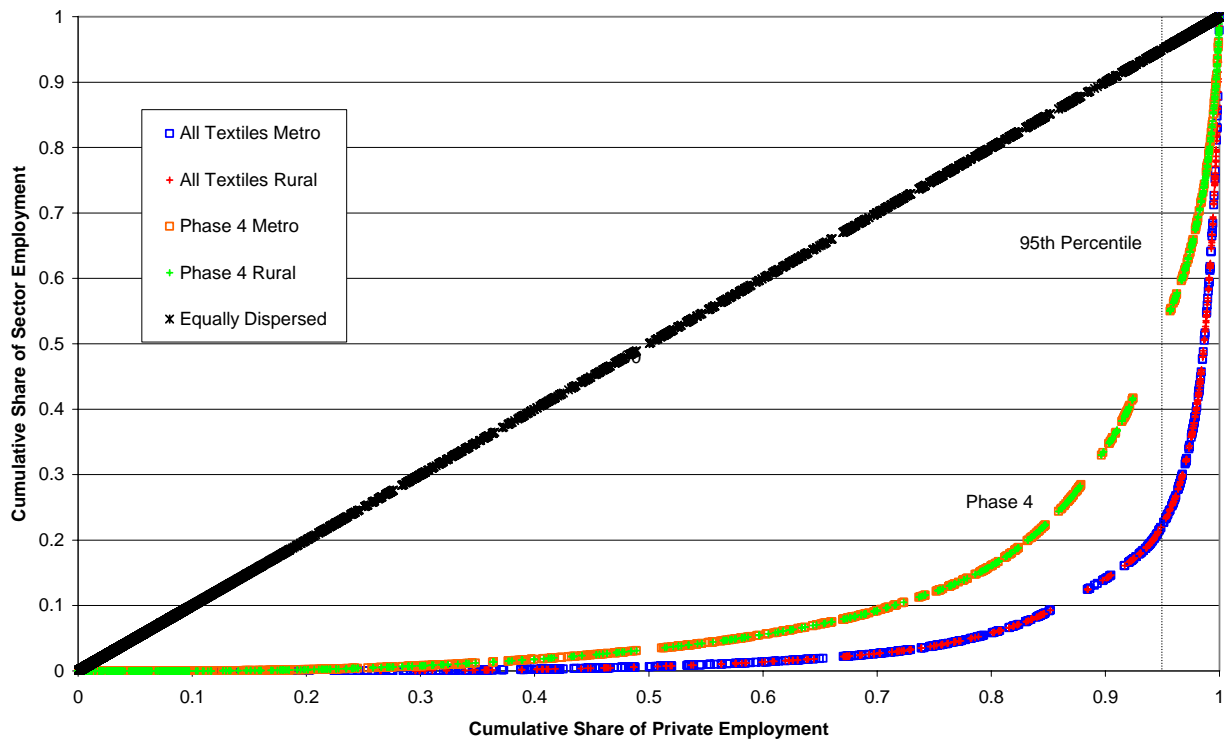
The pattern of concentration at the county level of Phase 4 industry employment is very similar to that for textile and apparel employment as a whole. Counties potentially most vulnerable to job loss due to trade liberalization are similarly found in the southern tier of Virginia counties, the Carolinas, Georgia and Alabama. Again, Mississippi, Tennessee and Kentucky also contain a number of counties with a high share of Phase 4 industry. However, there are some notable differences of Phase 4 industry employment concentration relative to textile and apparel employment more generally. Kentucky has a considerable number of counties concentrated in textile and apparel employment but with few counties concentrated in Phase 4 industries. Other instances of textile and apparel dependent counties with little Phase 4 industry employment occur in other southern states but these appear more infrequently. A list of some of these counties and their dominant industry are provided below.

### **Concentrated Textile and Apparel Counties with Little Phase 4 Industry Employment**

County Name and Major Settlement	Dominant Industry
DeKalb County, Alabama (Fort Payne)	Hosiery, nec (e.g., socks)
Calhoun County, Georgia (Morgan)	M&B Work Clothes
Whitfield County, Georgia (Dalton)	Carpets and Rugs
Bath County, Kentucky (Owingsville)	M&B Work Clothes
Larue County, Kentucky (Hodgenville)	M&B Work Clothes
Nicholas County, Kentucky (Carlisle)	Knit Underwear Mills
Russell County, Kentucky (Jamestown)	Knit Underwear Mills
St. Martin Parish, Louisiana (Breaux Bridge)	Knit Underwear Mills
Yadkin County, North Carolina (Yadkinville)	Yarn Texturizing
Meigs County, Tennessee (Decatur)	Yarn Texturizing
Morgan County, Tennessee (Wartburg)	M&B Work Clothes
Rockbridge County, Virginia (Lexington)	Carpets and Rugs

The distribution of Phase 4 industry employment reflects the combination of textile and apparel industries. Figure 5 provides a Lorenz curve of Phase 4 industry employment along with the Lorenz curve from the textile industry for comparison. The less concentrated distribution of Phase 4 employment suggests that conventional trade adjustment assistance directed to individuals may be effective for dealing with the majority of displaced workers. More than 50% of Phase 4 employment is distributed across 95 percent of the US labor market. The major discontinuity at the 95<sup>th</sup> percentile is caused by the large absolute number of Phase 4 industry employment in Los Angeles. However, 22% of Phase 4 industry employment is located in counties that that comprise only 1 percent of the US labor market.

Figure 5: Geographic Concentration of Phase 4 Employment



Source: Unpublished Bureau of Labor Statistics *Quarterly Census of Employment and Wages 2000*

### Prospects for Adjustment

Although the local impact of the expiration of import quotas cannot be quantified, it is prudent to examine the characteristics of those counties that are most dependent on these industries to assess the challenges that may confront trade adjustment assistance. We concentrate on two characteristics that are most likely to affect the ability of displaced workers to find new employment. We first examine the concentration of Phase 4 industry employment in the labor market sheds of highly vulnerable counties. Clearly, if surrounding counties are little affected by trade liberalization then the prospect of finding alternative employment is much brighter. Information on the human resource endowment in these counties is then examined to assess the flexibility of displaced workers for filling new work opportunities.

### *Employment Growth and Vulnerability in Commuting Sheds*

Assessing the ability of local labor markets to create new employment opportunities has been made more difficult by the soft labor market that has characterized the economic recovery that began in

November 2001. Recent data provide little insight as to the likely ability of specific labor markets to absorb workers that may be displaced due to trade liberalization. Robust job growth in March and April 2004 suggest that prospects are improving. As local labor market data for 2004 become available, analysis of Southern labor market areas should provide some indication of the employment creation capability of particular areas and the suitability of new jobs for displaced workers (see Thompson and Shaffer 1996).

In the meantime, the current analysis focuses on the concentration of Phase 4 industry employment in the commuting sheds surrounding the most vulnerable counties. Two commuter shed geographies—commuting zones and labor market areas—are used. Commuting Zones (CZs) were developed by grouping together individual counties sharing strong 1990 journey-to-work flows (Tolbert and Sizer 1996). These commuting zones were developed without regard to a minimum population threshold and are intended to be a spatial measure of the local labor market. The 3141 U.S. counties were grouped into 741 CZs. However, CZs failing to meet a 100,000 population threshold were combined with adjacent CZs into Labor Market Areas (LMAs) to meet this threshold to satisfy nondisclosure rules (Tolbert and Sizer 1996). Thus, LMAs can be regarded as extended CZs, although some CZs are coterminous with their LMA.

**Table 7** provides a list of the counties with the highest share of employment in Phase 4 industries. The share of Phase 4 industry employment in each target county's CZ and LMA were also calculated to indicate the potential ability of the larger labor market to absorb displaced workers. CZs and LMAs were classified as vulnerable if Phase 4 industry employment made up more than 5 percent of total private employment, and not vulnerable if this share fell below 2.5 percent. Labor markets falling within this range were classified as susceptible to job loss (indicated by "SUSC" in the table). Of the 57 counties included in the list, 26 of them are in labor markets that are vulnerable to substantial job loss. All of these counties are in the southern crescent of Alabama, Georgia, South Carolina and North Carolina, extending into the southern tier of Virginia counties. Monroe County, Alabama is the only county where the larger LMA may provide some relief for the vulnerable CZ. In 17 counties, Phase 4 employment made up between 2.5 to 5 percent of private employment using either labor market geography. These labor markets may be better able to absorb displaced workers but are still likely to be stressed. This category includes counties in

Mississippi, Tennessee and Kentucky along with the southern crescent states. Labor markets having the most potential to absorb displaced workers are found predominantly outside the core textile and apparel region in Missouri, Arkansas, Oklahoma and Florida. However, southern crescent counties near larger metropolitan centers are also included in this category.

In close to half of the most vulnerable counties, current labor market conditions indicate limited ability for absorbing displaced workers.

**Table 7: Counties with Highest Shares of Phase 4 Industry Employment**

	County Name	State	Commuting Zone Vulnerable?	LMA Vulnerable?	% of Labor Force without HS Diploma	Sewing Machine Operators as % of T&A Occupations	2000 Population
1.	Chattooga County	GA	YES	YES	32.50%	37.55%	25,470
2.	Randolph County	AL	YES	YES	28.15%	69.31%	22,380
3.	Cherokee County	AL	YES	YES	27.88%	53.67%	23,988
4.	Henry County	VA	YES	YES	26.80%	50.62%	57,930
5.	Carroll County	VA	YES	YES	26.69%	68.44%	29,245
6.	Jeff Davis County	GA	YES	YES	26.56%	67.77%	12,684
7.	Chambers County	AL	YES	YES	25.99%	34.76%	36,583
8.	Treutlen County	GA	YES	YES	25.97%	89.37%	6,854
9.	Charlotte County	VA	YES	YES	25.75%	66.32%	12,472
10.	Johnson County	GA	YES	YES	25.74%	84.19%	8,560
11.	Mecklenburg County	VA	YES	YES	25.58%	61.54%	32,380
12.	Cherokee County	SC	YES	YES	25.22%	26.75%	52,537
13.	McCormick County	SC	YES	YES	25.06%	47.05%	9,958
14.	Coosa County	AL	YES	YES	24.89%	60.16%	12,202
15.	Russell County	AL	YES	YES	24.03%	31.62%	49,756
16.	Rutherford County	NC	YES	YES	23.78%	23.85%	62,899
17.	Union County	SC	YES	YES	22.96%	23.14%	29,881
18.	Decatur County	GA	YES	YES	22.70%	73.47%	28,240
19.	Tallapoosa County	AL	YES	YES	22.22%	54.69%	41,475
20.	Hoke County	NC	YES	YES	21.99%	44.11%	33,646
21.	Scotland County	NC	YES	YES	21.76%	55.89%	35,998
22.	Yancey County	NC	YES	YES	21.64%	48.97%	17,774
23.	Lincoln County	GA	YES	YES	21.48%	85.11%	8,348
24.	Rabun County	GA	YES	YES	21.46%	52.77%	15,050
25.	Covington County	AL	YES	YES	21.10%	72.39%	37,631
26.	Abbeville County	SC	YES	YES	20.77%	34.93%	26,167
27.	Monroe County	AL	YES	NO	22.96%	89.38%	24,324
28.	Tallahatchie County	MS	SUSC	SUSC	32.58%	94.64%	14,903
29.	Jenkins County	GA	SUSC	SUSC	29.33%	90.88%	8,575
30.	Todd County	KY	SUSC	SUSC	28.14%	92.17%	11,971
31.	Page County	VA	SUSC	SUSC	27.85%	90.39%	23,177
32.	Johnson County	TN	SUSC	SUSC	27.19%	91.29%	17,499
33.	Banks County	GA	SUSC	SUSC	26.94%	53.15%	14,422
34.	Clay County	TN	SUSC	SUSC	26.46%	94.35%	7,976

**Table 7: Counties with Highest Shares of Phase 4 Industry Employment (cont.)**

	County Name	State	Commuting Zone Vul- nerable?	LMA Vulner- able?	% of Labor Force without HS Diploma	Sewing Machine Operators as % of T&A Occupations	2000 Population
35.	Berrien County	GA	SUSC	SUSC	26.13%	57.45%	16,235
36.	Walker County	GA	SUSC	SUSC	25.42%	31.16%	61,053
37.	Chester County	SC	SUSC	SUSC	25.33%	33.47%	34,068
38.	Clarke County	MS	SUSC	SUSC	24.13%	51.78%	17,955
39.	Henry County	AL	SUSC	SUSC	23.18%	79.04%	16,310
40.	Lancaster County	SC	SUSC	SUSC	22.97%	41.79%	61,351
41.	Anson County	NC	SUSC	SUSC	22.35%	64.47%	2,5275
42.	Danville city	VA	SUSC	SUSC	22.08%	37.27%	48,411
43.	Edgefield County	SC	SUSC	SUSC	21.97%	50.57%	24,595
44.	Caswell County	NC	SUSC	SUSC	21.24%	39.92%	23,501
45.	Wolfe County	KY	SUSC	NO	27.43%	70.59%	7,065
46.	Shannon County	MO	SUSC	NO	22.37%	92.23%	8,324
47.	Coal County	OK	SUSC	NO	21.96%	90.27%	6,031
48.	Calhoun County	MS	NO	NO	27.58%	97.59%	15,069
49.	Saluda County	SC	NO	NO	25.92%	61.06%	19,181
50.	Jackson County	TN	NO	NO	24.71%	83.60%	10,984
51.	Madison County	MO	NO	NO	22.57%	100.00%	11,800
52.	Bollinger County	MO	NO	NO	21.31%	83.97%	12,029
53.	Pulaski County	GA	NO	NO	21.29%	61.97%	9,588
54.	Lincoln County	AR	NO	NO	20.70%	74.67%	14,492
55.	Person County	NC	NO	NO	19.61%	52.98%	35,623
56.	Washington County	FL	NO	NO	18.70%	88.48%	20,973
57.	Seminole County	OK	NO	NO	17.74%	86.82%	24,894
	Correlation and Sum					.0965	1,377,762

Source: Unpublished Bureau of Labor Statistics Quarterly Census of Employment and Wages 2000; EEOC Special Tabulation of the 2000 Census of Population, EEOC Special Tabulation of the 1990 Census of Population

### ***Human Resource Endowment of Potentially Displaced Workers***

The preceding analysis assumed that prospects for adjustment are determined by labor demand in nearby counties. The other side of the adjustment problem relates to labor supply, specifically whether displaced workers are qualified to fill the new jobs created. We examine the educational attainment of county residents in the labor force along with the occupational composition of textile and apparel workers in counties with the highest shares of Phase 4 industry employment.

### ***Educational Attainment of the Labor Force in Vulnerable Counties***

Given the historic decline in textile and apparel employment, the possibility for substantial job loss after January 1, 2005, and bleak forecasts for job growth in low-skilled manufacturing more generally, the



prime indicator of labor flexibility is the ability to master new skills required of very different kinds of work. The share of workers with a high school diploma in a county is one indicator of this ability. Significant remedial education of displaced workers lacking a high school education will likely be required before job retraining can begin. Although data on the educational attainment of textile and apparel workers in counties are not available, data on the educational attainment of the county labor force should provide an approximation of the need for remedial education.

Table 8 provides information on the percent of county residents in the labor force that lack a high school diploma for all the counties included in Table 7. The percentages are computed for all Table 7 counties in a state. The share of the state labor force lacking a high school diploma is also provided as a benchmark. The findings partially mirror those of the previous section: the gap between the educational attainment of Table 7 counties and their state is smallest in those states outside the textile and apparel core. The need for remedial education in Florida, Oklahoma, and Arkansas counties appears less daunting than in the other Southern states. However, the Carolinas appear to have a less serious problem than Kentucky, Mississippi, Tennessee, Virginia, Georgia or Alabama. Nevertheless, remedial education is likely to be necessary in all these states as the educational attainment of low-skill textiles and apparel employees will tend to be higher than the level present in the county. A better understanding of the educational attainment level of rural textile and apparel workers awaits an analysis of Current Population Survey samples. The county-level analysis suggests that counties with high shares of Phase 4 industry employment may be burdened with a large number of displaced workers who are unqualified to even begin job re-training.

**Table 8: Percentage of Labor Force Lacking a High School Diploma**

State	Number of Counties	% Labor Force Lacking HS Diploma	% Labor Force Lacking HS Diploma in State	Difference
Alabama	9	24.20%	17.87%	6.33%
Arkansas	1	20.70%	17.81%	2.89%
Florida	1	18.70%	17.10%	1.60%
Georgia	12	25.71%	17.62%	8.09%
Kentucky	2	27.92%	16.99%	10.93%
Mississippi	3	27.73%	20.11%	7.62%
Missouri	3	22.02%	14.62%	7.40%
North Carolina	7	22.00%	17.58%	4.42%
Oklahoma	2	18.54%	15.84%	2.70%
South Carolina	8	23.73%	18.31%	5.42%
Tennessee	3	26.22%	17.43%	8.80%
Virginia	6	25.59%	14.34%	11.25%

Source: EEOC Special Tabulation of the 2000 Census of Population

#### *Distribution of Textile and Apparel Occupations in Vulnerable Counties*

Evidence provided by Field and Graham (1997) largely refutes the claim that displaced textile and apparel workers are less likely to be re-employed than displaced workers from other industries. They conclude that the labor adjustment argument does not justify special protection for the industry. However, they also provide evidence suggesting that some types of textile and apparel workers may have a more difficult time finding alternative employment. Their data come from a study of 34,940 North Carolina workers who lost their jobs between the third quarter of 1986 and the fourth quarter of 1991, with their re-employment experience tracked to the end of the first quarter of 1992. Displaced female apparel industry workers had the least success in finding new employment of any of the various worker/industry combinations considered. Only 79.7% of these workers found a new job, compared with re-employment rates of greater than 90% for workers in textiles and other manufacturing. The occupational composition of highly vulnerable counties provides another indication of the difficulty of labor adjustment.

Data on detailed occupations are available in the EEOC Special Tabulation of 2000 Census, but only for groups of rural counties meeting a 50,000 population disclosure threshold. However, these data were provided at the county level in the 1990 Special Tabulation and are used here.

The production occupations overwhelmingly in textile and apparel industries include Dressmakers; Tailors; Miscellaneous precision apparel and fabric workers; Winding and twisting machine operators; Knitting, looping, taping, and weaving machine operators; Textile cutting machine operators; Textile sewing machine operators; and Miscellaneous textile machine operators.

Information on Sewing Machine Operators as a share of all textile and apparel production occupations is provided in Table 7. Across all of these highly vulnerable counties, sewing machine operators accounted for nearly 64% of the textile and apparel occupations. This is slightly more than the national share of 56.2%. This is clearly an overestimation of the true share of sewing machine operators in the industry that is explained by excluding a large number of textile and apparel workers, classified in general production occupations, from the denominator. However, the measure does provide some indication of the relative reliance on low-skill apparel employment and the difficulties this may present for labor adjustment. The highest shares are in counties outside the textile and apparel core and generally in labor markets that are not vulnerable to substantial job loss. Counties with the lowest share of sewing machine operators tend to be in the textile and apparel core (NC, SC, GA and AL), in labor markets vulnerable to substantial job loss.

### **Conclusions and Policy Implications**

The purposes of this analysis were to determine the spatial distribution and concentration of the textile and apparel industries, determine which detailed industries within the textile and apparel complex were most vulnerable to significant import penetration and job loss following the expiration of all import quotas on January 1, 2005, and to identify those counties most dependent on potentially vulnerable employment and assess the capacity of displaced workers in these areas to find alternative employment.

The analysis confirmed that the majority of textile and apparel employment is located in the Southeastern United States, which is most heavily concentrated in the southern crescent of North Carolina, South Carolina, Georgia and Alabama. Analysis determining that the textile industry is the most geo-

graphically concentrated of major manufacturing industries suggests that the costs of trade liberalization may be borne by a relatively small number of places, complicating the process of trade adjustment.

However, the majority of detailed industries most vulnerable to job loss were found in the apparel sector. While the spatial distribution of vulnerable industry employment is less concentrated than textiles alone, close to half of this employment is sufficiently concentrated in a relatively small number of counties to present new challenges to the existing programs of trade adjustment assistance.

A closer examination of those counties most highly dependent on potentially vulnerable employment confirms that the normal adjustment process in close to half of them is likely to be impeded by a concentration of vulnerable industry employment in the counties' larger labor market sheds. Labor forces in these counties are also characterized by a significantly higher share of workers who never graduated from high school. This again suggests that the normal adjustment process may be impeded by a large number of displaced workers requiring remedial education before receiving job retraining.

Before addressing possible policy responses to these hard cases, it is important to note those factors contributing to a more orderly adjustment process in most of the country. First, backloading in the sequence of phasing out import quotas means that two-thirds of the employment in vulnerable industries is in apparel firms, that is distributed more evenly throughout the country. In addition, protection afforded to the weakest industries for the full ten years has in effect facilitated significant adjustment through the secular decline of these industries. Employment is roughly half of what it was in 1995 meaning that the adjustment will be considerably less disruptive than would have been the case if integration to WTO rules had been mandated for all textile and apparel industries earlier.

The implication of these factors is that the majority of vulnerable industry employment is located in labor markets where traditional, employee-focused programs of trade adjustment assistance are likely to be effective as workers that may be displaced due to trade liberalization make up a small percentage of the local labor force. The major policy recommendation would be for incremental improvement in these programs to make them more effective. For example, for the Labor Department's High Growth Job Training Initiative has demonstrated the value of facilitating collaboration between potential employers, business

associations, community colleges and the public workforce systems to better coordinate training programs to meet local workforce needs.

The same argument for better coordination between stakeholders and various government agencies and programs pertains to those counties most vulnerable to substantial job loss due to trade liberalization. However, the scope of this coordination should extend beyond job retraining to include developing alternative bases of economic development. The recent Commerce Department report (2004) on policy responses to continued job losses in manufacturing elaborates on just such a need:

The federal government already has a number of programs available that can be used to develop the competitiveness of communities and support innovation in manufacturing. The challenge for communities often involves sorting out the purposes and requirements of these federal programs and how they might be employed or tailored to local circumstances. What is needed is an interagency federal task force, chaired by the Assistant Secretary of Commerce for Economic Development, to coordinate the efforts of relevant federal agencies, particularly the Departments of Labor and Education, in addressing the structural economic challenges faced by manufacturing dependent communities... Given that early intervention and planning are critical for communities at risk, the first step the task force should take is to identify criteria for determining when a rapid response is needed. The task force would then work with the communities identified under these criteria to develop market-based development policies that seek to retain manufacturing jobs in a community, while beginning efforts to diversify the economic base of the community (p. 73).

Vulnerability to job loss due to trade liberalization may qualify as one of these early warning criteria. The very high level of trade protection afforded to the textile and apparel industries, and the geographic concentration of this employment in the Southeast present an urgent opportunity for demonstrating the workability of an interagency response to communities at risk.

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