International Trade Agreements Bring Adjustment to the Textile and Apparel Industries

Industries important in nonmetro areas, such as agriculture, food processing, and tobacco products, have benefited from increasingly open markets and increased exports. However, the textile and apparel industries have seen declining employment as trade has liberalized, and many nonmetro communities with closed textile and apparel plants have turned to trade assistance programs for help.

Recent trade liberalization efforts, including the North American Free Trade Agreement (NAFTA), are of interest to rural areas because trade-related industries are especially important to rural economies. Exports of goods—including agricultural, manufacturing, and mining products—account for about two-thirds of U.S. exports. These goods-producing industries currently account for 26 percent of nonmetro jobs, whereas they are only 14 percent of metro jobs, making goods production disproportionately nonmetro.

Increased growth in U.S. exports translates into greater employment growth and a lower unemployment rate in nonmetro areas. Indeed, in the recent 1997-98 global financial crisis, nonmetro employment growth declined along with export growth of U.S. goods, while metro labor markets were largely unaffected. As exports rebounded in late 1998 and the global financial crisis subsided, the shock to the nonmetro labor market subsided as well.

Although trade liberalization has benefited nonmetro areas overall, not all industries and localities are equally affected and some may suffer adverse effects. The textile and apparel industries, which are disproportionately nonmetro and concentrated in the Southeast (fig. 1), are a particular concern because of declining employment and import competition.

This article focuses on the textile and apparel industries, looking at the current trade agreements and other international factors that affect domestic production. These industries' participation in Federal trade adjustment assistance programs is also highlighted. In addition, a comparison of the textile and apparel industries' experience with that of agriculture, food processing, and tobacco products is presented.

NAFTA and the WTO Opening Economies to Trade

NAFTA, ratified in 1993, among the United States, Mexico, and Canada, has had a positive effect overall on U.S. agriculture and manufacturing, reinforcing the trend toward greater integration of markets in North America. Along with more competitive U.S. agriculture and manufacturing, American consumers have also benefited from wider sources of supply. NAFTA's most important innovation was incorporating Mexico into the long-standing, open trading relationship between Canada and the United States, a move which acknowledged Mexico's progress in opening its economy.

Although trade liberalization in textiles and apparel lag most other manufacturing sectors, the World Trade Organization's (WTO) 1995 Agreement on Textiles and Clothing (ATC) represents a dramatic step in the sector's multilateral liberalization. Even with limited liberalization to date, imports of textiles and apparel by industrialized countries have grown dramatically. With demand supported by rising incomes, the United States remains the world's largest retail consumer of textiles and apparel. However, with the ATC, the quantitative restrictions that have provided some protection to the U.S. textile and apparel industry are scheduled to end by 2005, opening the industry to greater worldwide competition (see box on pg. 35, "WTO's Agreement on Textiles and Clothing and NAFTA").

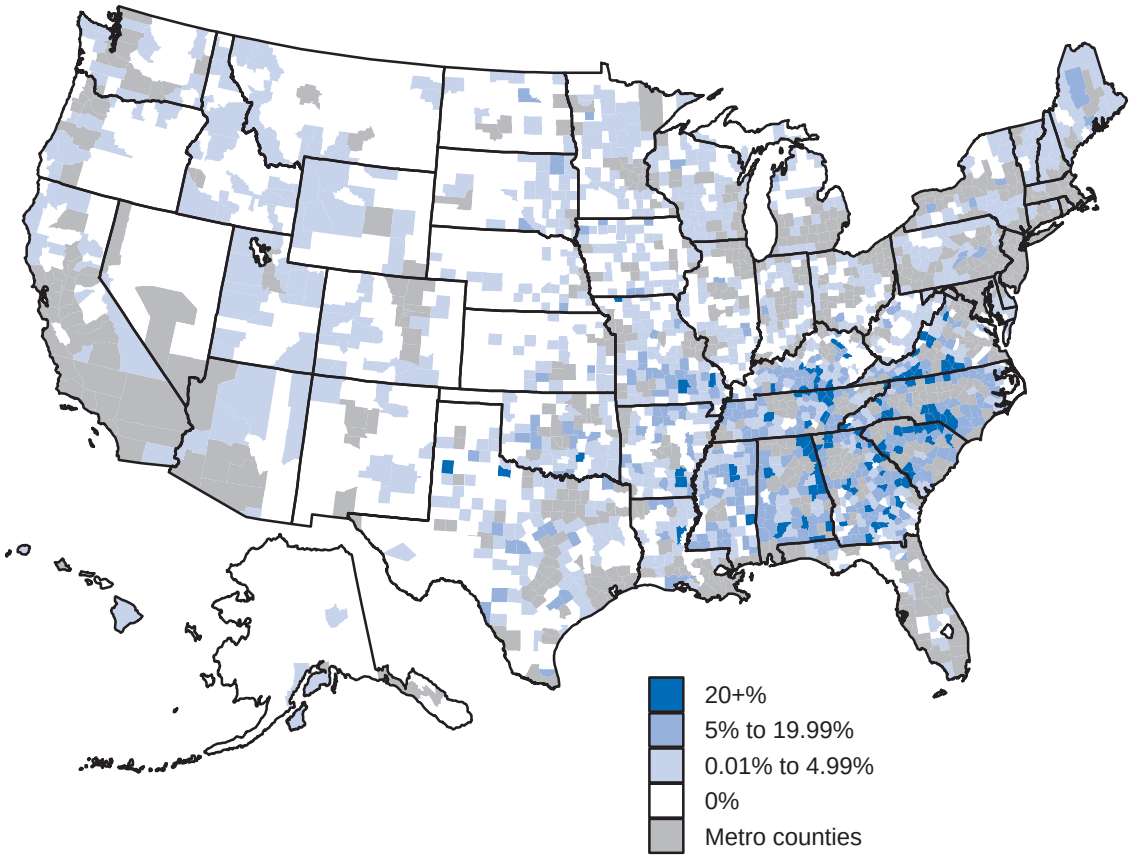
Prior to 1959, the United States exported more textile and apparel products annually than it imported. Since then, however, the United States has run a net trade deficit. In the early 1980's, textile and apparel exports fell significantly as real exchange rates made U.S. products more expensive overseas, while at the same time, imports surged as relatively lower priced imported products became available to U.S. consumers.

Since the implementation of NAFTA, the overall value of textile and apparel trade has continued to rise (fig. 2). While NAFTA alone is not responsible for all of the changes in U.S. textile and apparel trade in the 1990's, the agreement has certainly influenced trade. Over the past several years, U.S. trade has been shifting, not only in the source or destination of the products but also in the type of products that are traded. U.S. textile and

Figure 1

Textile and apparel: Jobs in textile and apparel manufacture as percentage of all jobs in the county, 1996

Southeastern counties are most dependent on textile and apparel manufacture



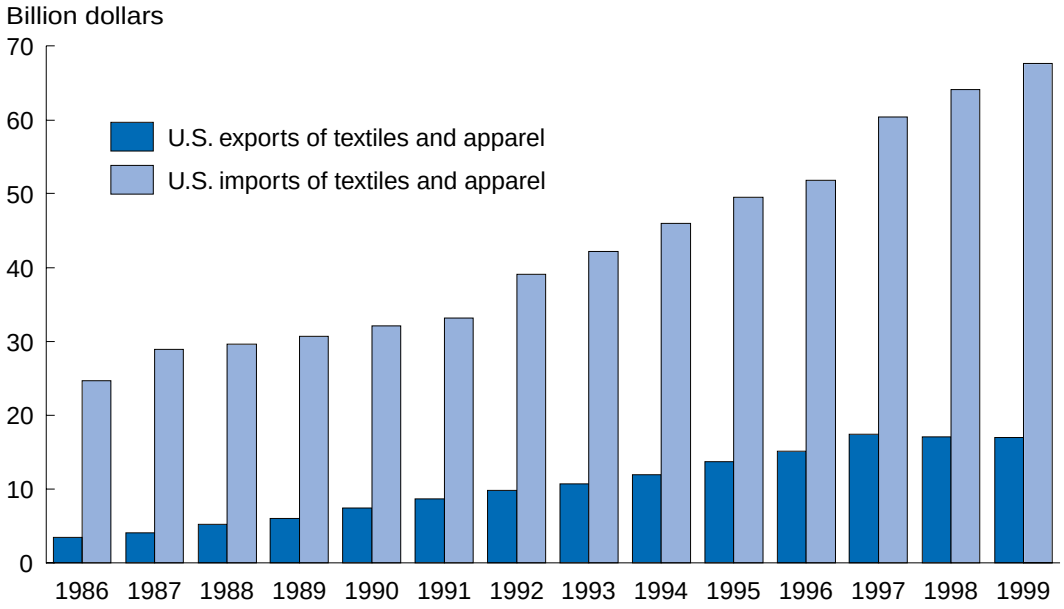
Source: ERS calculations using *County Business Patterns* data.

apparel imports consist largely of apparel items, which are labor intensive and can be produced at lower cost outside the United States. (see box on pg. 38, "Labor Costs Favor Developing Countries' Textile Trade").

Apparel also accounts for a large share of U.S. textile and apparel exports, albeit much less so than with imports. With NAFTA, and the continued success of the Caribbean Basin Initiative—started in the 1980's to allow quota-free access for selected countries for products produced with U.S. fabric—apparel pieces increasingly have been exported to Mexico and the Caribbean for assembly before returning to the United States as finished apparel products.

NAFTA's direct impact on U.S. textile and apparel trade is difficult to quantify due to the lagged impacts of changes in Mexican textile trade policy during the 1980's, the peso devaluation that occurred shortly after NAFTA's implementation, and structural changes in Asian textile production and trade. In addition to increased textile and apparel trade with Canada and Mexico, U.S. trade with other North American countries (including Central America and the Caribbean) has expanded as well. In fact, all North American textile and apparel producers have benefited from a slowdown in shipments from traditional Asian exporting countries. In 1993, U.S. imports from North American countries accounted for only 20 percent of the total, while imports from Asian countries contributed about 64 percent. During 1999, data indicate that the North American share of U.S.

Figure 2
U.S. trade in textiles and apparel, 1986-99
U.S. imports have risen dramatically in the 1990's



Source: U.S. Department of Commerce, SITC classifications 65 and 84.

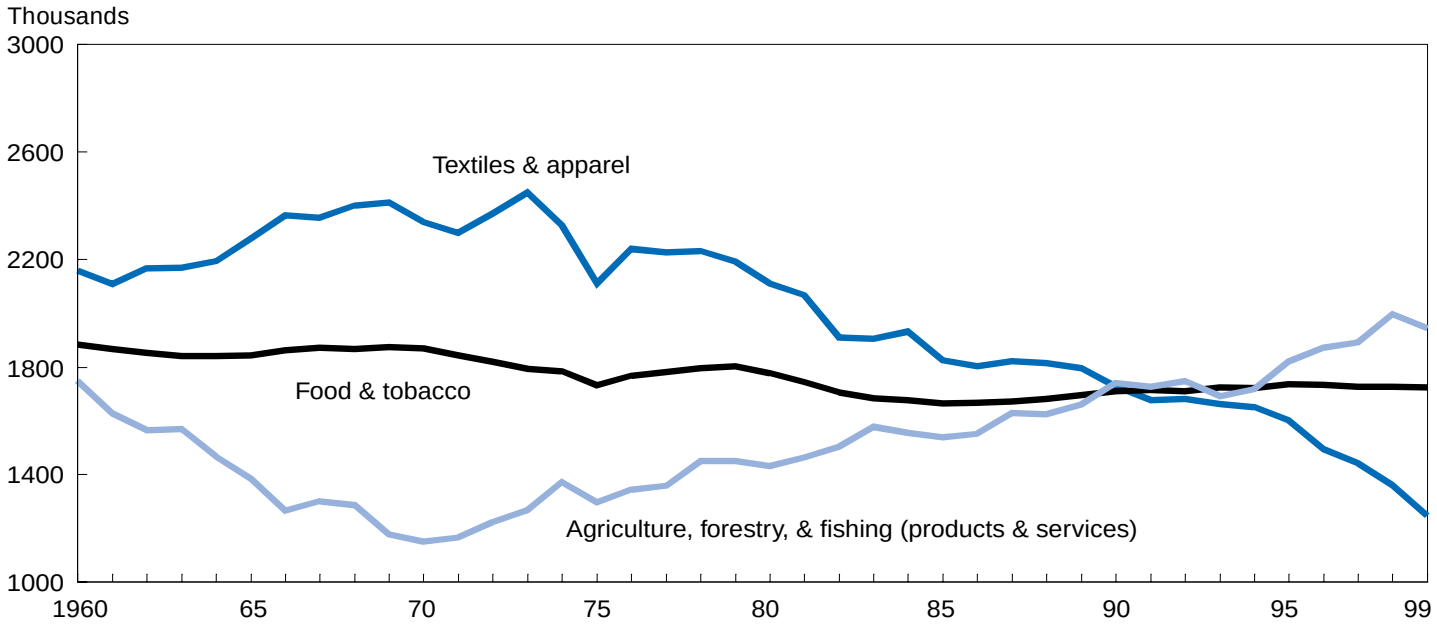
imports had doubled to 40 percent, while Asian imports as a percentage of the total declined to 48 percent.

Likewise, U.S. textile and apparel exports have expanded to North American countries since the start of NAFTA. Unlike Asia's import domination prior to 1994, North American countries (including the Caribbean, in this case) have historically accounted for the majority of U.S. exports. In 1993, 60 percent of all U.S. textile and apparel exports went to other North American countries, while 18 percent went to Asian countries. Since 1993, both the quantity and share of total U.S. shipments have risen dramatically to the North American region. During 1999, the North American share of U.S. textile and apparel exports reached 82 percent, while the share to Asia decreased to only 6 percent of U.S. shipments.

Declining Textile and Apparel Employment

All the changes discussed above, together with high productivity increases, have led to declining employment in the textile and apparel industries (fig. 3). In 1960, textiles and apparel provided 2.2 million jobs in the United States. At their 1973 peak, the industries had 2.45 million jobs. Although the number of jobs has generally fallen since then, after 1994 the drop-off accelerated, with only 1.25 million jobs left in 1999. Through the 1990's, these industries achieved high productivity growth, with the average annual growth at about 4 percent for both, double the productivity growth of all nondurable manufactured goods industries. The Bureau of Labor Statistics (BLS), in its recently released employment projections (U.S. Department of Labor, Bureau of Labor Statistics, *Monthly Labor Review*, November 1999, or http://stats.bls.gov/emphome.htm), expects employment to continue to decline in these industries by 20.5 percent in total over 1998-2008 as a result of productivity increases in textiles and import competition in apparel, although output will continue to grow in both industries.

Figure 3
Jobs by industry, 1960-99
Textile and apparel jobs in decline since 1973



Source: ERS calculations using Bureau of Labor Statistics Current Employment Statistics and Current Population Survey data.

Large Numbers of Textile and Apparel Applicants Qualify for Trade Adjustment Assistance Programs

Multilateral trade agreements have expanded international trade, benefiting the United States. However, while the economy as a whole may benefit, certain sectors and worker groups within those sectors may bear the brunt of the adverse effects of liberalized trade. The Trade Adjustment Assistance (TAA) and NAFTA Transitional Adjustment Assistance (NAFTA-TAA) programs exist specifically to assist workers whose layoffs are determined by the Department of Labor to have been caused by trade. Assistance includes retraining, income support while in training, and job search and relocation allowances. The goal of these programs is to assist individuals in acquiring the skills necessary for them to obtain suitable reemployment. A worker group at a plant or a portion of a plant must be certified by the Department of Labor in order for workers in that group to be individually eligible to receive benefits. A petition seeking certification may be filed by three or more workers, their union, or by a company official on the workers' behalf. The FY 2000 appropriations include $349 million for the TAA program and $66 million for the NAFTA-TAA program.

Between January 1994 and September 1999, the Department of Labor granted certification to 6,282 worker groups under TAA (table 1), and about 40 percent were in nonmetro counties. Under the NAFTA-TAA program, about 40 percent of the certifications over January 1994-January 1999 were also in nonmetro areas (table 2). These nonmetro shares of certifications are double the nonmetro proportion of U.S. population and labor force, and also double the share of nonmetro establishments as a proportion of all U.S. establishments. The main reason for certification under NAFTA-TAA was that production at the affected companies shifted to Mexico.

By far, the largest group of certifications under TAA and under NAFTA-TAA was for the apparel and other textile products industries. For nonmetro areas, certifications of worker groups at apparel establishments made up 43 percent of nonmetro TAA certifications, and also made up 39 percent of all NAFTA-TAA certifications in the United States. Furthermore, about one-third of all nonmetro apparel establishments received worker-

WTO's Agreement on Textiles and Clothing and NAFTA

International trade in textiles and apparel has been governed by quantitative restrictions under the Multi-Fiber Arrangement (MFA) and earlier agreements for more than 30 years. One of the major results of the Uruguay Round was the conclusion of the Agreement on Textiles and Clothing (ATC), which provides for the dismantling of these restrictions. Under the Uruguay Round ATC, the MFA restrictions are to be phased out over a 10-year period and are scheduled to end by the year 2005.

The ATC provides the legal framework leading to a complete integration of this sector into the General Agreement on Tariffs and Trade (GATT) at the end of the transition period. The MFA phaseout is comprised of two parts: a four-stage process eliminating export restraints contained in bilateral agreements previously negotiated on products covered under the MFA, and an increase in quota growth rates for products still under restriction during the transition period. The ATC also deals with other non-MFA restraint measures relating to textiles and clothing.

With the elimination of the MFA quotas and other restrictions, tariffs will become the primary mechanism for border protection as the same rules will apply to trade in textiles and clothing as in other goods. In the long run, the restraint reductions will effectively improve market access for developing countries' textile and clothing products in developed countries. And at the same time, developed countries are already achieving the reciprocal access to developing countries' textile and apparel markets that was lacking before the Uruguay Round Agreement (URA).

The North American Free Trade Agreement (NAFTA), implemented on January 1, 1994, began liberalizing trade and investment rules among the United States, Canada, and Mexico. The United States pursued NAFTA to secure its relationship with Canada and Mexico, promote economic stability in both countries, and lock in policy reforms and trade gains achieved since the mid-1980's. NAFTA encompasses the Canada-U.S. Free Trade Agreement, which began in 1989, and builds on the "Framework of Principles and Procedures for Consultations Regarding Trade and Investment Relations" between the United States and Mexico, which began in 1987.

Structural changes resulting from trade liberalization have developed over the last several years, but any assessment of the impact of NAFTA must recognize that it is only one of several factors that have influenced North American agricultural markets. Trade liberalization with NAFTA and domestic policy reforms in the United States, Canada, and Mexico are part of a broader global trend toward more market-oriented policies. All three countries have recently adopted fundamental domestic agricultural policy reforms, and the effects of these changes are sometimes difficult to separate from the direct effects of NAFTA trade reforms.

For textile products, the United States reduced tariffs and expanded quota-free access for items constructed from yarn and fiber produced by a NAFTA country. Starting in 1998, all duties on textile goods between the United States and Canada that qualify under NAFTA were eliminated. By 1999, over 95 percent of the U.S. duties on Mexico's textile goods that qualify under NAFTA rules of origin were eliminated, and at the same time, over 90 percent of Mexico's duties on U.S. textile exports that qualify were eliminated.

Information on Trade Assistance Programs

For more information on TAA and NAFTA-TAA, see U.S. Department of Labor Employment and Training Administration, http://www.doleta.gov.

Two other trade assistance programs not discussed in this article are (1) technical assistance to employers through the Trade Adjustment Assistance Program (see Department of Commerce's web site, http://www.doc.gov, and look under Economic Development Administration), and (2) the North American Development Bank, see http://www.nadbank.org.

Table 1

Trade Adjustment Assistance Program Certifications, January 1994-September 1999

The apparel industry had the most certifications

Industry	Nonmetro Certifications	Nonmetro Rate[1]	Metro Certifications	Metro Rate[1]	Total U.S. Certifications[2]	Total U.S. Rate[1]
	Number	Percent	Number	Percent	Number	Percent
Agriculture, forestry, and fishing	7	0.03	5	0.01	12	0.01
Mining	376	3.30	613	4.56	1,435	5.78
Manufacturing—total	1,855	2.23	3,091	1.04	4,758	1.25
Food and kindred products	13	.22	57	.37	70	.33
Tobacco products	0	.00	1	.92	1	.74
Textile mill products	126	6.44	175	3.94	301	4.70
Apparel and other textile products	965	27.20	1,007	4.86	1,986	8.18
Lumber and wood products, except furniture	141	.68	46	.27	191	.51
Furniture and fixtures	24	1.00	32	.34	56	.47
Paper and allied products	24	2.24	49	.89	73	1.11
Printing, publishing, and allied industries	8	.08	19	.04	27	.04
Chemicals and allied products	15	.80	82	.78	97	.78
Petroleum refining and related products	10	2.24	15	.90	25	1.18
Rubber and miscellaneous plastics products	25	.81	69	.51	93	.56
Leather and leather products	98	19.92	127	8.78	227	11.71
Stone, clay, glass, and concrete products	16	.32	77	.66	118	.71
Primary metal industries	34	2.58	91	1.68	125	1.86
Fabricated metal products	38	.67	106	.34	144	.39
Industrial and commercial machinery, and computer equipment	42	.39	213	.46	290	.51
Electronic and other electrical equipment	151	7.02	302	2.01	479	2.79
Transportation equipment	51	1.81	104	1.14	158	1.33
Measuring, analyzing, controlling instruments	35	3.34	107	1.03	143	1.25
Miscellaneous manufacturing industries	39	1.43	115	.73	154	.84
Service sector and construction	16	.00	28	.00	77	.00
Total	2,254	.17	3,447	.06	6,282	.09

[1]TAA certifications as a percentage of all establishments.

[2]Total U.S. includes certifications in nonmetro and metro, and also certifications for worker groups at companies with the location, “all locations,” at companies certified in Puerto Rico, and at companies in cities that could not be identified as metro or nonmetro. Consequently, U.S. totals may be larger than the sum of nonmetro and metro.

Source: Calculated by ERS using data from Employment and Training Administration, U.S. Department of Labor, and from Enhanced County Business Patterns data, 1996.

Table 2

NAFTA-Transitional Adjustment Assistance Program Certifications, January 1994-January 1999

Nonmetro areas led metro areas in apparel certifications

Industry	Nonmetro Certifications	Nonmetro Rate[1]	Metro Certifications	Metro Rate[1]	Total U.S. Certifications[2]	Total U.S. Rate[1]
	Number	Percent	Number	Percent	Number	Percent
Agriculture, forestry, and fishing	9	0.04	10	0.01	19	0.02
Mining	16	.14	17	.13	58	.23
Manufacturing—total	658	.79	995	.33	1,663	.44
Food and kindred products	4	.07	25	.16	29	.14
Tobacco products	0	.00	0	.00	0	.00
Textile mill products	26	1.33	44	.99	69	1.08
Apparel and other textile products	270	7.61	259	1.25	531	2.19
Lumber and wood products, except furniture	100	.48	30	.18	134	.36
Furniture and fixtures	6	.25	16	.17	22	.18
Paper and allied products	17	1.59	24	.44	41	.62
Printing, publishing, and allied industries	4	.04	12	.02	16	.03
Chemicals and allied products	7	.37	28	.27	35	.28
Petroleum refining and related products	1	.22	1	.06	2	.09
Rubber and miscellaneous plastics products	15	.48	38	.28	53	.32
Leather and leather products	26	5.28	28	1.94	55	2.84
Stone, clay, glass, and concrete products	8	.16	27	.23	35	.21
Primary metal industries	8	.61	28	.52	36	.54
Fabricated metal products	22	.39	68	.22	91	.25
Industrial and commercial machinery, and computer equipment	19	.18	60	.13	79	.14
Electronic and other electrical equipment	78	3.63	164	1.09	244	1.42
Transportation equipment	27	.96	52	.57	79	.66
Measuring, analyzing, controlling instruments	14	1.33	57	.55	72	.63
Miscellaneous manufacturing industries	6	.22	34	.22	40	.22
Service sector and construction	9	.00	36	.00	52	.00
Total	692	.05	1,058	.02	1,792	.03

[1]NAFTA-TAA certifications as a percentage of all establishments.

[2]Total U.S. includes certifications in nonmetro and metro, and also certifications for workers groups at companies with the location, “all locations,” “various locations,” or “Throughout the state,” and at companies in cities that could not be identified as metro or nonmetro. Consequently, U.S. totals may be larger than the sum of nonmetro and metro.

Note: Many worker groups petition for and are certified under both the TAA and NAFTA-TAA programs. Thus, number of worker groups certified under these programs cannot be added together. Approximately 75 percent of the worker groups certified under the NAFTA-TAA program are also certified under TAA.

Source: Calculated by ERS using data from Employment and Training Administration, U.S. Department of Labor, and from Enhanced County Business Patterns data, 1996.

Labor Costs Favor Developing Countries' Textile Trade

An important generalization applies to textile and apparel trade between the United States and Mexico, and this generalization applies to trade between the United States and other developing countries as well. Apparel production is one of the least capital-intensive industries in the world. Since every developing country has a domestic market for apparel as well as low-wage labor to produce it, developing countries largely supply their own apparel. However, during the last 30 years, developed-country imports of apparel have risen significantly, further increasing the size of the markets available to developing-country apparel producers. Institutions like the co-operative buying offices of U.S. department stores and Japanese trading firms facilitate access to export markets. Thus, the comparative advantage of developing countries in producing apparel has resulted in increasing developing-country exports.

Virtually every country that has successfully industrialized has in part begun this process with its textile industry. As industrialization progresses, other industries grow in prominence, and outcompete textiles for labor and other inputs. Thus, the world's largest importers of textiles are almost exclusively the highest income developed countries and the world's largest exporting countries are among the lowest in income. According to the WTO, the largest textile and apparel deficits are in the United States, the European Union, Japan, Canada, and Switzerland. In contrast, the largest surpluses are achieved by China, Korea, Taiwan, India, and Hong Kong.

During the 1990's, each major deficit country or region integrated its textile industry with neighboring surplus regions. The United States integrated with Mexico and the Caribbean Basin, exporting fabric and apparel pieces and importing completed apparel and other final goods. Similarly, the EU increasingly integrated with Eastern Europe and the Mediterranean countries, while Japan pursued integration with Southeast Asia and China.

group certification under the two programs. The average number of employees affected at the certified nonmetro apparel establishments was over 100 employees for both programs. Some nonmetro establishments had over 500 employees who were affected. The textile industry also had a sizable number of certifications in nonmetro areas, 126 under TAA and 26 under NAFTA-TAA.

Trade Liberalization Benefits Agriculture, Food Processing, and Tobacco Products

Although the U.S. textile and apparel industries face stiff import competition with trade liberalization, other industries important to nonmetro areas have expanded and have, in some cases, bucked the U.S. trend of declining manufacturing employment. For example, the U.S. agriculture industry and the food processing and tobacco products industries have flourished with the opening of world markets. These industries are similar to the textile and apparel industries in that they are disproportionately nonmetro, geographically concentrated, and the jobs are generally low-skill.

Looking at employment trends in these industries (fig. 3), agriculture has seen an increase in jobs, due to increases in employment in agricultural services, especially in landscaping and horticultural services, which are not significantly involved in trade. Due to technological progress, U.S. production agriculture has been able to increase output with fewer workers. Consequently, the number of workers in production agriculture has declined over the 1990's. BLS expects that the number of workers in agriculture will stay level over 1998-2008, although they see a decline in the number of workers in production agriculture and an increase in agricultural services employees. Employment in agriculture is disproportionately nonmetro (table 3). The Great Plains in particular has many nonmetro counties with high percentages of jobs in agriculture (fig. 4).

Food processing and tobacco products have held their own in terms of number of jobs over the last 40 years, even in the face of declining employment in manufacturing. With productivity increases, these industries are producing more and exports have increased. Even during the recent global financial crisis, these products and other high-value agricul-

Table 3

Demographic and job characteristics of trade-sensitive industries, 1999

Some characteristics vary substantially across the three industries

	Textiles & apparel		Food & tobacco		Agriculture		Total U.S.	
	Nonmetro	Metro	Nonmetro	Metro	Nonmetro	Metro	Nonmetro	Metro
				Thousands				
Number of workers	400	830	606	1,069	615	1,304	21,496	101,550
Demographic characteristics:				Years				
Average age	40.5	40.0	37.9	39.9	38.0	34.6	39.2	38.6
				Percent				
Male	43.6	42.5	65.2	68.6	76.4	72.8	52.3	52.9
Race:								
White	71.9	75.0	79.3	80.4	92.4	93.2	89.9	82.3
Black	26.3	11.2	17.0	14.6	5.4	3.6	7.9	12.6
Other	1.8	13.8	3.7	5.0	2.2	3.2	2.3	5.1
Hispanic	4.0	31.6	22.8	19.1	16.2	39.9	4.8	11.8
Citizen	97.9	65.1	86.0	85.3	89.8	68.0	98.0	91.6
Household income:								
Less than $15,000	15.6	19.0	18.0	8.6	24.2	21.7	12.8	8.9
Job characteristics:								
Full-time schedules	95.7	93.6	96.2	93.2	80.3	81.2	81.9	82.6
Union member	5.6	7.5	20.4	23.3	1.4	2.8	12.0	13.7
Low-skill occupation	78.7	72.7	78.4	69.6	72.5	75.4	58.9	50.8
				Dollars				
Median hourly earnings	9.02	8.56	10.00	12.50	7.58	7.75	10.25	12.50

Note: Only wage and salary civilian employed, age 16 or older included. Agriculture includes agriculture, forestry, and fishing, both production and service workers. Total U.S. includes all industries. Totals may not add to 100.0 due to rounding. Hispanics may be of any race. A full-time schedule is 35 or more hours a week. Hourly earnings computed by dividing usual weekly earnings by usual weekly hours; included are tips, overtime, and commissions.

Source: ERS calculations using the 1999 CPS Earnings files.

tural products were able to maintain their prices and experienced continued high export demand. BLS expects employment in these industries to continue to increase, albeit slightly, with 1.4 percent growth over 1998-2008. In 1999, they provided employment to 1.7 million workers, with 36 percent residing in nonmetro areas, making this workforce disproportionately nonmetro. In addition, jobs in these industries are somewhat geographically concentrated in the Southeast and the Midwest (fig. 5). Most of the nonmetro jobs are in food processing, as tobacco products manufacturing is primarily located in metro areas. Many nonmetro counties have a high dependence on these jobs, with 20 percent or more of the county's jobs in these industries. In the Southeast, the food processing is mainly in poultry, peanuts, and cottonseed oil; in the Ozarks, chicken broilers, eggs, and rice; in the Midwest, meat, sugar, dairy, oil, turkeys, and frozen vegetables; and in the West, meat, sugar, potatoes, fruit, wine, nuts, raisins, and seafood.

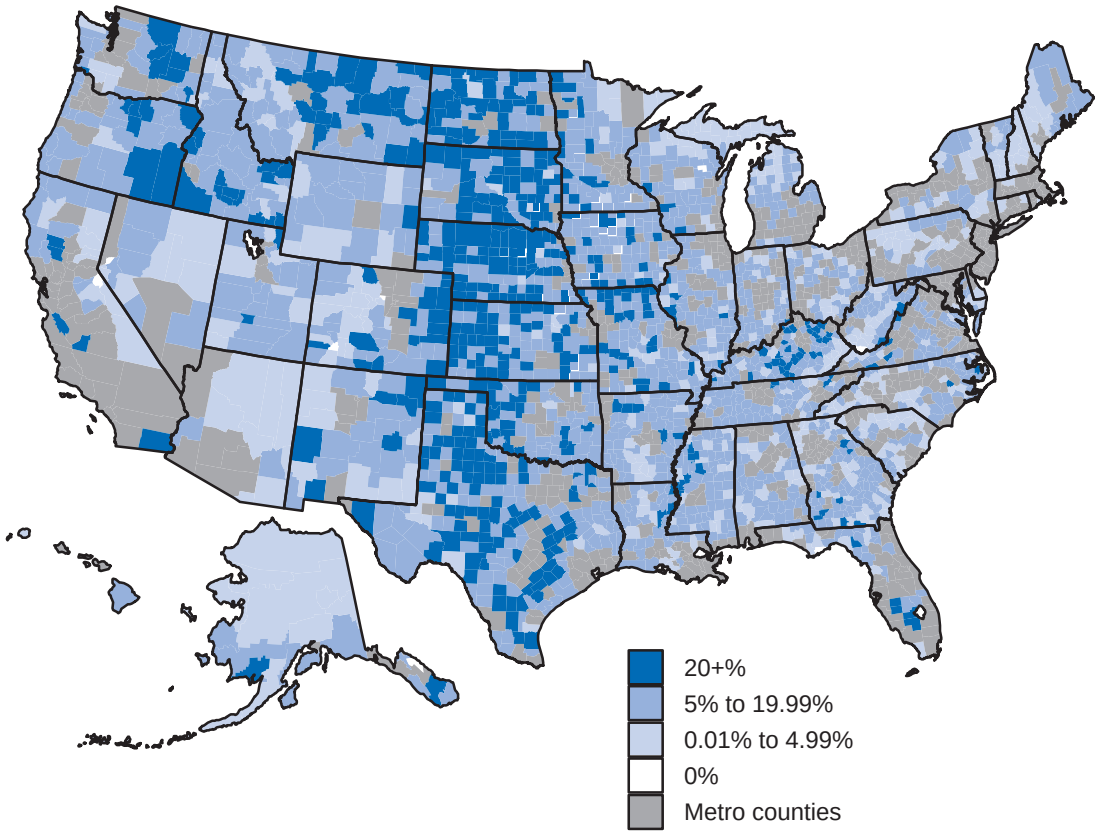
Looking Ahead

The textile and apparel industries are clearly undergoing a deep restructuring. This means that many, if not most, dislocated apparel workers who find a new job will do so in

Figure 4

Production agriculture and agricultural services: Jobs in agriculture as a percentage of all jobs in the county, 1996

The Great Plains counties have a high dependence on agriculture jobs



Source: ERS calculations using Bureau of Economic Analysis data.

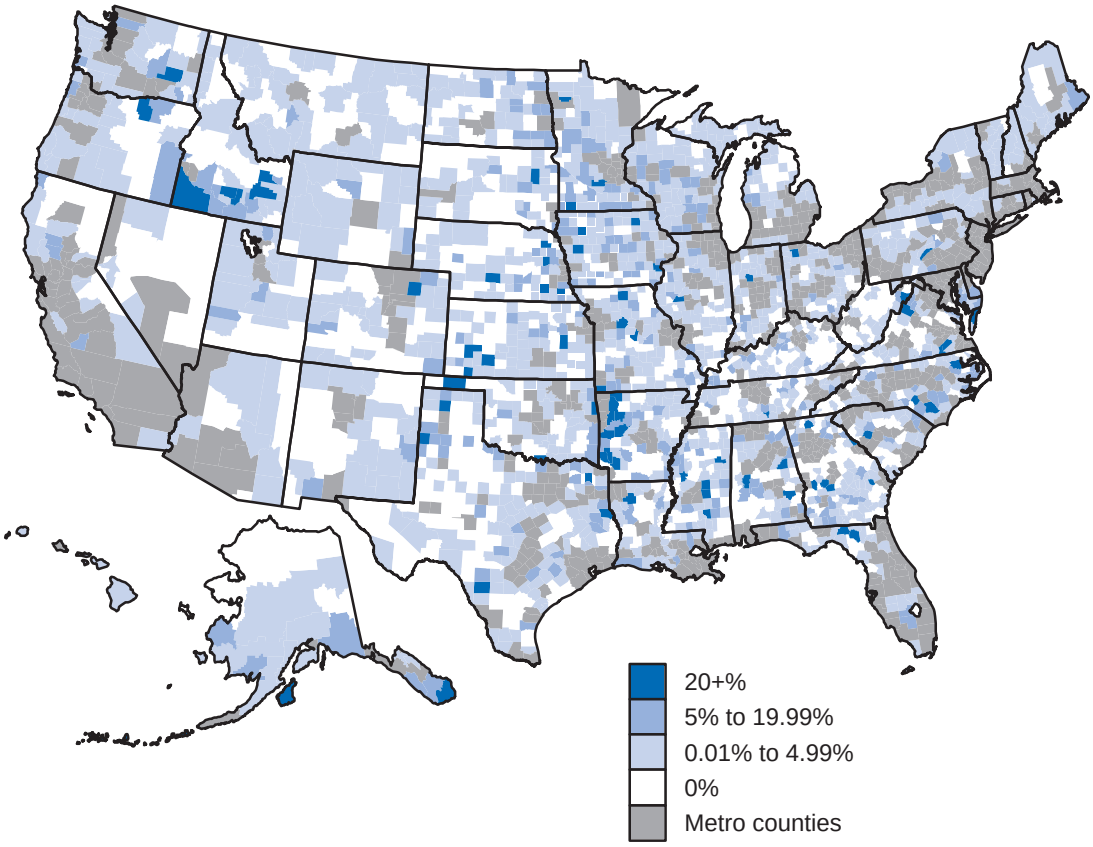
another industry or occupation. The burden of this adjustment due to increased productivity and increased sourcing from outside the United States is falling disproportionately on nonmetro workers. Under the WTO's ATC, the long-standing textile and apparel quotas developed under the Multifiber Arrangement (MFA) are scheduled to grow at accelerated rates through 2004, and subsequently disappear. This arrangement will mean U.S. imports from WTO members will face fewer barriers than has been the case in the past, and are likely to grow. Apparel imports in particular would be expected to respond to reduced barriers, while it is possible that textile exports could increase with growing opportunities to supply inputs to developing-country apparel producers. Consequently, nonmetro areas will continue to depend on trade adjustment assistance to transition workers and communities to other industries and occupations as increased textile and apparel import competition results in further industry restructuring. However, increasingly open and growing global markets suggest processed food and tobacco exports will grow, providing opportunities for nonmetro employment.

[Data as of 3/28/00. Karen S. Hamrick, 202-694-5426, Khamrick@ers.usda.gov; Stephen A. MacDonald, 202-694-5305, Stephenm@ers.usda.gov; Leslie A. Meyer, 202-694-5307, Lmeyer@ers.usda.gov]

Figure 5

Food and tobacco: Jobs in food processing and tobacco products as a percentage of jobs in the county, 1996

Counties in the Southeast and Midwest have a high dependence on food processing and tobacco products jobs



Source: ERS calculations using *County Business Patterns* data.