



# Global Commerce

Tennessee and the International Economy

## Globalization and Tennessee's Clothing Industry

### Apparels in Peril?

by Steven G. Livingston

Few industries appear to be as threatened by "globalization" as the American apparel industry. Declining jobs and plant closings have attended soaring imports and probably the worst trade balance of any major industrial sector. Tennessee, home to a significant part of this industry, has experienced the fallout. Scores of major plant closures, even of prestige labels such as Levi Strauss, along with the loss of some 25,000 jobs over the 1990s, have severely affected communities across the state. Much of this has been blamed on NAFTA. Indeed, the Treasury Department has declared the town of Celina to be eligible for a special business loan program given to communities suffering from NAFTA-related job losses. Yet buried amidst this gloomy picture is news of the vigorous expansion of the state's apparel exports, and the fact that a significant number of firms are bucking the trend and adding employees. How much trouble is Tennessee's clothing industry actually in?

The Tennessee apparel industry is today still a

apparel workforce is located. However, the importance of the sector has declined over the years. In the last ten years, apparel production has declined from six to four percent of Tennessee's total manufacturing production, and the industry has slipped from the tenth to the eleventh largest manufacturing sector in the state. Far more worrisome is the number of plant closures and layoffs. Some seventy of Tennessee's apparel manufacturing plants have ceased operations in just the last two years, and the state's apparel workforce has been cut nearly in half over the last five years. (Eight thousand jobs were lost in 1998 alone.) Tennessee is hardly unique in this respect, as the industry has been shrinking dramatically across the U.S., but this does raise hard questions about the future of the apparel industry in this state.

### NAFTA: The Final Nail?

Many people blame trade, and more particularly the NAFTA pact with Mexico, for the difficulties of the industry. And the U.S. did import almost \$60 billion in clothing last year. Indeed, close to two-fifths of all the clothing sold in the U.S. today is from overseas. These imports are rising. Apparel imports grew 63 percent in the last five years, compared to 53 percent for all U.S. imports. Foreign-produced apparels have gained an additional eight percent of the U.S. market during the nineties. The U.S. trade performance in apparels is clearly worsening. However, there are several caveats before

*continued on page 2*

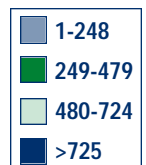
The Tennessee apparel industry is still a very significant part of the state's economy.

Tennessee's exports of apparels have gained 161 percent during the nineties.

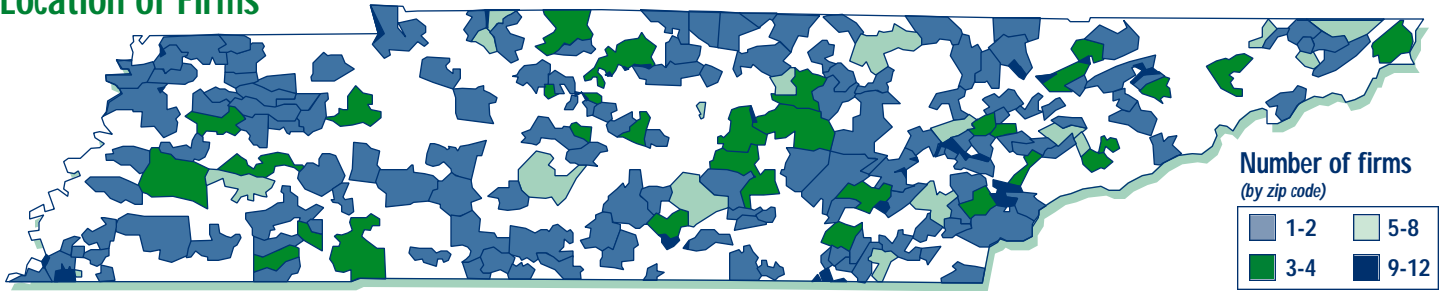
## Number of Employees in Apparel Industry by County

very significant part of the state's economy: nearly 400 apparel manufacturers employ about 35,000 people, around seven percent of Tennessee's total manufacturing workforce. In 1996, these firms shipped more than \$3.4 billion in goods, including \$165 million in exports. The industry is spread throughout the state. A number of counties are each home to more than a thousand apparel workers, led by Knox County, where fifteen percent of the state's

rushing to blame globalization for this industry's ills. First, major portions of the industry remain very competitive. A good sign of competitiveness is the ability to compete and win in foreign markets. And U.S. exports of apparels are up a heady 227 percent during the nineties (Tennessee's have gained 161 percent). Second, significant parts of this industry are in trouble for reasons having little to do with foreign pressures. American sales of men's suits and coats,



## Location of Firms



Nearly a third of Tennessee apparel firms are in the automotive-related “apparel” sector, which looks like a portion of the industry with a very bright future.

Tennessee’s apparel firms are disproportionately located in America’s best performing sectors, and away from the poorest sectors.

## Apparel

*continued from page 1*

for example, have been virtually flat over the nineties. Here, even if there were no imports, we would likely be seeing layoffs and plant closures.

It’s a fair question, however, to ask if NAFTA has only made things worse. Imports from Mexico have increased dramatically, 166 percent from 1994 to 1998 (from \$2.9 to \$7.7 billion). In certain sectors, such as shirts, pants, and women’s outerwear, the surge has been even larger. Mexican imports are growing roughly four times as fast as imports from the rest of the world. Thus the evidence seems to support the claim that NAFTA has noticeably increased the troubles of American apparel producers. However again there are some caveats. First, we don’t know how much of the Mexican gains were actually grabbed, not from U.S. firms, but from its foreign competitors. In other words, Mexican production could be merely supplanting imports from elsewhere. The steep decline in the rate of growth of imports from China, the main threat to the industry in the early nineties, is evidence for this view. The unfortunate fact is that apparel imports have been growing for four decades, no matter what the industry or the government has tried to do to stop them. The most extensive regime of trade protectionism of the postwar era has failed miserably to reverse the tide. Unable to prevent the growth of imports, perhaps the government’s only power is to influence which

countries they come from, through agreements like NAFTA. The other problem is that the apparel industry has become a truly global industry, and clothing is now sent back and forth across national frontiers at various stages of the production process. This explains the simultaneous rise of U.S. exports with imports. Such a globally integrated process is today easiest to develop, of course, close to home. So, for example, Tennessee’s apparel exports to Mexico have soared along with the rise of Mexican imports, gaining 76 percent since NAFTA. This makes the position of Mexico and NAFTA much more ambiguous, for, by allowing the integration of production across markets, it is enabling the growth and maintenance of some parts of the U.S. apparel industry even as it destroys other sectors.

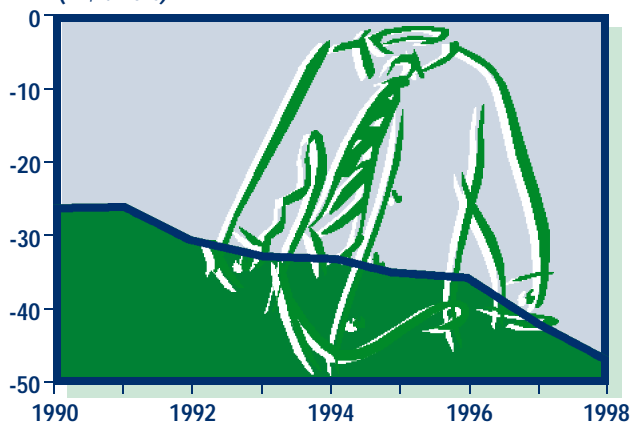
## Comparing Tennessee’s Apparel Industry

What we see then is that the future of apparel production really revolves around several issues, including which sector of the apparel industry we are talking about, and exactly how the Mexican connection is likely to play out. With these issues in mind, how does Tennessee’s industry stack up?

The state’s apparel manufacturers are clearly cross-pressured. Last year, as some seventy firms were leaving the industry and nineteen percent of those remaining were reducing their workforce, another eleven percent were heading the other direction and expanding their employment by one tenth or more. The expanding firms are in the least traditional apparel sectors, house furnishings and automotive-related trimmings, though a number of firms in the men’s clothing area are also growing. The state industry is also increasingly internationalizing. In the 1970s no Tennessee apparel firms were exporting. Today fifteen percent (sixty firms) are selling abroad. These again are primarily in men’s clothing (where better than one-fifth export) and the newer “miscellaneous” sectors. As a result, Tennessee’s apparel exports have exploded in the nineties. Apparel exports have more than doubled since 1991. This pretty much tracks the performance of the nation, although the trajectory has been a little different. Most of the growth for Tennessee has occurred since 1996. This is for one simple reason: it is only in the last several years that Tennessee and Mexico discovered one another. Since then, exports to Mexico have exploded: rising from \$16.1 to \$87.5

## The Balance of Trade in Apparel

(in \$ billions)



million just in the last two years. In 1998, Mexico took thirty percent of Tennessee apparel exports; in 1991 it was two percent.

Examining the industry in greater detail, we see that Tennessee's industry is quite different in composition from that of the nation. Tennessee firms are unusually concentrated in men's and boy's clothing. More than half of this state's apparel production is in this sector. This is a mixed blessing. With larger than average trade flows, it is a sector in which Mexican imports are rising very rapidly. But here American exports are growing even faster (though they remain far lower than imports). Almost one-sixth of production now goes to Mexico, though much of it, obviously, comes right back. The sector as a whole is not very dynamic, and the key to survival appears to be the ability to take advantage of global ties and integrated production. This would account for the different trends within the sector in this state: many firms are losing employment, while about one in ten is actually expanding. A second area of state concentration, not surprisingly, is automotive-related "apparel" (interior trimmings and so forth). Nearly a third of Tennessee apparel firms are in this sector. Many of these are quite small, but this is also America's best-performing part of the apparel industry. We run a strong trade surplus in this sector, with exports trebling in the last five years. Exports to Mexico have grown more than 600 percent during this time, the result of another globally integrating industry. This looks like a portion of the apparel industry with a very bright future.

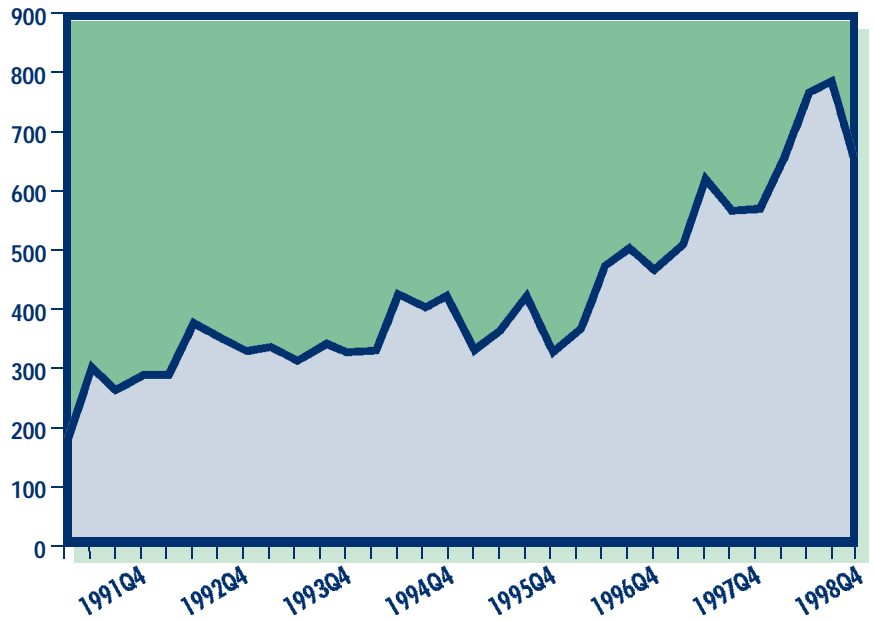
An interesting way to sum up Tennessee's industry, and compare it to the nation's, is to look at the percentage of firms for each that are located in the best and worst performing parts of the industry. Disaggregating the industry using four-digit SIC codes, we define the best sectors as those that are dynamic (i.e., overall production is continuing to rise at solid rates), that feature strong export performance (a sign of competitiveness), and where levels of imports are relatively modest, or at least growing modestly. The worst sectors have just the opposite features. Judged from this perspective, the state is actually not too badly positioned for the future. Its apparel firms are disproportionately located in America's best performing sectors, and away from the poorest sectors. This offers no guarantees of course; each individual firm must succeed on its own. But it does suggest that this state's industry is far from being in the midst of a disappearing act.

### The Future: A New Apparel Industry

In sum, we are seeing an industry in transition. Like many other industries it is incorporating new technology and facing increasing foreign pressure. In this respect it is no different than steel, autos, or many other industries which have been forced to shed capacity and innovate to emerge "leaner and meaner." Those sections of the industry reliant on low-skilled labor and modest technology are very likely to all but disappear. But this has been the trend over the entire past century. Blaming Mexico, or trade generally, is too easy. Foreign trade is without

## Tennessee Apparel Exports in the '90s

By quarter, in \$ millions



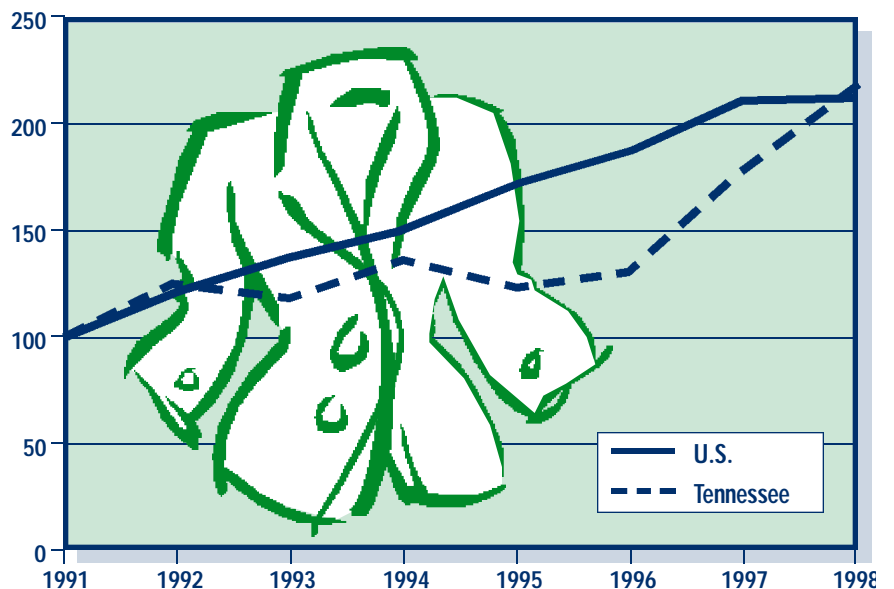
doubt damaging portions of the apparel industry, but that trade, especially with Mexico, at the same time supports other parts of the same industry. We see this in Tennessee. Portions of the industry, especially the more traditional sectors, are having and will continue to have a difficult time. Yet other sectors are prospering. In the future the industry may look vastly different than today: more capital-intensive, specialized, and globally integrated. But there *will* be a Tennessee apparel industry. ■

**Apparel exports have more than doubled since 1991.**

*continued on page 4*

## Export Performance: Tennessee vs. the U.S.

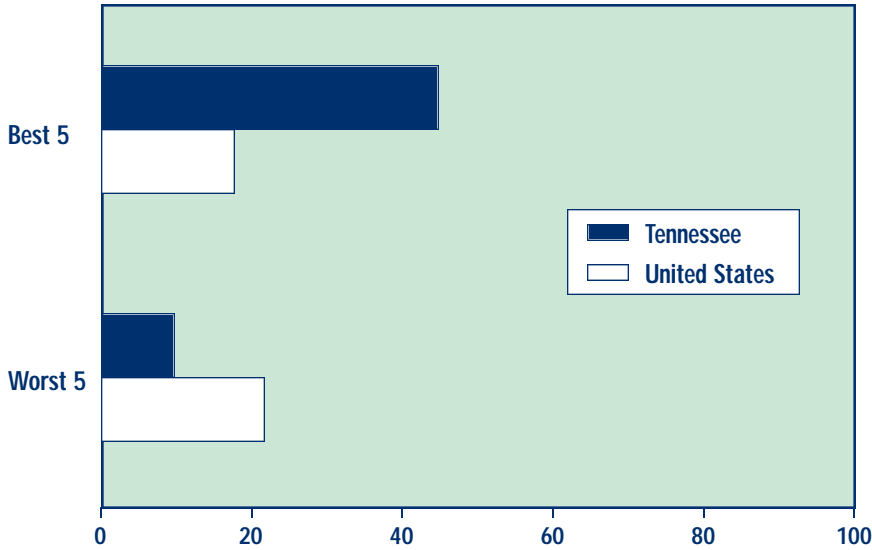
Index of Apparel Exports, 1991=100



## Percentage of Firms in the Top and Bottom Five Performing Apparel Sectors

# Apparel

continued from page 3



1st Quarter 1999

## Tennessee Trade-Weighted Dollar Index

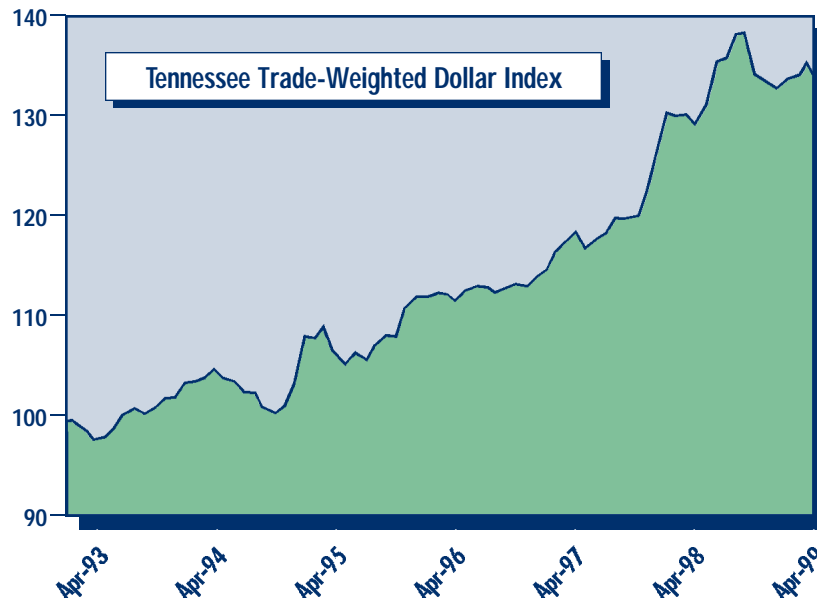
The dollar is relatively calm ... good news for state exporters, who have faced a steadily increasing dollar for most of the past several years.

In spite of continued global financial turmoil, the dollar has finally steadied. The April Tennessee trade-weighted dollar index stood at 133.27, up only a fraction from December's 132.5. This is good news for state exporters, who have faced a steadily increasing dollar for most of the past several years. Most of the twenty-two currencies composing the index posted but very small moves against the dollar during the first quarter of 1999. There were exceptions. The biggest, obviously, was Brazil. After its initial devaluation in early January, the *real* has continued to fall and is now down thirty percent from last quarter. The Indonesian *rupiah* was the other major currency in motion, descending eleven percent over the quarter. The most significant currency decline, however, was by the new *euro*, which has surprised everyone by sliding 7.5 percent against the dollar since the first of the year. Japan, the U.K., Singapore, and Taiwan round out the currencies which weakened over the quarter, each with a very modest movement down.

The dollar weakened against only three currencies in the index, but two of these, the Canadian dollar and the Mexican *peso*, are the currencies of the state's largest markets. This was enough, when combined with the rise of the Australian dollar, to counterbalance the rest of the world and keep the index steady. The Canadian

dollar gained 3.8 percent against the greenback, while the *peso* was up 5.6 percent.

The Trade-Weighted Index still stands three percent higher than a year ago, and a full third higher than five years ago, so one can hardly call the current environment ideal. But given the financial turmoil of the past two years, a relatively calm dollar is probably the best that could have been expected. The fate of the dollar in the near term depends on the continued recovery of Asian markets, along with whatever actions the European Central Bank may take to lower bond interest rates to assist lagging EU economies. The latter would continue the dollar's strength against the *euro*, and stymie its long predicted fall from the heights of mid-1998. ■



Nineteen ninety-eight will not be a year for the export record books. Tennessee's foreign sales grew a meager 1.7 percent over the year, the state's weakest performance of the nineties. The global economic crisis clearly affected state exporters. However, the year did provide just enough good news to sustain those refusing to leave the sunny side of the street. At \$10.399 billion, state exports reached a record high. And that 1.7 percent gain looks pretty good compared to America's total 0.9 percent loss over the year.

The fourth quarter was the toughest quarter of the year. State exports actually fell 0.44 percent to \$2.688 billion. Good news from our NAFTA neighbors was more than offset by losses almost everywhere else in the world. State exporters did eke out small gains in Australasia and Central America, but there were sizable drops in Asia, the Middle East, Latin America, and Europe. In Asia, the effects of the economic collapse are still being felt by exporters. Tennessee's sales to both Indonesia and Korea fell by over a quarter from a year ago. The Japanese market declined thirteen percent, as losses in food products, paper goods, and the automotive sector swamped a healthy pickup in apparel exports. The Chinese Economic Area (Taiwan, Hong Kong, and China) was a little harder to read. Net Tennessee exports declined almost five percent, to \$175.2 million. But two of these markets, Taiwan and Hong Kong, actually grew quite robustly. State exporters posted nearly fifty percent gains in each, with the most sizable increases coming in processed food and chemicals. China itself, however, crashed, with exports dropping by sixty percent. But much of this drop was a statistical artifact of a huge, \$50 million one-time sale of used goods to China in 1997. Excluding this sale, exports were still down, but a much more modest \$10 million.

The Brazilian crisis hit during the fourth quarter, and exporters felt its effects immediately. More surprisingly, the majority of other Latin American markets performed just as poorly. Not only Brazil, but Argentina, Chile, and Venezuela all purchased one-fifth fewer Tennessee goods than a year ago. The result was that the state's sales to Latin America fell \$17 million, a fourteen-percent loss.

The state's European markets were particularly frustrating. Excepting the small markets of Eastern Europe, where exports were up strongly, sales were down nearly everywhere. Germany was the worst. There exports were down fourteen percent. Even the U.K., one of the state's most reliable markets, was off. A sharp drop in chemical and transportation sales accounted for most of its thirteen-percent decline. As a result, net exports to the European Union were down six percent, to \$545.1 million. The one bright spot, oddly, was Portugal, where state sales were up over 500 percent!

It was a mixed bag for the state's other major markets. South Africa posted some very good numbers, with exports up twenty-five percent over

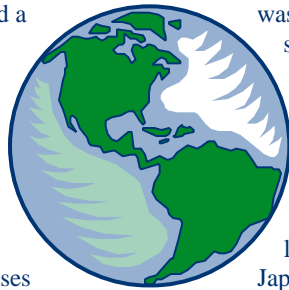
1997's fourth quarter. But Turkey, one of Tennessee's hottest recent markets, finally cooled off. At \$11.9 million, exports were only about half of last year's. By far the state's worst market was Russia. Here sales all but disappeared. Fourth quarter exports shrank to a little over half a million dollars.

The quarter's numbers were not all bleak, though. NAFTA markets continued strong. Canadian sales rose to \$909 million, a 6.3 percent gain, while Mexico was once again the state's best market, posting a 10.1 percent gain, to \$319.6 million. Adding in a six-percent gain in Central America and a double-digit rise in exports to the Caribbean, Tennesseans can thank nearby markets for most of whatever good news one finds in the state's export picture.

Turning to industrial sectors, the biggest news is the rise of the industrial machinery industry to second place among state export sectors. At \$351.8 million, this industry's sales rose a solid six percent in the fourth quarter. In this state, much of industrial machinery production is in fact adjunct to automotive production, another sign of the growing power of the latter industry in the state's economy. That said, it was not a particularly good quarter for the state's automotive industry. Transportation sales were still by far the largest of any sector, but they fell 7.6 percent, to \$526.4 million for the quarter. The problem was widespread. Transportation sales were down \$20 million in Canada (about a tenth), \$14 million in the U.K. (a little over two-fifths), and \$9 million in Japan (about a third).

The chemical industry suffered through another hard quarter, experiencing a nearly one-fifth decline in sales as it dropped into third place among the state's export sectors. Only Hong Kong increased its chemical imports from Tennessee. The electronics industry probably had the best numbers of the state's large industrial sectors, seeing its exports rise better than eighteen percent. Rubber (up 11.1 percent), fabricated metals (22.7), printing (25.1), and the state's furniture industry (42.3) were the other strong performers. The latter's terrific performance was primarily due to large sales in Canada, Mexico, and Britain. The food-processing industry, along with lumber and the paper industry, lost exports last quarter. Losses in Canada and Japan hurt the former, while the Asian crisis along with reduced Mexican purchases of paper products explains the latter. Except for agricultural crops, which had another great quarter, exports from the state's raw materials industries continued to decline. A trend over the whole of the nineties, this does not look to be reversed soon.

Thus far, 1999 is unfolding much as last year. State exports dropped three percent in January, and then gained two percent, to \$870 million, in February. With any luck, resumed economic growth in Asia and Europe will improve the picture as the year goes on. Until then state exporters will face an uphill battle to reverse the recent mediocre figures. ■



**Tennesseans can thank nearby markets for most of the good news in the state's export picture.**

**Among state export sectors, the biggest news is the rise of the industrial machinery industry to second place.**

## 4th Quarter 1998

Industrial machinery supplanted chemicals as the state's #2 export sector.

## 4th Quarter 1998

It was a rough quarter for the state's raw materials' producers.

Exports to Hong Kong rose fifty percent from a year ago.

## Tennessee's Largest Export Sectors

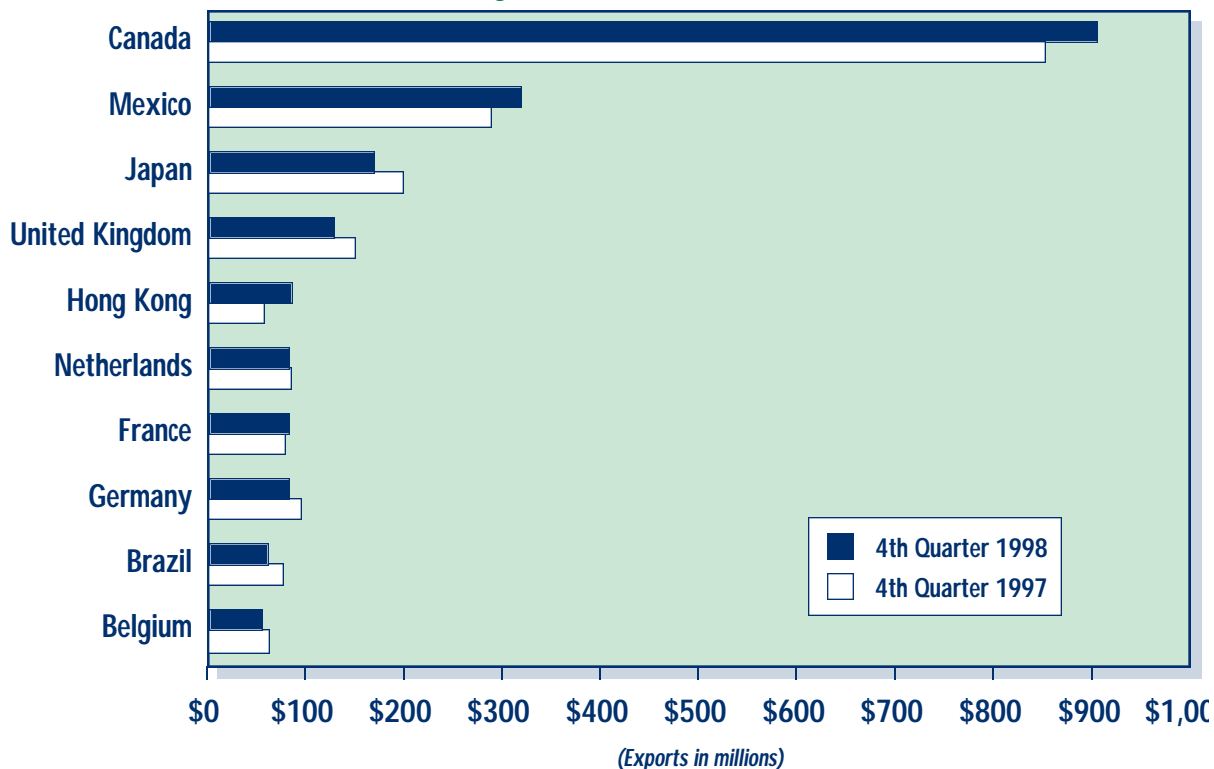
	Exports	Change from Last Year	Change from Last Quarter
Transportation Equipment	\$526,361,432	-7.6%	8.8%
Industrial Machinery	\$351,849,979	6.1%	-3.0%
Chemicals	\$348,359,098	-18.2%	-4.3%
Electronics	\$288,931,871	18.2%	24.0%
Industrial and Medical Instruments	\$176,751,063	11.5%	3.5%
Agricultural Crops	\$144,597,671	86.9%	38.8%

## Greatest Growth and Decline in Exports by Industry

(among sectors averaging exports of more than \$2 million per quarter)

	Value of Exports	Growth	Decline
<b>SECTORS WITH THE GREATEST GROWTH</b>			
Environmental Quality	\$7,353,012	153.4%	
Agricultural Crops	\$144,597,671	86.9%	
Furniture	\$59,738,580	42.3%	
Printing and Publishing	\$42,777,490	25.1%	
Fabricated Metals	\$81,472,019	22.7%	
<b>SECTORS WITH THE GREATEST DECLINE</b>			
Scrap and Waste	\$2,728,059		-61.9%
Metal Mining	\$3,082,513		-55.5%
Petroleum and Coal Products	\$1,637,269		-32.3%
Lumber and Wood Products	\$20,193,309		-21.8%
Primary Metals	\$57,649,247		-20.2%

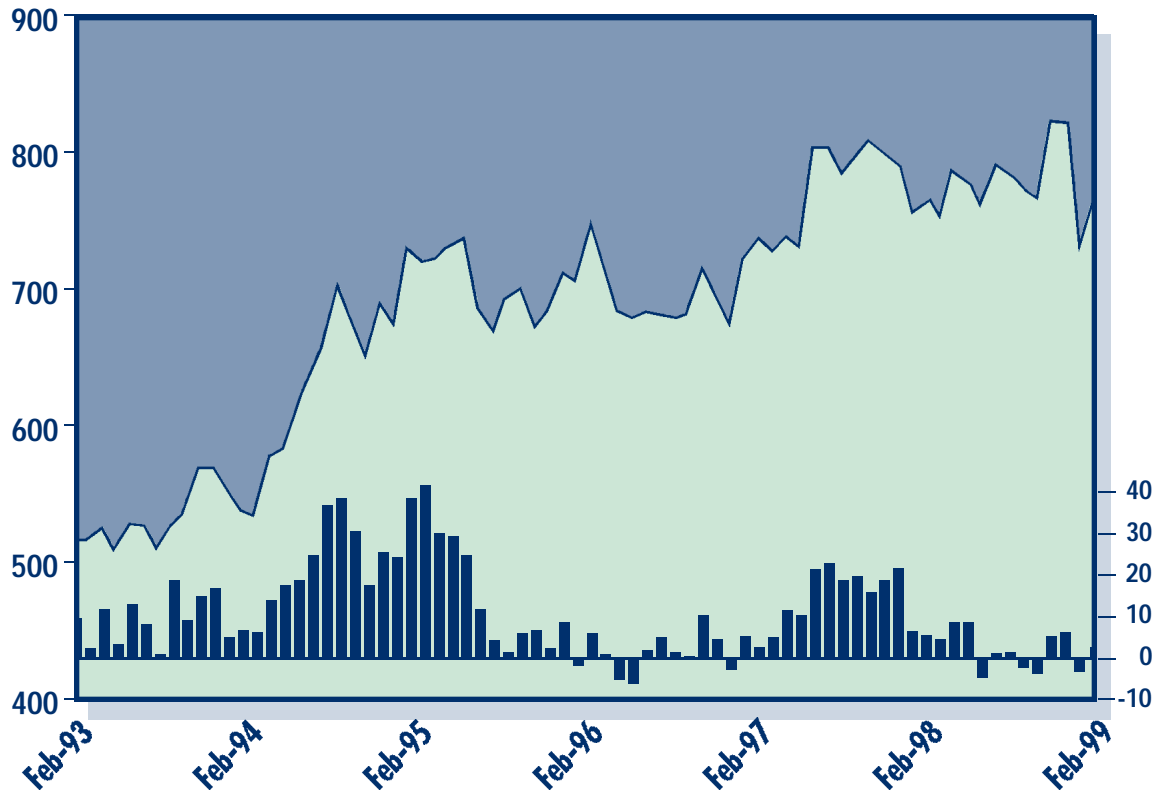
## Tennessee's Leading Trade Partners



# Tennessee's Monthly Exports

Exports in \$ Millions

Nominal Growth Rate (%)



Tennessee continues to show better numbers than the nation.

(Seasonally adjusted, expressed in 1993 dollars)

4th Quarter 1998

## GlobalCommerce

*Global Commerce: Tennessee and the International Economy*, published quarterly by Middle Tennessee State University's Business and Economic Research Center, is available free of charge to interested individuals and institutions.

**Editor:** Steven G. Livingston

**Publications Editor/Designer, College of Business:**  
Sally Ham Govan

**Phone:** 615-898-2610

**On-line:**  
[www.mtsu.edu/~berc/intl/intlmain.html](http://www.mtsu.edu/~berc/intl/intlmain.html)



A Tennessee Board of Regents Institution  
MTSU is an equal opportunity, non-racially identifiable educational institution that does not discriminate against individuals with disabilities.

## Fastest Changing Export Destinations

(among countries averaging more than \$2 million in sales per quarter)

	Value of Exports	Gain	Decline
<b>COUNTRIES WITH THE GREATEST GROWTH</b>			
Ecuador	\$9,584,738	165.4%	
Malaysia	\$14,472,161	60.6%	
Taiwan	\$52,564,412	56.5%	
Jamaica	\$2,699,693	51.3%	
Hong Kong	\$88,083,957	50.7%	
<b>COUNTRIES WITH THE GREATEST DECLINE</b>			
Russia	\$541,942		-84.9%
China	\$34,369,926		-62.2%
Egypt	\$5,016,340		-60.0%
Panama	\$1,998,744		-47.8%
Kuwait	\$5,134,308		-47.1%