

## Tennessee's Export Profile

by Steven G. Livingston

It is estimated that by 2020 half of the U.S. economy will be foreign trade related. The ability of Tennessee firms to succeed in foreign markets will be critical, therefore, to the state's future economic growth. Below we look at some of the major questions about Tennessee and its export performance.

### How Does Tennessee's Export Performance Compare to the Nation's?

Optimists and pessimists will reach different conclusions on this question. In terms of the relative size of its export sector, the state remains an underperformer. Tennessee accounts for 1.6 percent of American manufactured exports. This is less than its two-percent share of the American population. Put another way, the U.S. exports \$2,566 worth of goods per person while Tennessee only exports about \$1,972 per person. Tennessee exports less than it "should." If we compare foreign trade against the size of the economy, rather than of the population, the gap remains. According to the most recent figures, American exports amount to 17.2 percent of the nation's total value of shipments. The figure for Tennessee is 9.7 percent, an appreciably smaller amount. Tennessee still has some distance to go to export at the national level.

On the other hand, the state's export growth rate far outstrips the nation's. During the 1990s, state exports grew 173 percent (in nominal terms), while national exports gained 99 percent. In 2000 and 2001 the state's export performance continued to significantly outstrip the rest of America. (Although in 2001, this meant that Tennessee's loss of exports was smaller than was America's.) If these numbers continue, there is every reason to expect that the state will reach national export levels in the coming years.

### Major Export Commodities

Products Accounting for at Least Three Percent of Exports for the U.S. or Tennessee (in Percentages)

	U.S.	Tennessee
Industrial Machinery*	20%	17%
Electrical Machinery	17	13
Vehicles and Parts	8	13
Aircraft and Parts	6	4
Instruments (Optical, Photo, Medical)	6	5
Plastics	4	5
Cotton	0.9	4
Organic Chemicals	3	2.2
Rubber Products	0.6	3

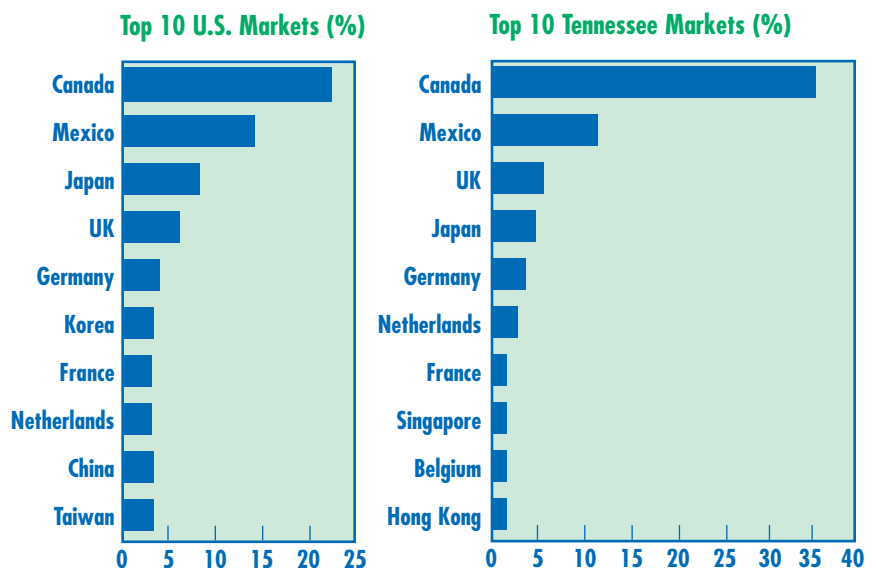
\* includes computers

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### Is Tennessee's Export Profile Different from the Rest of the Country?

One reason the state may not match the nation's export performance is what and/or where it sells. However, what it sells is in fact quite similar to what the rest of America sells. The chart above shows the commodity profiles of American and Tennessee exports. Their convergence is remarkable. Tennessee's foreign sales are weighted more heavily in the automotive sector and in cotton, and less so in

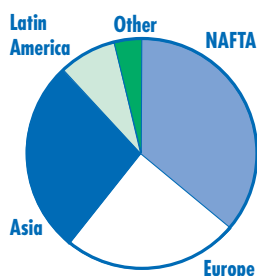
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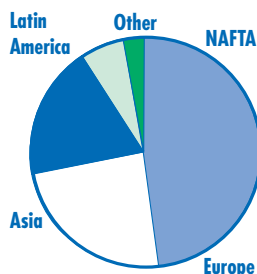
# Export Profile

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## U.S. Export Destinations



## Tennessee Export Destinations



electrical equipment. Otherwise there are no sizable differences. (Organic chemicals, the lone national product not appearing among Tennessee's top commodities, actually account for 2.2 percent of the state's exports, not far from the national figure.) In each case, a handful of commodities comprise nearly two-thirds of total exports.

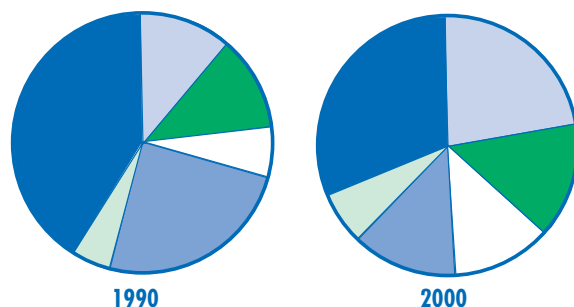
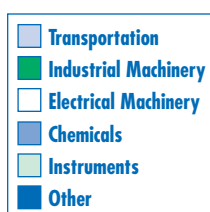
The story is somewhat different, though, when it comes to destinations. Tennessee is far more reliant on Canada than is the rest of the U.S. Thirty-six percent of all state exports go north of the border. When combined with Mexico, NAFTA accounts for nearly half of Tennessee's exports, versus somewhat more than a third for the U.S. The concentration on NAFTA is countered by a significantly smaller percentage of Tennessee exports going to Asia.

The state's export market is also more concentrated. The top ten trade partners account for three-quarters of Tennessee exports, while the top ten account for about two-thirds of national exports. Is this unusual reliance on our neighbors good or bad for Tennessee's future? The state is obviously more dependent upon the success of NAFTA, and upon the economic growth of these two countries, than is most of the U.S. However, they are also among the most stable markets in the world, and each has excellent growth prospects.

## How are Tennessee's Exports Changing?

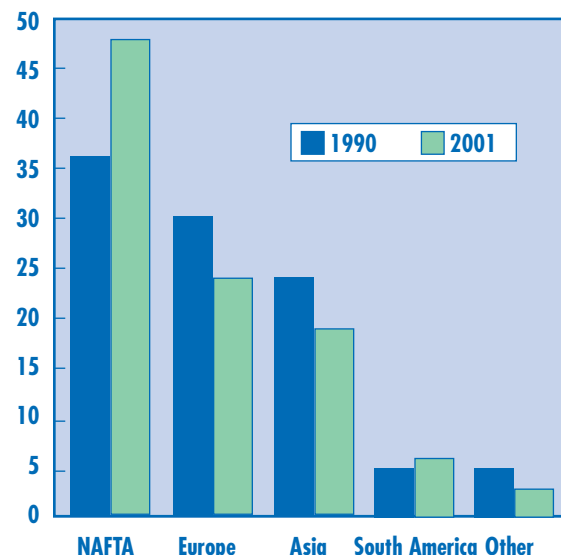
Two related trends dominate the state's export picture: the rise of the automotive industry as Tennessee's largest export sector and the concentration of state exports in the NAFTA market. In 1990, one-quarter of state exports were in chemicals (and largely from one company, Eastman Chemical). Since that time, when adjusted for inflation, chemical exports have barely grown. Meanwhile, transportation exports have grown 262 percent. Industries such as rubber, glass, and industrial and electrical machinery, all of which produce many auto parts, have posted similar growth rates. Tennessee exports are increasingly concentrated in the automotive sector. This is not to say that other sectors are not continuing to grow as well, merely that their increases are swamped by the huge gains in automotive trade.

## The Growth of Automotive Exports



## The Rising Importance of the Americas

Percentage Share of Tennessee Exports, 1990 versus 2001



Only three industries have actually lost ground over the past decade: lumber, furniture, and the rather small fishing industry.

The automotive trade is overwhelmingly with Canada and Mexico, reflecting the intra-industry specialization within this market. This is the driving force behind the state's relative concentration of trade within NAFTA. Indeed, outside of a few dynamic markets in the developing world (Singapore and Brazil especially), most non-NAFTA markets do not take as large a percentage of Tennessee's foreign sales as they did a decade ago. Again, it is not a case of *losing* these markets. They continue to grow. But the pace of NAFTA trade is simply growing much, much faster.

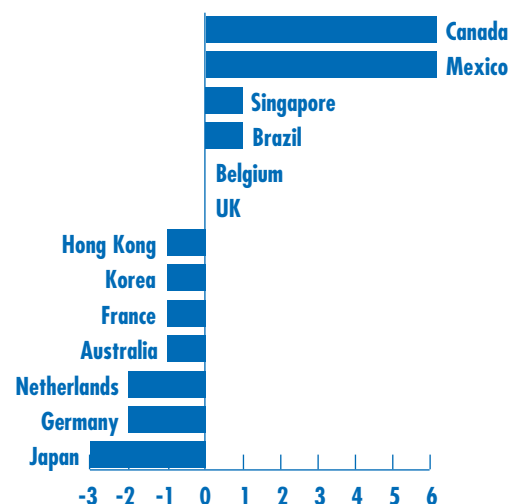
## What Part of Tennessee Exports the Most?

Because foreign trade has an increasing impact on local economic performance, it is worth asking if

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## A Changing Marketplace

Shifts in % of Tennessee Exports, 1990-2000



## 4th Quarter 2001

Computer exports  
soared last quarter.

## Tennessee's Largest Export Sectors

	Exports	Change from Last Year	Change from Last Quarter
Transportation Equipment	\$626,268,807	6.5%	3.0%
Electronics	\$405,063,474	5.4%	-3.8%
Chemicals	\$352,540,696	-3.9%	23.1%
Industrial Machinery	\$278,016,241	-8.7%	3.8%
Miscellaneous Manufacturing	\$158,905,790	50.2%	44.2%
Electrical Equipment	\$119,159,434	-21.8%	4.0%

## What's Hot and What's Not?

(among Tennessee's top 100 exported goods)

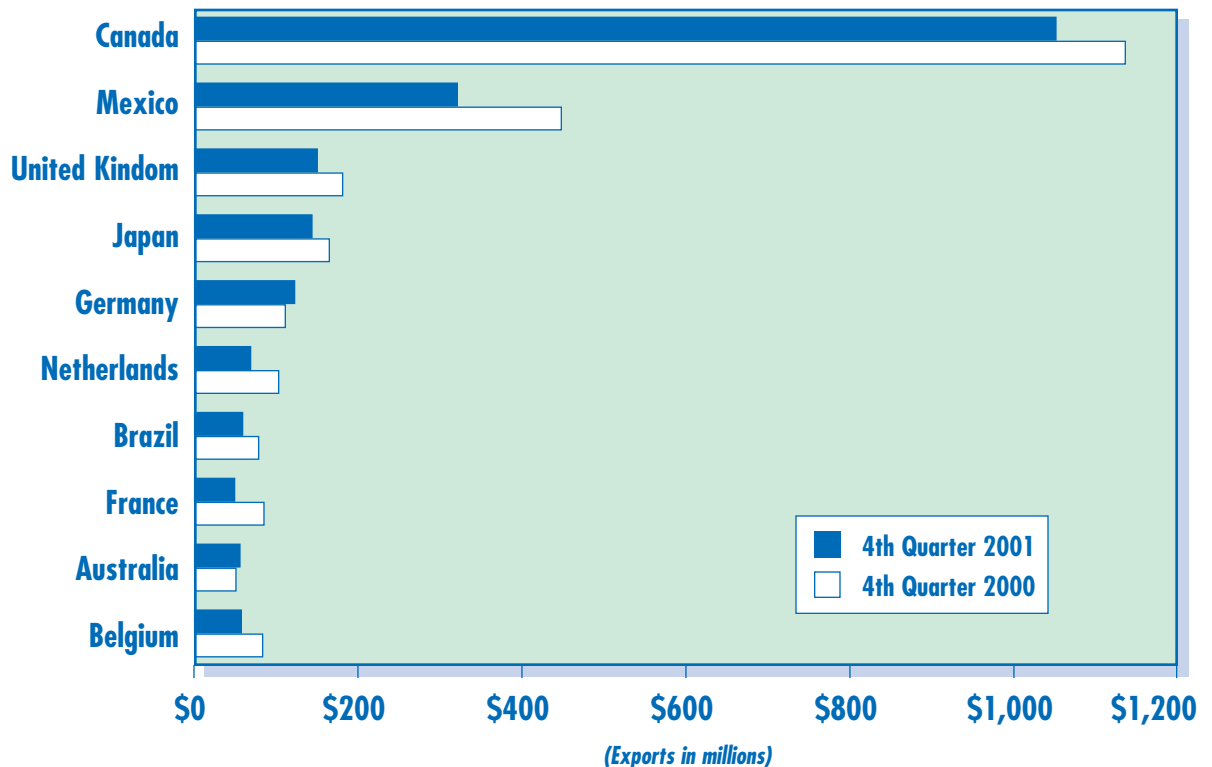
	Value of Exports	Growth	Decline
<b>SECTORS WITH THE GREATEST GROWTH</b>			
Terephthalic Acid and its Salts	\$13,977,957	*	
Video Games	\$16,587,167	88,767.1%	
Electric Telephonic Apparatus	\$14,215,336	21,066.5%	
Laptop Computers	\$2,226,077	353.6%	
Computer Systems	\$22,861,099	268.8%	
<b>SECTORS WITH THE GREATEST DECLINE</b>			
Special Canadian Re-exports**	\$6,728,235		-94.7%
Toilet Paper	\$4,735,396		-77.6%
Automotive Regulating Instruments	\$9,924,975		-75.6%
Manganese Dioxide Batteries	\$7,238,024		-70.4%
Monolithic Integrated Circuits	\$7,320,976		-69.7%

\* No exports in the fourth quarter, 2000

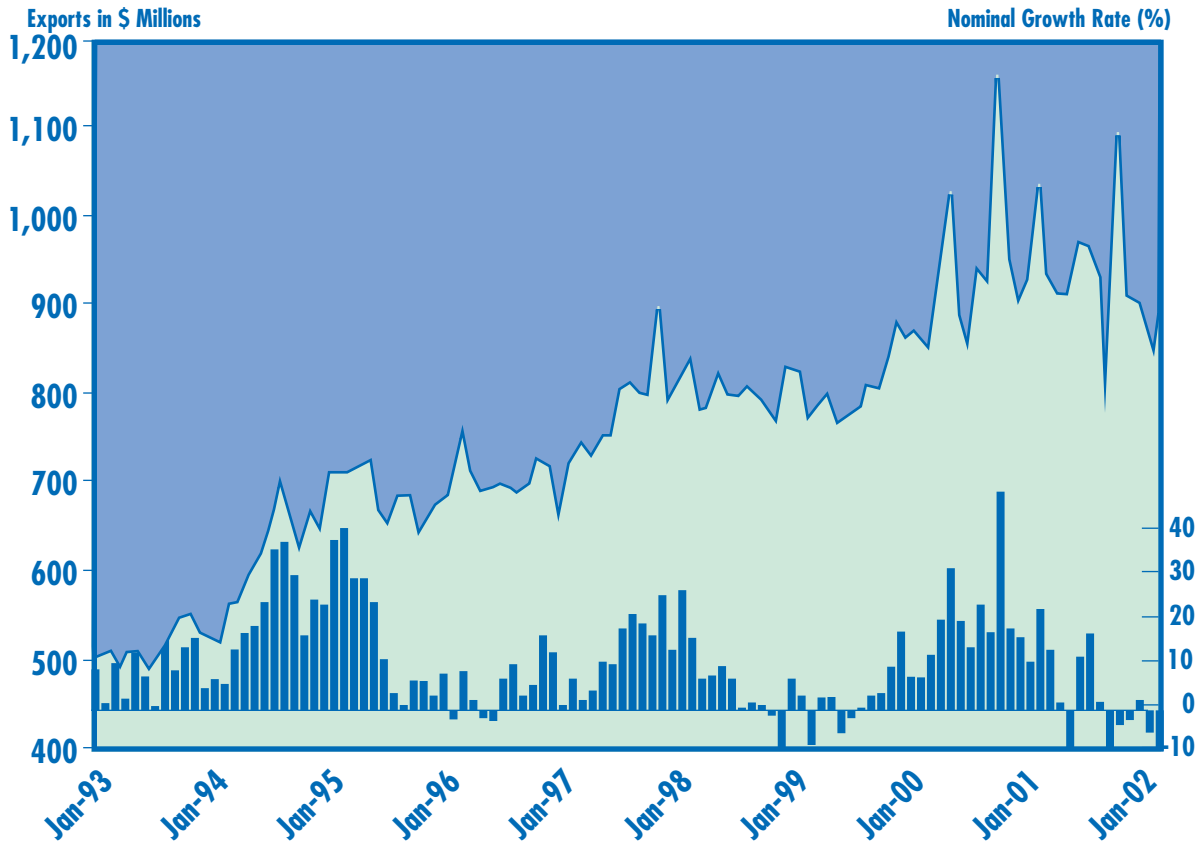
\*\* Includes software and goods returned for repairs or other reasons

## Tennessee's Leading Trade Partners

Most major  
markets were  
down.



# Tennessee's Monthly Exports



4th Quarter 2001

## GlobalCommerce

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

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[http://www.mtsu.edu/~berc/trade\\_database](http://www.mtsu.edu/~berc/trade_database)



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## 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>			
Poland	\$5,854,108	276.6%	
India	\$26,438,570	176.2%	
Norway	\$2,818,480	153.0%	
Malaysia	\$34,760,698	121.5%	
Egypt	\$9,393,382	64.2%	
<b>COUNTRIES WITH THE GREATEST DECLINE</b>			
Russia	\$1,270,740		-83.7%
Panama	\$2,031,428		-78.6%
El Salvador	\$4,946,648		-59.2%
Indonesia	\$8,610,078		-50.6%
Guatemala	\$7,592,962		-31.3%

## A difficult quarter for state exporters

Tennessee exporters encountered one of the most difficult trade environments in recent memory during the fourth quarter of this past year. A global economic slowdown along with the aftermath of the events of September 11 produced disheartening trade numbers for the state. Total fourth quarter exports were down five percent from a year ago. At \$2.806 billion, this amounts to a loss of \$150 million. December's 17.7 percent decline in foreign sales was the worst monthly performance in at least a decade.

As might be expected, the problems spanned across many markets and many products. The big exception was Canada. Strong computer and electronics sales overcame losses in other sectors, as total exports to Canada grew modestly (from \$1.047 to \$1.081 billion). Some smaller markets also bucked the trend. Australia, one of the few markets not in recession, increased its purchases of Tennessee products by \$10 million. Exports to Malaysia nearly doubled due to a large gain in electronics sales. India posted very strong numbers as well, although it was all due to one product: cotton. A 12-fold increase in cotton shipments led to a total export gain of 175 percent (\$16 million) for the quarter. Though a very small market, the best performance of all was in Botswana, thanks to a seven million dollar purchase of Tennessee-made aircraft.

Unfortunately, export losses in the rest of the world were more than enough to swamp these isolated successes. Numerically, the biggest problem

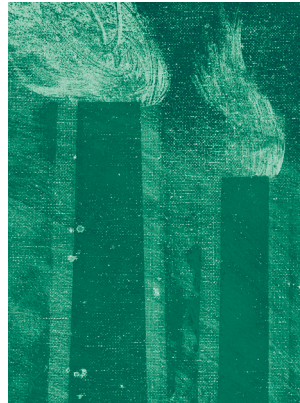
was Mexico. Although the transportation sector continued to make gains, other exports fell dramatically as Tennessee lost one-fifth (\$89 million) of its 2000 sales during the fourth quarter. The European Union countries were not much better. There exports declined \$56 million. Among major EU markets, only in Ireland did the state produce positive numbers. Overall, export losses were on the order of 10 percent. They were broadly distributed,

though a loss of some \$20 million in jet engines and parts to the U.K. does stand out. Only the chemical and the computer and electronics sectors were able to make much headway in Europe this past quarter. Exports to South America fell some eight million dollars, to \$131.6 million. Large losses in Brazil account for most of the decline. Argentina, surprisingly, increased its Tennessee purchases, making it the best Latin American market. Exports to Japan dropped about 10 percent, mostly due to

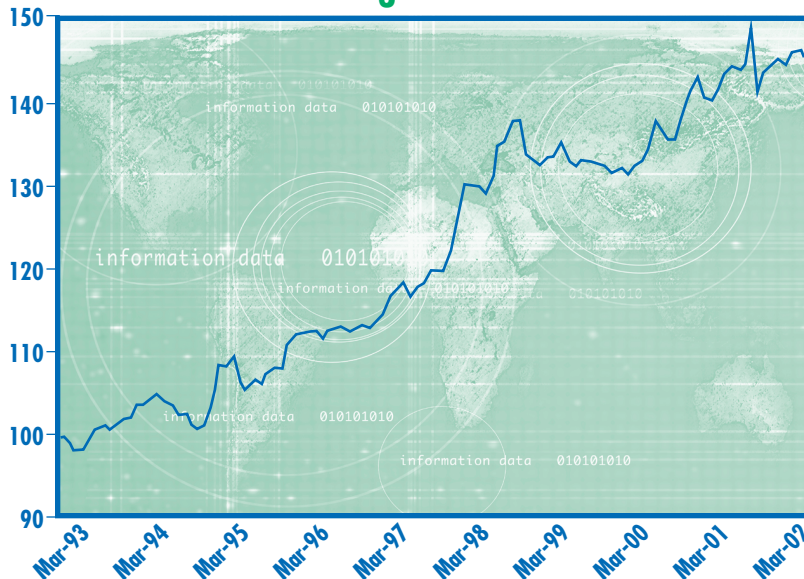
declines in purchases of prepared food products. Finally, the ASEAN and Chinese Economic Area were essentially flat for the quarter, with exporters eking out a tiny gain in each.

Examining Tennessee's exports by industry, we find, as noted, that the transportation sector did continue to increase its exports in this poor environment, largely thanks to NAFTA-destined auto industry sales. A good quarter in Canada led to solid numbers for the computer industry, and cotton sales gave the agriculture sector a positive quarter, but that's about it for the good news. It was a nearly catastrophic quarter for the apparel industry. It lost two-thirds of its exports, including most of its sales to Central America and Mexico. Textiles lost one-quarter of that sector's foreign sales, largely in the same markets along with Canada and Korea. The sectors at the heart of basic manufacturing—primary metals, fabricated metals, and industrial machinery—each lost between a fifth and a quarter of their exports of the previous year. The prepared food sector also lost about a quarter of its sales. And the state's paper industry saw its exports decline by 7.44 percent. Its nine million dollar loss was due primarily to poor sales in two markets far afield, Belgium and Indonesia.

It is not often that negative numbers can be called good news, but Tennessee's January 2002 exports were off "only" 0.79 percent. Perhaps this signals the bottoming of the difficult environment in which state exporters have recently found themselves. ■



## Tennessee Trade-Weighted Dollar Index





**A common worry is that rural areas will lag behind urban centers in their ability to export. In Tennessee, rural areas are holding their own.**

## Export Profile

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all parts of the state are involved in this trade. Forty years ago, nearly half of all Tennessee exports came from the Memphis area. (Note that a good deal of cotton is brokered through Memphis, and the export of that cotton is credited to the Bluff City). And more exports still come from Memphis than from any other part of the state. But the long-term trend is a steady diffusion of exporting across the state. Today, the Memphis area accounts for slightly more than 30 percent of all state exports. Nashville is the source of 19

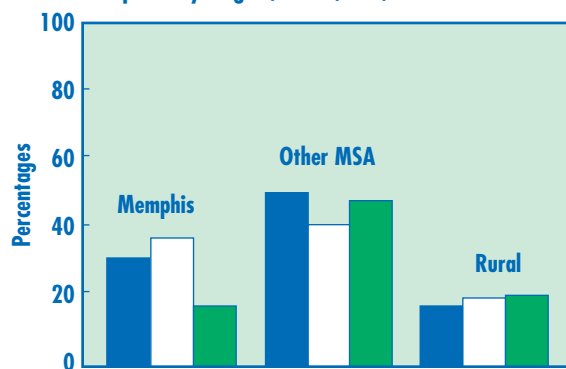
percent of Tennessee foreign sales (up from about seven percent in the mid-1960s) and Knoxville exports have grown from 5.7 to 8.7 percent of the state's total over that same period. Sixteen percent of exports now come out of the Tri-Cities area. Chattanooga, once the second largest exporting city in the state, has fallen to fifth (3.7 percent of exports).

A common worry is that rural areas will lag behind urban centers in their ability to export. In Tennessee, however, this does not appear to be happening. Rural areas are holding their own. At the beginning of the 1990s, rural areas accounted for about 20 percent of the state's total exports.<sup>1</sup> This has not changed over the past decade. Both export growth rates and the pattern of export destinations mirror those of urban areas. However, there is one important fact to note: much of the strong rural performance has been in areas hosting auto and auto parts manufacturing. Rural counties that are not home to the industry do appear to be shipping a declining portion of Tennessee exports.

These four questions hardly address all the issues involving Tennessee and its foreign trade, but they are a good starting point for understanding where this state is, and where it is headed, in this era of economic globalization. ■

### City versus Country

Share of Exports by Region, 1993, '96, and '99



<sup>1</sup> This is based on figures from six of the state's seven metropolitan statistical areas. Trade statistics are not reported for the MSA that includes Montgomery County. This county typically accounts for five to seven percent of state exports. Several Tennessee MSAs include counties in neighboring states.