

Global Commerce

Tennessee and the International Economy

Where Does Tennessee Rank?

by Steven G. Livingston

Tennessee exported more than \$11.6 billion in 2002, a very substantial amount, but how does this performance compare to the rest of the nation? Does Tennessee export more or less than most other American states?

In fact, for many years Tennessee was very much in the middle of the pack when it came to exports. In the mid-1970s, for example, Tennessee ranked 22nd among American states in the value of its foreign sales. Ten years later, it had dropped to 24th. But in the 1990s it started a slow ascent. By 1997 it cracked the top 20, and last year it reached its highest ranking ever, 17th in the nation. In doing so, Tennessee has also become the sixth leading inland exporting state.

Of course, export dollar value is not the only way to meaningfully rank the states. States vary greatly in population, so perhaps we should adjust for this. If we do so, does Tennessee's rank change? In 2002, the Volunteer State exported \$2,005 worth of goods per each Tennessean. This is about \$400 less than for the United States as a whole, but it still places Tennessee 19th among the states. Once again, Tennessee has been rising in this ranking over the years. Back in 1997, the state was 26th. Moreover, it has the ninth best growth rate in exports per person over the past five years.

Yet another possible ranking is the num-

Table 1. The State versus the Nation

	Tennessee	U.S.	Tennessee's Rank
Exports (2002)	\$11.6 billion	\$693 billion	17
Exporters (2001)	\$5,993	\$238,234	20
Exports per Capita	\$2,005	\$2,404	19
Exports per Export Firm (2001)	\$2,082,446	\$3,067,877	14
Exports per Manufacturing Worker (2000)	\$24,755	\$46,784	35
5-Year Export Growth	25.87%	0.82%	8
5-Year Exporter Growth	21.39%	25.60%	18
5-Year per Capita Growth	16.78%	-6.37%	9
% of Firms Exporting (1999)	5.36%	4.1%	23
Exports as % of Total Shipments (2000)	11.12%	18.50%	28

ber of exporting companies one finds in a state. In 2001, the last year available for these statistics, Tennessee had 5,436 exporters.

This places it 20th among the states.

However, the five-year growth rate in its number of exporting firms (5.90 percent) is a disappointing 34th in the nation. If we again adjust for the size of the state, Tennessee falls by a few notches. This time we adjust by considering the total number of firms operating in a state. Slightly more than five percent of all Tennessee firms export, a figure that is better than for the United States overall but ranks just 23rd among the states. (These percentages are based on data from 2000, the last year for which we have figures on the overall number of firms operating in each state.)

The average Tennessee exporter is selling \$2,082,446 in goods a year overseas. This is substantially less than for America overall (Table 1), but it still ranks as 14th among the

Tennessee has become the sixth leading inland exporting state.

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Rank

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The state is a top-10 exporter to 36 different countries overall.

states. The average Tennessee exporter also increased its foreign sales by 15.77 percent over the past five years, and this is one of the best performances in the nation. Tennessee had the seventh highest growth rate in exports per firm. On the other hand, the state exported \$24,755 per each manufacturing worker, well under the national figure and only 35th highest of the U.S. states. This suggests that state exporters are unusually labor intensive.

A final measure of state export ranking is that of export intensity. How much of the state economy is export-related? In Tennessee, export shipments account for 11.1 percent of the state's overall value of shipments. On its own terms, this is a rather impressive number and shows how important exports have become to the state's economy, but it is also only about two-thirds of the national percentage and makes Tennessee only the 28th most export-intensive economy in the nation.

The overall impression of these rankings is that the state is "catching up." Its growth rates exceed its overall rankings in most categories, suggesting that Tennessee will gain a

There are 20 products for which the state is one of the top 10 exporters.

Table 2. Top Tens

Product Categories in Which Tennessee Is a Top-10 Exporter

<p>2nd Man-made Staple Fibers</p> <p>3rd Beverages and Spirits Cotton Vegetable Oil</p> <p>4th Yarn and Twine Zinc and Zinc Articles</p> <p>5th Aluminum Articles</p> <p>6th Printed Books Rubber Products</p>	<p>7th Glass Furniture Musical Instruments</p> <p>8th Non-knitted Apparel Footwear</p> <p>9th Tobacco Products Games and Sports Equipment Automobiles Pulp Iron or Steel Articles</p> <p>10th Vegetable Plaiting Material</p>
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Table 3. Top Tens

Markets in Which Tennessee Is a Top-10 Exporter

<p>3rd Grenada</p> <p>4th Argentina Bangladesh Bolivia Kryrgyzstan</p> <p>5th Ghana Indonesia Zimbabwe</p> <p>6th Croatia Namibia</p>	<p>7th Bosnia Turks and Caicos Zambia</p> <p>8th Turkey</p> <p>9th Canada Guyana Lithuania Paraguay Peru St. Lucia Tajikistan</p> <p>10th Guadeloupe</p>
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(markets with sales of more than \$30 m)

few notches in the state rankings over the coming years.

Markets and Products

It might also be interesting to look at where, relatively, Tennessee is doing best in its export performance. It turns out that there is no product for which Tennessee is the nation's leading export state, but there are 20 products for which the state is one of the top 10 exporters. (This is based on two-digit Harmonized System commodity classification codes, which contain 97 total products.) They are given in Table 2. If you prefer to use the larger North American Industry Classification System groupings, Tennessee ranks eighth in printing and publishing exports among all American states, and ninth in plastics and rubber exports. Tennessee's weakest manufacturing performance is in processed food products, where it ranks only 29th among the states in the value of its exports.

If we turn to destinations, Tennessee is the largest exporting state to but one foreign market: the small country of Eritrea. The state is a top-10 exporter to 36 different countries overall; however, many are as small as or smaller

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4th Quarter 2002

Automotive exports have slowed markedly after two strong years.

4th Quarter 2002

Telecommunications exports continued their downward spiral.

China was the state's strongest large market.

Tennessee's Largest Export Sectors

	Exports	Change from Last Year	Change from Last Quarter
Transportation Equipment	\$598,406,101	-16.1%	-4.5%
Chemicals	\$406,315,609	-1.2%	15.3%
Electronics	\$392,274,207	22.1%	-3.2%
Industrial Machinery	\$318,587,889	9.9%	14.6%
Agriculture	\$185,069,376	23.4%	65.0%
Miscellaneous Manufactures	\$177,486,413	33.2%	11.7%

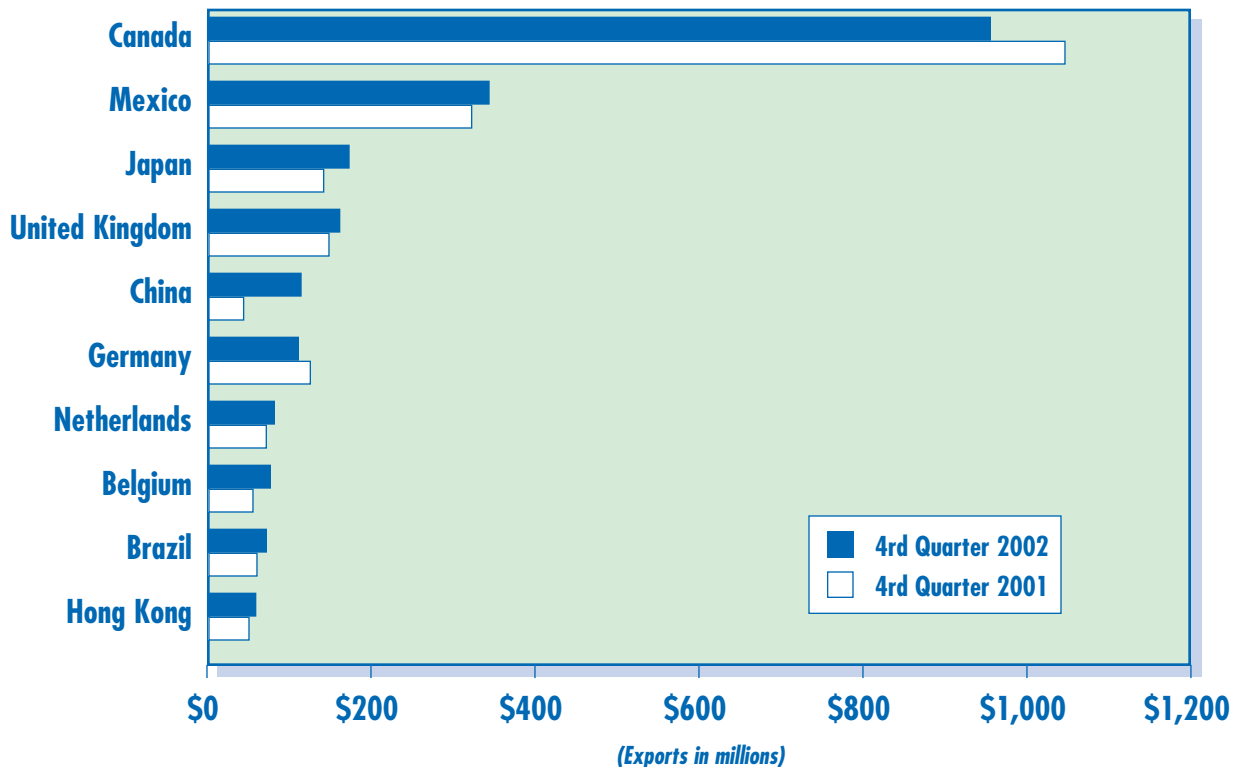
What's Hot and What's Not

(among Tennessee's top 100 exported goods)

	Value of Exports	Growth	Decline
PRODUCTS WITH THE GREATEST GROWTH			
Mechanical Excavators	\$5,101,575	*	
Gas Turbines >5000kw	\$2,005,000	*	
Mower and Harvester Parts	\$33,690,153	2,489.8%	
Men's and Boys' Shirts	\$6,109,930	1,543.9%	
Electro-diagnostic Apparatus	\$10,700,059	571.6%	
PRODUCTS WITH THE GREATEST DECLINE			
Apparatus for Telephony Lines	\$25,958,737		-72.8%
Toughened Safety Glass	\$764,611		-69.1%
Building Machinery	\$1,122,859		-58.9%
Iron and Steel Articles	\$10,522,258		-54.6%
Soybean Oil	\$2,867,548		-54.4%

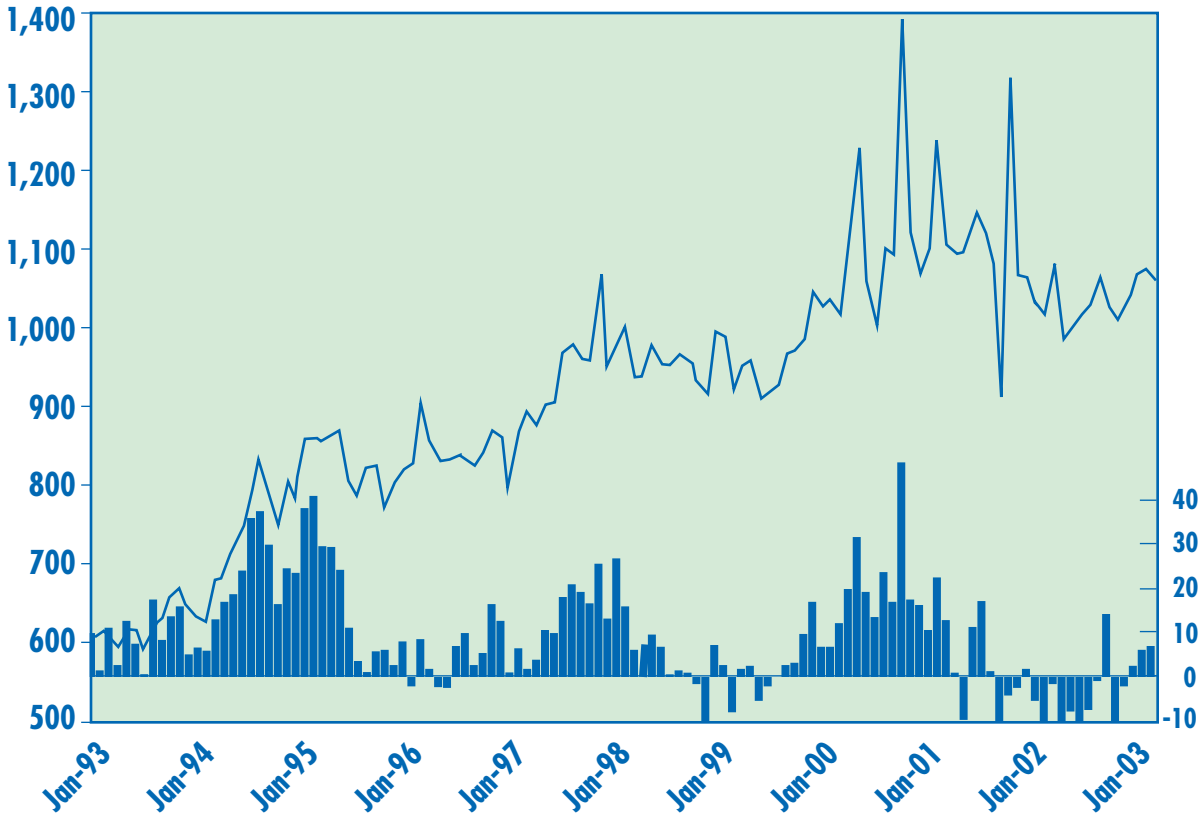
* No exports in the fourth quarter, 2002

Tennessee's Leading Trade Partners



Tennessee's Monthly Exports

Exports in \$ Millions



(Seasonally adjusted, expressed in 2000 dollars)

4th Quarter 2002

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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Fastest Changing Export Destinations

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

	Value of Exports	Gain	Decline
COUNTRIES WITH THE GREATEST GROWTH			
Ghana	\$2,872,401	592.2%	
New Zealand	\$12,983,923	224.8%	
Honduras	\$16,066,289	161.0%	
China	\$119,259,168	151.8%	
Panama	\$4,233,620	108.4%	
COUNTRIES WITH THE GREATEST DECLINE			
Austria	\$2,808,434		-71.7%
India	\$14,333,461		-45.8%
El Salvador	\$2,886,372		-41.6%
Turkey	\$14,387,357		-41.4%
Venezuela	\$9,152,960		-36.3%

Tennessee International Trade Report

Tennessee exports grew 6.31 percent, to \$2.983 billion, in the fourth quarter of 2002. This turned out to be the best quarterly performance in a very sluggish year. Total 2002 exports stood at \$11.621 billion, a meager 2.66 percent increase from 2001. More than half of the state's total gain in foreign sales occurred during the final quarter of the year.

The export growth that did occur was in spite of a substantial loss of trade in Canada, the state's primary market. Exports to Canada were down 8.5 percent during the fourth quarter. The dollar value of these lost exports—\$89 million—exceeded Tennessee's total sales to the Netherlands, the state's seventh largest market. This gives some idea of the importance of the Canadian market. This decline was mostly due to losses in auto-related exports and the continuing severe decline of the telecommunications industry. Parts for line telephony fell by a remarkable 75 percent (from \$105 to \$27 million), the worst performance of any Tennessee product that is exported.

Tennessee's second market, Mexico, was unable to make up for these losses as it, too, purchased substantially fewer auto-related goods than a year earlier. However, thanks to a very large purchase of cotton, total foreign sales to Mexico did grow a little over seven percent for the quarter.

NAFTA, then, was a rather weak market for the quarter, yet elsewhere state exporters actually did rather well. The state made major gains in Asia, Latin America, and Europe. Europe is perhaps the least surprising, as Tennessee firms were able to take advantage of the falling dollar. Tennessee exports to the euro zone were up about



\$30 million for the quarter (7.44 percent). Aircraft parts, chemicals, and electrical equipment sales accounted for most of this growth.

More surprising was the state's strong performance in Latin America. Overcoming

problems in Argentina and Venezuela (where exports fell 36 percent), Tennessee's foreign sales rose to \$239 million for the quarter, more than a 31 percent increase. Large increases in apparel shipments to Central America, along with gains in chemical exports and cotton sales, accounted for most of this performance. Japan, too, must be placed in the surprising column. After years of slow export sales, Tennessee exports jumped 21.3 percent last quarter. However, there is less here than meets the eye. This large increase (to \$175 million) was entirely due to automotive shipments.

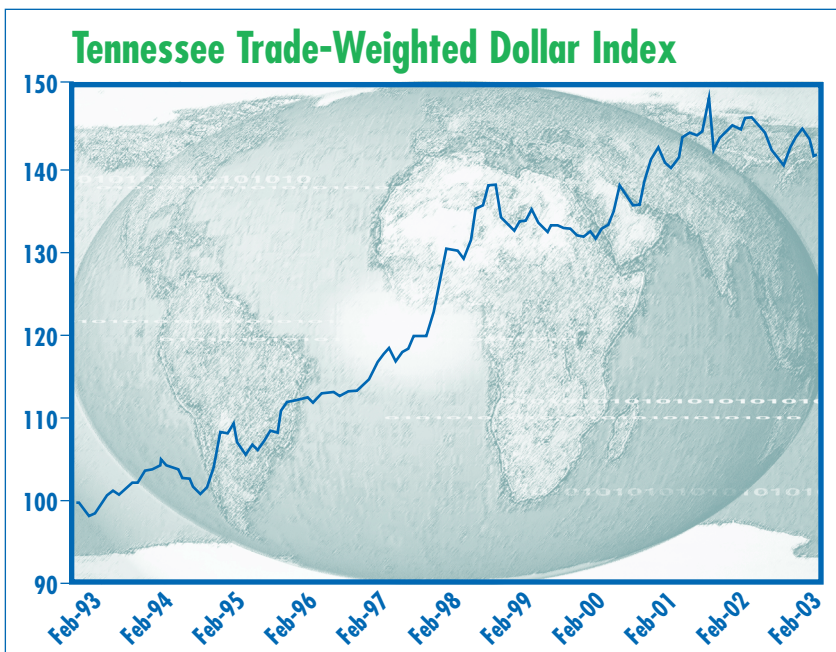
The state did extremely well in Asia. In raw numbers, China was nothing short of spectacular. At \$119 million, state exports were more than double that of a year ago. Almost all of this growth, though, was because of shipments of two products: cotton and harvesting equipment. Southeast Asia generally posted very good numbers, with Malaysia (42.9 percent growth) and Indonesia (96 percent) leading the way. The latter was due, once again, to cotton, while the Malaysian growth was mostly in computer-related sales.

The Middle East and South Asia were the most troubled markets for state exporters. Turkey, Tennessee's main Middle Eastern market, was off more than 40 percent, while India, Tennessee's major South Asian market, dropped by a similar amount. Both of these declines were due to lower cotton shipments.

The quarter featured an unusual number of dramatic gains in the state's smaller markets. Ghana, for example, saw Tennessee exports soar from less than a million dollars to some \$3 million. Hungary purchased 1,172.5 percent more Tennessee goods than a year earlier (\$.6 million to \$8 million). New Zealand more than tripled its imports from Tennessee (to \$13 million). Finally, a nearly \$7 million shipment of classified materials septupled the state's sales in Grenada.

Overall, it was not a bad quarter given current global worries as well as the continuing recession. January numbers, however, suggest that we may not be out of the woods just yet. At almost exactly \$1 billion, January exports showed virtually no growth from 2002. ■

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Rank

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than Eritrea. Tennessee ranks among the top 10 exporting states to 22 of the 142 foreign countries that buy more than \$40 million in American goods a year (admittedly a somewhat arbitrary cutoff point!). Grenada is the highest (third), but Canada (ninth) is by far the most important. Ten of these markets are in Africa, making the continent home to the largest number of countries for which Tennessee is a top-10 exporting state.

Lists such as these are obviously as much for entertainment as for analysis, but they do shed light on how Tennessee compares with other states and offer some insight into the state's strengths and weaknesses in its export performance. ■