

Global Commerce

Tennessee and the International Economy

China Takes the Stage

by Steven G. Livingston

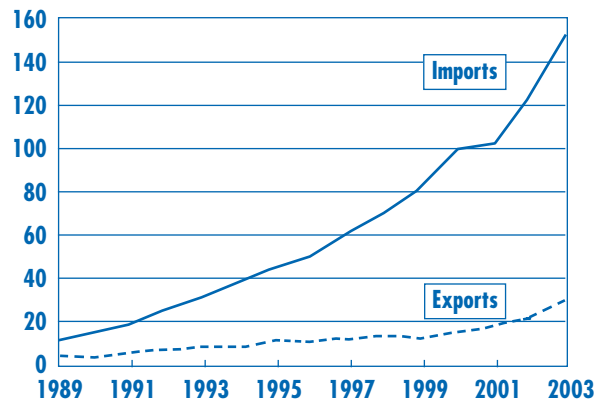
Few economic stories are as compelling as the dramatic expansion of America's trade with China. For how many decades have global marketers prophesied "if every family in China bought just one..."? Over the past few years, that dream suddenly appears within reach. American exports to China have made dramatic gains. Sales to China have doubled in just the past five years. In the first four months of 2004, Chinese purchases of American goods were up by more than a third from a year ago. China is now America's fifth largest foreign market.

However, the rise in American exports pales before what can only be called an explosion of Chinese imports into this country. Chinese imports have also doubled over the past five years but from a much larger base. China has become our second largest foreign supplier. One out of every eight dollars of American imports now comes from China. As a result, the U.S. has a larger trade deficit with China than with any other country.

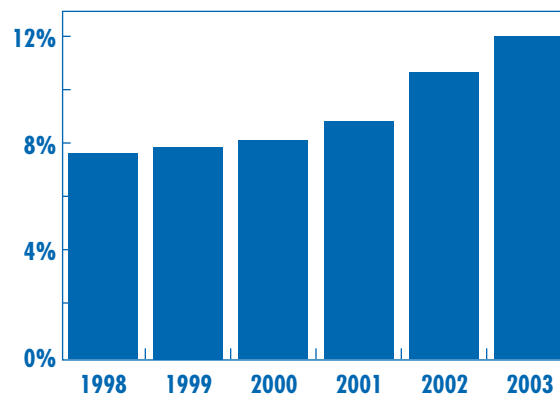
Whether as a market or as a source of competition, China is becoming increasingly important to the American economy. As a quick look at the growth of Chinese imports in this state's major industries demonstrates, Tennessee is not immune to this impact. In every major industry, Chinese products are growing rapidly. In fact, these numbers might raise the worry that the state is unusually vulnerable to Chinese imports. To examine this question, we constructed an index of Chinese imports into the U.S. We then compared this against a similar index constructed for Tennessee.* The results provide some comfort. Over the past five years, the effect of Chinese imports on Tennessee has been very similar to their effect on the U.S. overall. This state does not appear especially dependent on Chinese imports or vulnerable to Chinese import competition, even though these imports are growing rapidly.

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U.S.-China Trade Balance (\$ billions)



Chinese Imports as % of All Imports



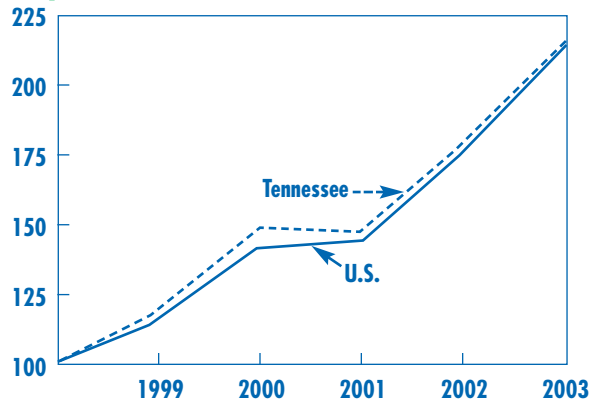
The U.S. has a larger trade deficit with China than with any other country.

Chinese Import Growth in Tennessee's Largest Industries 2003:1-2004:1

Industry	Import Growth
Transportation Equipment	122.99%
Food Processing	105.37%
Chemicals	83.89%
Computers and Electronics	146.14%
Machinery	108.52%
Plastics and Rubber	67.80%
Fabricated Metals	59.57%
Paper	56.49%
Primary Metals	97.28%
Electrical Equipment	86.26%

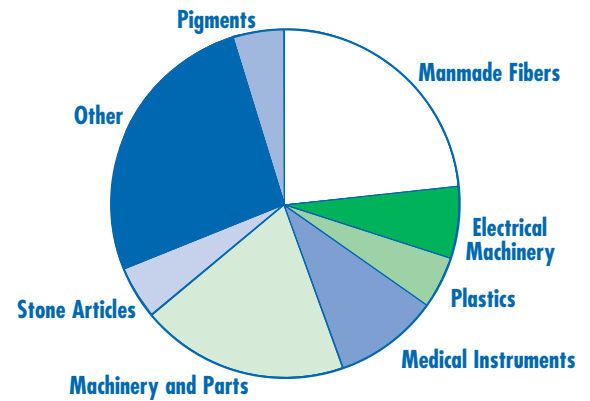
(ranked by value of shipments)

Comparing the Impact of Chinese Imports: Tennessee versus the U.S.



(Index of Import Growth, 1998 = 100)

Tennessee Exports to China, 2004 YTD



China

continued from front

In 2004 alone, more than \$600 million in cotton has been exported to China from Tennessee.

Of similar importance to states is their performance in what is now the world's fastest growing major economy. Has Tennessee been able to take advantage of this market?

The picture is clouded by the huge success of one state product: cotton. It may be a misnomer to call this "Tennessee cotton" since most of it is actually only brokered through Memphis, but nevertheless it has had stunning success in China. In 2004 alone, more than \$600 million in cotton has been exported to China from Tennessee. This is 62 percent of total U.S. cotton exports to that country. In the past, the export of cotton has been cyclical. There were dramatic gains in the mid-1990s, followed by steep declines later in that decade. While acknowledging the success and importance of cotton exports to China, it is probably wise to focus on the state's non-cotton exports to see how it compares with the rest of the country in selling its goods to China.

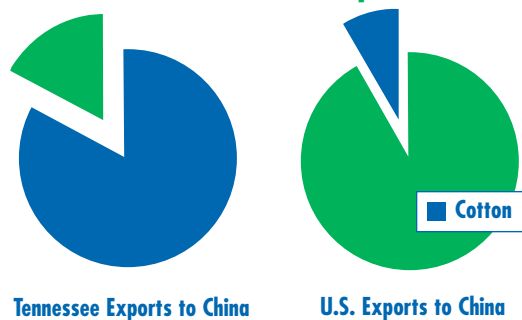
The profile of the state's non-cotton exports to China is dominated by a handful of industries. Of these, the medical instrument industry is currently

making some of the largest gains. Combined, these exports to China amount to 2.70 percent of all the state's nonagricultural exports. How does this stack up against other states?

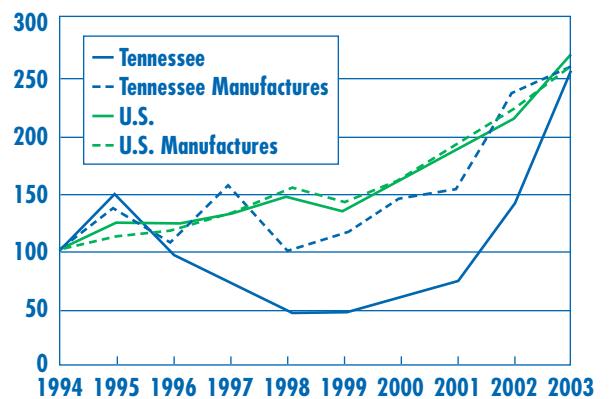
At first glance, not too well. The percentage of Tennessee exports that goes to China is lower than that for the rest of America (3.55 percent). Tennessee accounts for 1.66 percent of all American exports, but only 1.26 percent of U.S. exports to China. We created export indices to go along with our earlier import indices. From them, we see two things. First, the cotton sector makes Tennessee trade with China more volatile than that of the nation as a whole. When we take out cotton trade, we see that over the past 10 years Tennessee exports have grown at roughly the same rate as national exports. This indicates that the problem dates back some years. Compared to the rest of America, Tennessee has historically exported little to China. It's not falling further behind, but it is not catching up, either. It's difficult to know why. The two possibilities are that the state is poorly positioned to export to China (i.e., it doesn't have

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Cotton Dominates State Exports to China



Export Indices: Tennessee versus U.S.



1st Quarter 2004

Cotton was the state's largest export.

1st Quarter 2004

The transportation industry produced many of the quarter's hottest goods.

China has become the state's second largest market.

Tennessee's Largest Export Sectors

	Exports	Change from Last Year	Change from Last Quarter
Agriculture	\$735,758,486	228.1%	122.4%
Transportation Equipment	\$656,634,521	19.4%	12.7%
Computer and Electronic Products	\$505,084,642	41.1%	0.6%
Chemicals	\$503,604,942	19.9%	5.9%
Nonelectrical Machinery	\$345,982,737	2.7%	12.3%
Miscellaneous Manufactured Goods	\$246,183,425	82.9%	18.8%

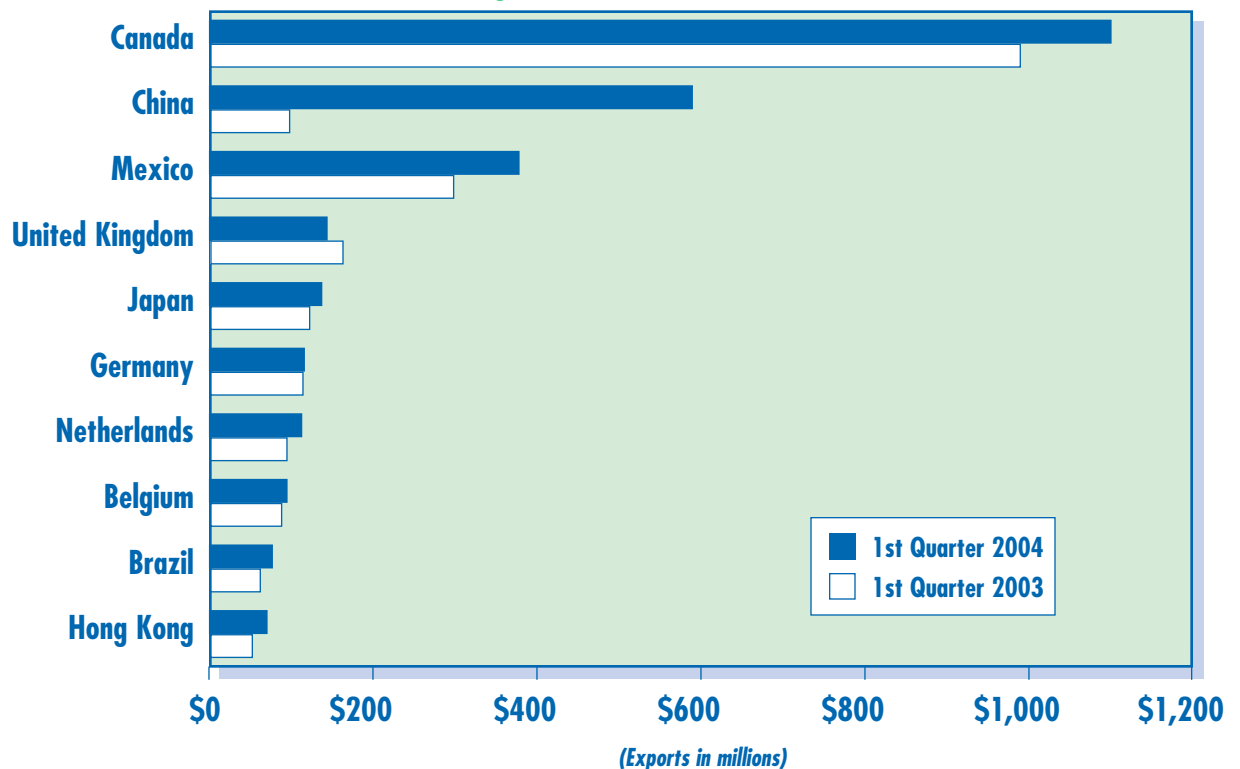
What's Hot and What's Not

(among Tennessee's top 100 exported goods)

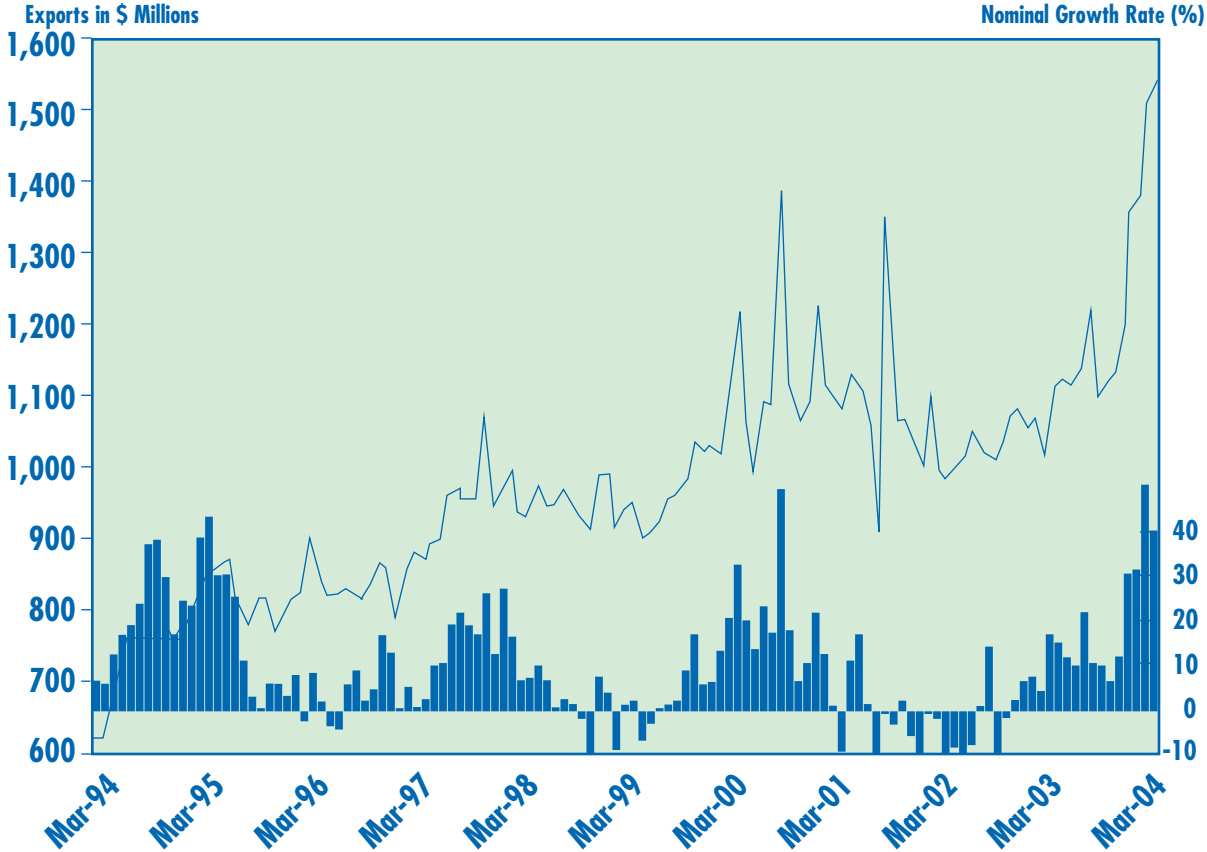
	Value of Exports	Growth	Decline
SECTORS WITH THE GREATEST GROWTH			
Helicopters	\$10,634,464	***	
Autos (of nonstandard classification)	\$15,533,573	19,169.8%	
Cellulose Ethers	\$6,423,473	3,351.5%	
Trucks for the Transport of Goods (weight < 5 tons)	\$11,280,390	3,126.7%	
Autos (engine > 3000CC)	\$10,527,393	865.7%	
SECTORS WITH THE GREATEST DECLINE			
Books and Brochures	\$12,872,814		-60.6%
Mower Parts	\$9,252,576		-51.3%
Aluminum Plates > .2mm thick	\$15,783,744		-46.2%
Derrick Parts and Attachments	\$7,180,235		-36.2%
Auto Body Parts	\$76,696,800		-34.1%

*** No exports in 2003

Tennessee's Leading Trade Partners



Tennessee's Monthly Exports



(Seasonally adjusted, expressed in year 2000 dollars)

1st Quarter 2004

GlobalCommerce

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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			
Hungary	\$17,958,133	1,524.3%	
China	\$595,153,129	482.6%	
Poland	\$6,116,312	378.0%	
Pakistan	\$11,599,826	311.6%	
Venezuela	\$6,953,801	218.7%	
COUNTRIES WITH THE GREATEST DECLINE			
Portugal	\$2,993,246		-68.3%
India	\$14,285,962		-32.2%
Malaysia	\$18,940,255		-28.3%
Egypt	\$3,628,190		-28.2%
Chile	\$10,771,004		-24.7%

Tennessee International Trade Report

Tennessee exports grew by more than a billion dollars in the first quarter of 2004. This is a near stunning gain of 35 percent over 2003.

Tennessee exports grew by more than a billion dollars in the first quarter of 2004. This is a near stunning gain of 35 percent over 2003. At \$3.916 billion, the state's foreign sales were more than \$500 million higher than in the fourth quarter of last year, the previous best export performance in Tennessee history.

The backbone of this tremendous performance was another remarkable rise in cotton exports. Tennessee exported \$736 million in cotton last quarter. This was a gain of more than \$500 million from last year. March exports alone (\$312 million) exceeded the state's total cotton exports for the entire first quarter of 2003. The vast majority of this increase was to one country: China. The state's cotton exports to China grew from \$37 million to \$501 million. However, China was not alone. Pakistan, Brazil, Colombia, and Turkey all dramatically increased their cotton purchases from Tennessee. Of course, "from Tennessee" cannot be taken too literally here. Much of the cotton was grown in Arkansas and Mississippi and shipped or brokered through Memphis, leading the exports to be assigned to this state. Indeed, according to the data, Tennessee is now America's largest cotton exporting state. This rapid growth of cotton exports does a lot to explain the recent WTO decision that ruled American subsidies of this crop violate international trade rules.

The incredible rise in cotton exports, however, covers only about half of Tennessee's export growth. A variety of industrial sectors boomed alongside King Cotton. Perhaps the most spectacular was the medical instrument industry. Its foreign sales grew by nearly \$100 million (from \$56 to

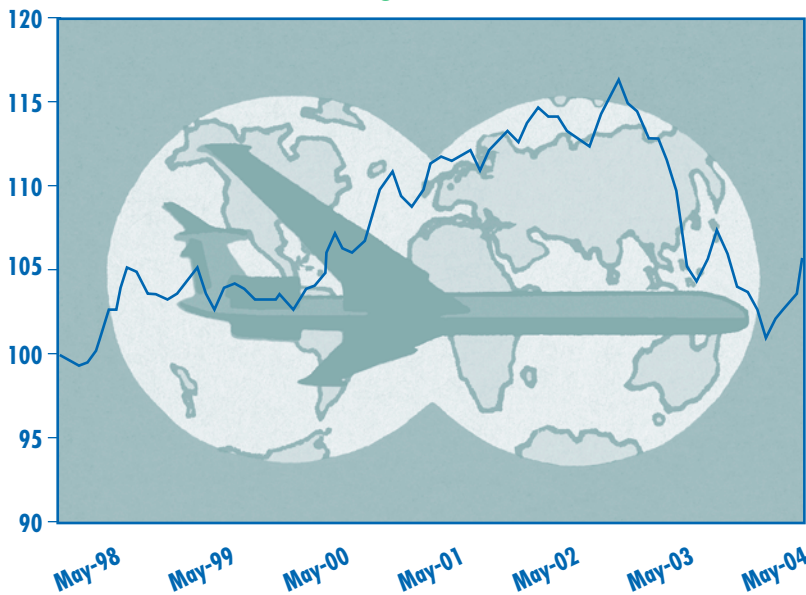
\$153 million), a 173 percent increase. Though the growth was worldwide, the majority of the gains were in Italy, the Netherlands, and Spain. Laptop sales, primarily to Canada, continued their rapid growth as well. This sector exported \$188 million, a gain of some \$54 million from a year ago. The aircraft parts industry was another terrific performer. Largely due to sales in Singapore, Italy, and the Philippines, its exports rose 51 percent to \$118 million. Industries as diverse as integrated circuitry (\$21 million), pleasure boats (\$25 million), automotive regulating instruments (\$24 million), and radio/TV equipment (\$22 million) all posted export growth rates in excess of 50 percent. Indeed, only a few industries disappointed. Tennessee's exports of motor vehicle parts fell from \$249 to \$219 million, the largest dollar loss of any industry. The largest percentage loss was borne by the publishing industry, where exports fell 55 percent (to \$15 million). Most of the fall was due to lost sales in Britain. Apparels (off \$9 million to \$22 million) and aluminum plates (which dropped \$13 million, thanks to a fall in sales in Mexico) were two other industries that did not fare well last quarter.

The state's substantial export gains occurred in almost all parts of the globe. China, thanks to the cotton sales, was the best single market, growing from \$102 to \$595 million. But the entire Pacific Rim more than doubled its purchases of Tennessee goods (\$556 to \$1,170 million). Of all the East and Southeast Asian markets, only Malaysia fell (due to a decline in computer purchases). Even exports to Japan, recently Tennessee's most difficult major market, grew by more than 12 percent for the quarter.

Tennessee also posted double-digit gains in Europe, South America, Australasia, the Middle East, and the NAFTA market. In the latter, where exports were up 15 percent (to \$1.49 billion), a substantial increase in automotive-related goods accounted for most of the \$195 million gain. Sales to the EU were up better than 11 percent. Tennessee survived a \$17 million drop in exports to the UK (mostly in the publishing industry) to post an overall \$70 million increase. Latin American exports were up 19 percent. The gains were concentrated in Brazil (23 percent) and Colombia (40 percent). About 60 percent of the export growth to South America was due to cotton. Finally, largely due to a \$29 million gain in Turkey, the state fashioned a sizable 53 percent gain in the Middle Eastern markets. Cotton was again a factor, accounting for about a third of that gain.

In sum, it was an extremely good quarter for state exporters. Tennessee well exceeded the overall national gains in exports. A falling dollar and a small revival in the world economy lead optimists to hope that this trend will continue through 2004. ■

Tennessee Trade-Weighted Dollar Index



China

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U.S. Exports to China, 2003-2004

	\$ millions	% from Tennessee	% Tennessee to World
Largest Exports			
Cotton	966	62.84%	45.43%
Electrical Integrated Circuitry	897	*	0.18%
Soybeans	733	0%	0%
Aircraft	667	0%	0.20%
Scrap Iron and Steel	321	0.93%	0.38%
Computers	243	0.95%	3.13%
Miscellaneous Machinery	225	0.67%	0.49%
Fastest Growing			
Refined Copper Alloys	47	0%	0.97%
Fur	20	0%	*
Polycarboxylic Acids	31	0%	11.43%
Plastic Plates and Sheets	29	0.69%	1.57%
Auto Parts (not engine or body)	151	1.59%	2.86%
Artificial Filament Tow	47	20.49%	59.99%
Paper and Cardboard Containers	26	0%	0.45%

Industries at 4-digit HS (Harmonized System) Code, * = insignificant amount

the right industries) or that state firms, for whatever reason, are not as focused on China as are firms elsewhere in the U.S. (i.e., it has the right industries; they're just not exporting to China).

Our final table examines this. Unfortunately, there is some evidence for both explanations. In some cases (aircraft, soybeans), the state is simply not home to industries that have been successful in China. But in other situations (computers, artificial filament tow), the industries are here; it is more a case that they are focused elsewhere in their global trade. This mix of causes suggests that the state may continue to lag in its exploitation of the Chinese market.

The growth of the Chinese economy has been remarkable. Its entrance into world trade is a major economic event of our time. It is an event that mixes opportunities with threats for many Tennessee industries. How they respond will be itself a significant story. ■

* Since the major economic impact of imports is assumed to rest within the same industry, the Tennessee index was constructed by assigning Chinese imports to Tennessee based on the economic structure of the state (at the four-digit NAICS level). Note that the economic impact is actually dual. Imports may compete with local production, or they may be the source of lower-priced inputs that enable local firms to cut their costs and thus expand their production.