

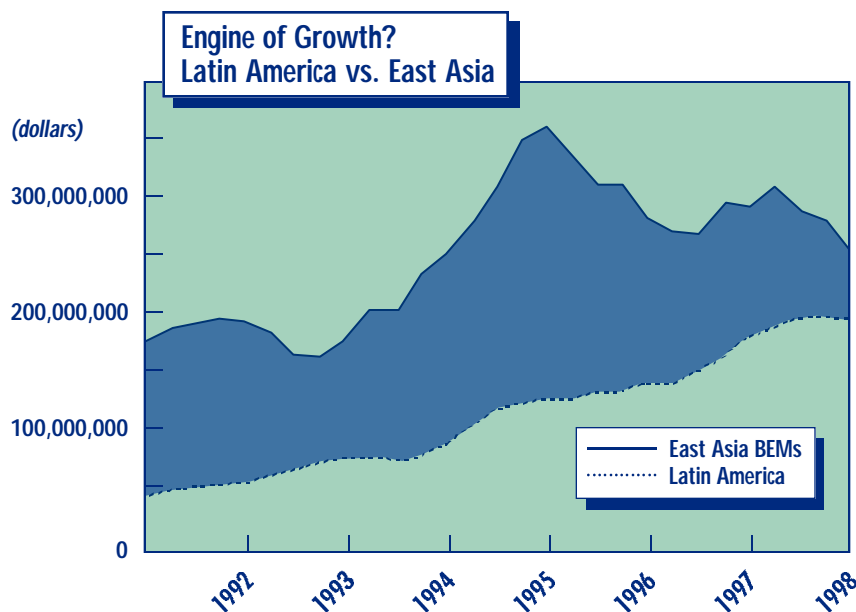
Tennessee's Stake in Brazil's Financial Crisis

Latin America's Growing Importance to the State's Economy

by Steven G. Livingston

Nineteen ninety eight's version of the big bad wolf—a global financial crisis that has produced a severe recession across much of the world—has already blown two houses down, East Asia and Russia, and is now knocking on the door of a third: Latin America. The IMF and the U.S. have been working furiously to shore up Brazil, recently extending it an additional \$41 billion in credit, and have thus drawn a “line in the sand” for the entire continent. For few doubt that if the region's biggest economy collapses, Argentina will be next, and the crisis will then race north to Mexico. Recent large swings in the U.S. stock market following economic actions in Brazil show how seriously American investors believe the situation to be. Though it would be nice to think that Tennessee will be exempt from the consequences, the fact of the matter is that this state has become increasingly reliant on South America's markets and would be hard hit by a repeat of last year's Asian meltdown.

Strong exports to Latin America are of one of the reasons the state has weathered the Asian crisis as well as it has. As shown by our chart, Tennessee exports to East Asia actually peaked back in 1995. Since that time much of the slack has been taken up by a robust and continuous expansion of sales to Latin America. (In this article we exclude Mexico, which, after NAFTA, is under a quite different trade regime. However as we have seen in earlier issues, the growth of sales to Mexico has been even more phenomenal over this same period.) Over the last seven years, trade with South America has tripled, rising relentlessly to nearly \$200 million in exports a quarter. This betters by far the trajectory of East Asian export growth. As the chart shows, the gap in total sales between the two regions is closing, and it is no longer far-fetched to argue that in



the years ahead the value of exports to South America might exceed those to the Orient. Really, for state exporters, the Asian crisis came three years ago, and since then it has been sales south of the border which have helped to maintain the state's continued strong export growth.

Sales south of the border have helped to maintain the state's continued strong export growth.

Latin America: A Reliable Partner

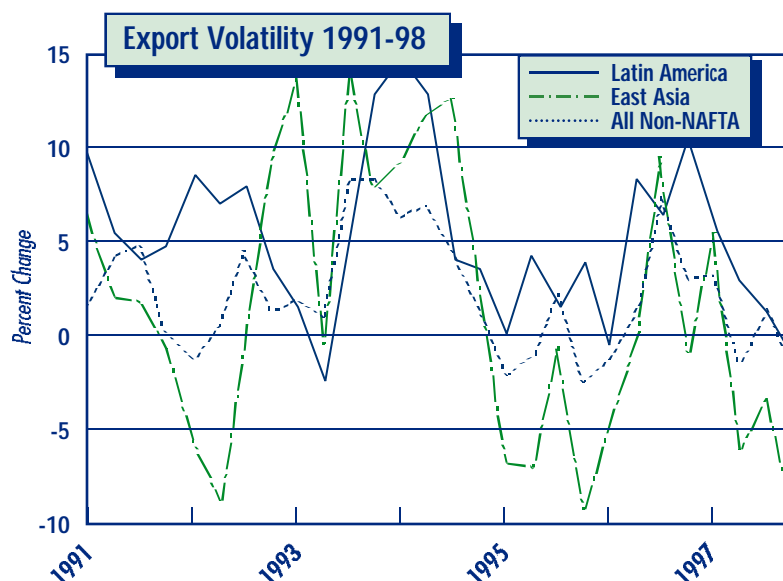
A second way to observe the importance of this market is by looking at the volatility of the state's foreign trade. Here we are referring to how much Tennessee's exports change quarter by quarter. East Asia

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Latin American trade has been an unusually steady source of state export growth.



global financial crisis and continue to contract its purchasing, a major prop will have been kicked out from under the state's steady economic growth.

As trade with Latin America has matured, the number of products going to the region, and the number of industries having an important stake in the region, have expanded. At the start of the decade, the lion's share of South American trade involved one industry, chemicals. (And, to a large extent, one firm, Eastman Chemical.) But the much larger pie of 1998 is divided a lot more evenly among the state's industries. Agricultural crops and the rubber and plastics industry have both had especially dramatic gains in importance, but

trade with the rest of the Americas now involves most sectors of the state's economy.

For six industries, sales to Latin America now constitute more than a tenth of all world exports. Needless to say, these firms are probably watching current events most closely. The apparel industry and agricultural crops are by far the most dependent on Latin American sales. For crop producers, Latin America has become a very important new market. The region has rescued farmers from several years of very poor sales in Asia, and has enabled this sector to return to its rosier export growth figures of earlier in the decade. The collapse of this market would definitely hurt badly. Sales of the apparel industry, on the other hand, are actually concentrated in Central America and, given that the final market for these goods is often elsewhere in the world, these exports are probably less

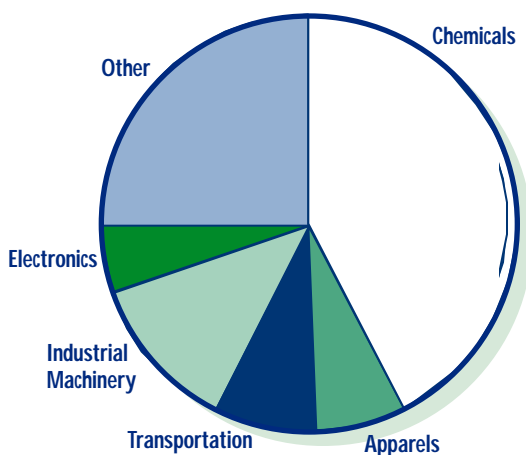
Brazil

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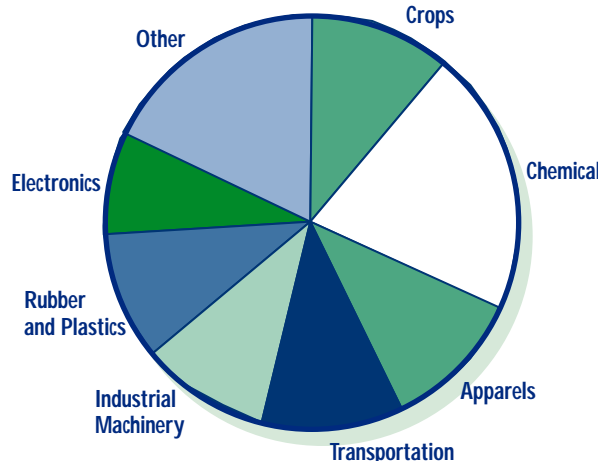
has clearly been quite a volatile region for some time. Exports have gyrated up and down by nearly ten percent a quarter for almost the entire past decade. Big gains have been followed by sharp losses. Trade to the rest of the world has been much less volatile. Latin American trade, in particular, has been more stable. The region has also evidenced another very important quality: its growth rate hardly ever dips below zero. Not since 1993 has its quarterly growth rate actually been negative—until this past quarter, that is! The lesson is this: Latin American trade has been an unusually steady source of state export growth. If the region should fall to the

As trade with Latin America has matured, the number of products going to the region has expanded.

A Diversifying Market: Major Exports (first three quarters)



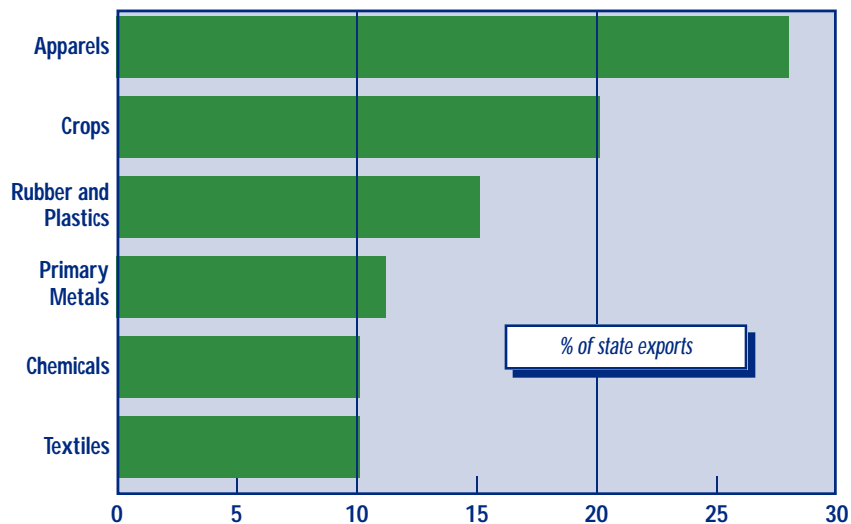
1991



1998

vulnerable to the region's economic vagaries. The state's rubber and plastics product industry is the third most reliant on the Latin American market, and this has been a big change. This sector sold less than a million dollars a quarter in Latin America at the start of this decade, but by 1998 sales have grown to just about \$55 million a quarter, fifteen percent of its entire global exports. Many other industries are becoming steadily more reliant on this market as well. The state's largest sector, transportation, for example, has expanded its exports to Latin America more than five-fold over the past seven years, to some \$80 million a year, and has doubled the percentage of its exports that go there (sold almost entirely, incidentally, to Brazil and Venezuela). Of all Tennessee's industries, only the scientific and medical instrument sector is exporting a smaller percentage of its goods to South America than it was in the early 1990s. In other words, almost across the board, Latin America is becoming more important to most of the state's industries.

Industries Most Reliant on Latin America



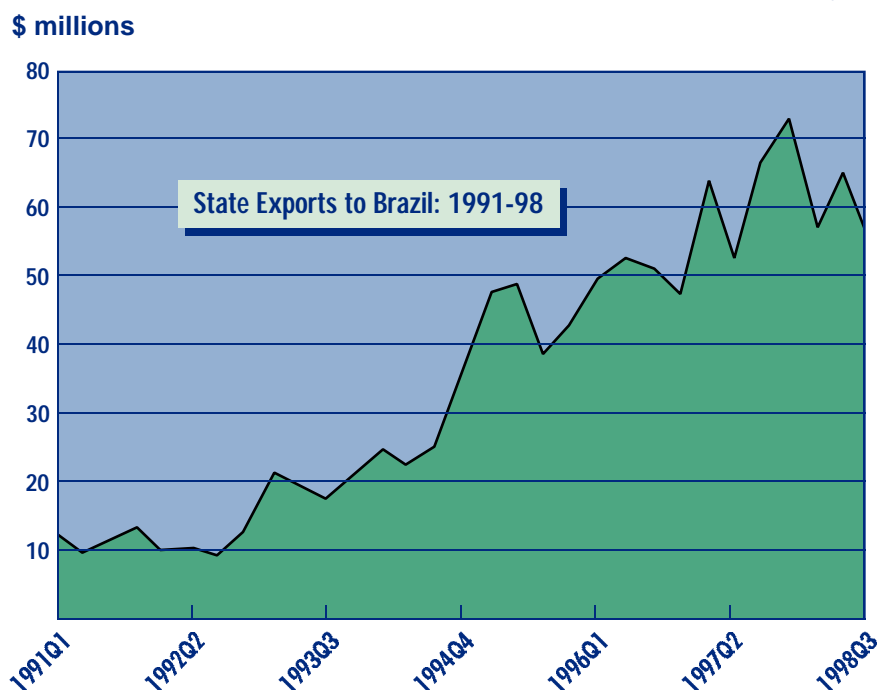
For six industries, sales to Latin America now constitute more than a tenth of all world exports.

Brazil: Keystone of the Latin American Economy

Unfortunately, these very positive trends are colliding with the continent's financial uncertainty. And here, the current focus on Brazil is not misplaced. Brazil is indeed the linchpin to Tennessee's future trade performance with the entire continent. It is today one of Tennessee's ten largest export markets. Along with Mexico, it has been the state's most dynamic large market. As shown in the accompanying graph, quarterly exports have shot up some 600 percent over the decade. The chart, however, also shows the incipient effects of the country's recent troubles. Sales from Tennessee firms peaked in late 1997 and have been declining

throughout this year. Thus far, increased sales to the rest of the continent have more than made up for these losses. But, given the size of Brazil's market (the country contains 53 percent of Latin America's total gross product, again excluding Mexico, and purchases 28 percent of all state exports to the continent), this obviously cannot continue for long. Our last chart shows the relative importance of Brazil to the five state industrial sectors with the largest dollar valued exports to Latin America. As can be seen, the picture varies quite a bit. As noted above, apparel exports are primarily to Central America, but the other four largest sectors have a sizable stake in Brazil. Thus far in 1998, both the state's chemical industry and its transportation industry have sold Brazil more than \$40 million in goods. Of the two, the transportation industry is the more reliant, however. Well over half of its Latin

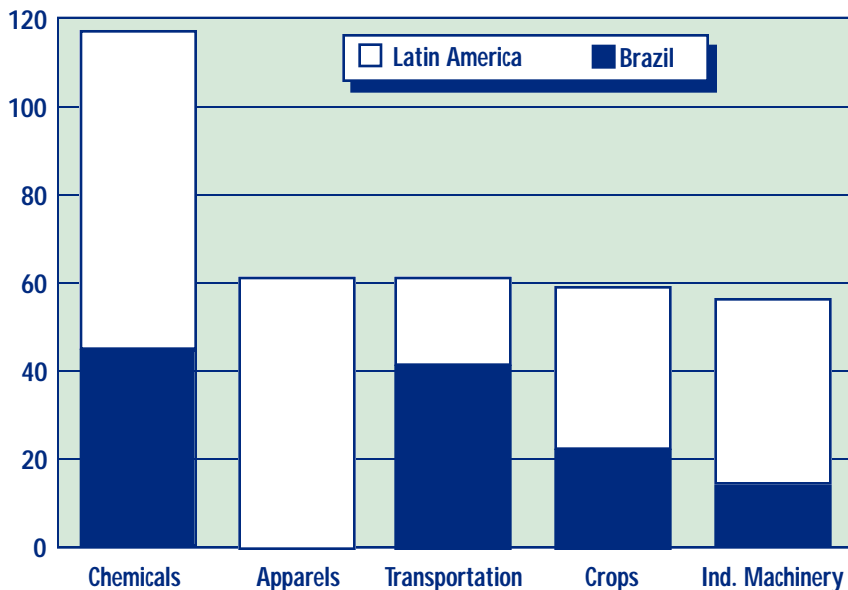
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Sales from Tennessee firms peaked in late 1997 and have been declining throughout this year.

Tennessee's Latin American Exports Going to Brazil

\$ millions



Brazil

continued from page 3

American exports are going to Brazil. The auto industry's toehold in South America will suffer a severe setback should the economy fall into recession. In sum, Tennessee's stake in Brazil's economy is sizable.

The recession that now afflicts much of the world is clearly having an effect on American business. U.S. manufacturing employment is falling, and industrial production is virtually flat. In this environment, Latin American markets are becoming even more critical. It is clearly these markets which have done much to buoy this state's exports even in the face of unwelcome developments in many other parts of the world. Thanks to their reliability, they are coming to rival East Asia as this state's most important emerging markets. We should closely watch economic developments in this region over the coming months, for events in Brazil and Latin America will significantly influence the fortunes of this state's exporters, and indeed the fortune of the entire Tennessee economy. ⁿ

3rd Quarter 1998

Tennessee Trade-Weighted Dollar Index

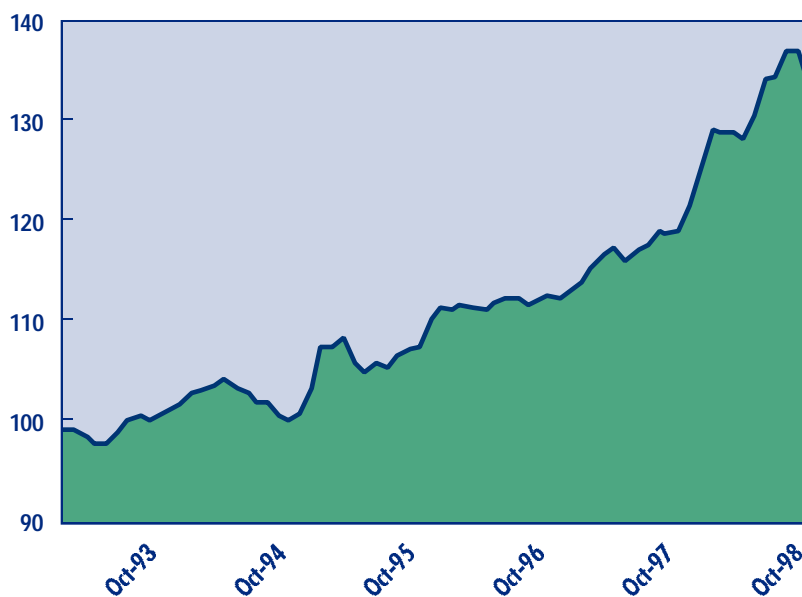
For state exporters, there is good news and bad. The good news is that the dollar is clearly beginning to fall. October's Tennessee trade-weighted dollar index stood at 133.9, a decline of 2.9 percent from its September peak and a drop of 0.8 percent from this past summer. The bad news is that the dollar remains extraordinarily strong, a third again higher than it was five years ago. This undoubtedly continues to hamper the state's foreign sales. Most of the recent decline has been due to Europe, where currencies have been steadily rising against the dollar since mid-summer. The greenback fell between 8 and 9 percent in almost all the EU states this past quarter. The lone exception was the UK, where the dollar has gained modestly. The Asian currencies, after a desperate year, have also finally begun to stiffen. The Thai baht and the Korean won both have gained on the dollar. The biggest change, however, was in Indonesia, where, over the third quarter, the dollar fell by slightly over a third against the rupiah. Finally, the dollar also weakened significantly against the Japanese yen, falling some 14 percent over the quarter.

Indeed, the dollar rose against only six of the index's twenty-two currencies this past quarter. Unfortunately, two of these were the Canadian dollar and

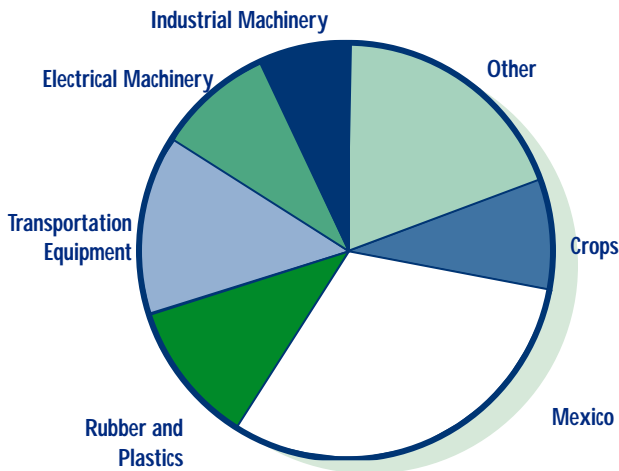
the Mexican peso, the currencies of the state's two largest markets. The dollar posted a healthy 4.88 percent rise against Canada's currency, while it rose rather steeply against the peso, gaining just over 14 percent since last June. In the other three cases, Brazil, the UK, and the Dominican Republic, the rise was fairly small.

Barring a further spread of the global financial crisis, most experts expect the dollar to continue to fall over the next several months. Finally, state exporters may get a break from the relentlessly unfavorable currency situation they have had to face for the last year. But then again, if we have learned anything over the past year, it's to take such predictions with a large grain of salt. ⁿ

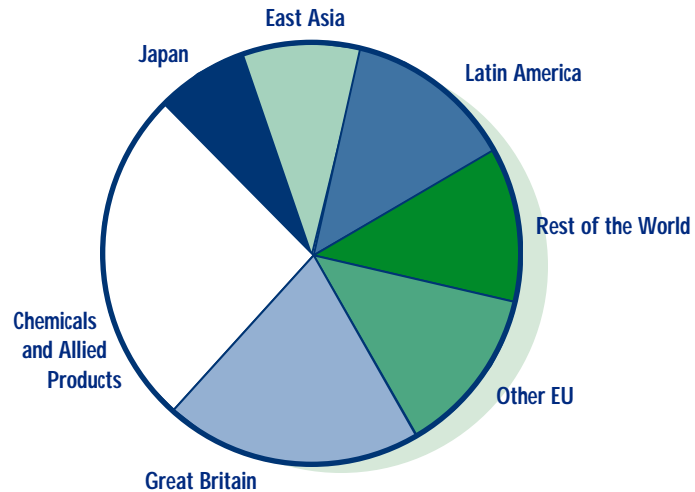
The good news is that the dollar is clearly beginning to fall.... The bad news is that the dollar remains extraordinarily strong.



Tennessee's Exports to MERCOSUR



Tennessee's Environmental Quality Exports



Tennessee International Trade Report

It could have been worse. Tennessee export growth decidedly slowed in the second quarter, but nevertheless the state's foreign sales are still at an all-time high. The state shipped \$2.724 billion in goods overseas last quarter, a record amount. Though the double digit export growth of last year appears over, exports still grew 5.4 percent over 1997's second quarter, easily surpassing growth figures for the rest of the nation. Thus far, the impact of the world financial crisis has only been to slow, not stop, Tennessee's steady expansion into global markets.

However the global downturn has clearly created soft spots in the state's export picture. In fact, the state's positive numbers are almost entirely due to the continued expansion of trade in the Western Hemisphere. State exporters made solid gains in Canada, Mexico, and most of Latin America. Exports to Brazil nearly doubled, and the development of the free trade organization of the Southern Cone nations, MERCOSUR, into a major state market continued apace. Sales to Canada increased to \$885 million, \$40 million over the quarter. And Mexico remained by far the state's most dynamic market. Here exports rose another \$100 million to almost \$320 million, a 44.2 percent gain. How long exporters can continue to so dramatically increase sales in Mexico is perhaps the major question mark for the future. For the past three quarters, the NAFTA markets have single-handedly buffered the state from a far less rosy performance in the rest of the world. This past quarter the \$140 million gain in exports to the NAFTA markets equals the state's overall net gain in exports. In other words, sales to the rest of the world are essentially flat.

As one would expect, exports to Asia were down for the quarter. In terms of impact, the worst performances were in Japan and Korea. Korea, once one of the state's

top ten markets, saw its Tennessee imports drop by almost half. Exports to Japan were down \$18 million. Steep drops in Hong Kong and Taiwan more than erased a solid gain in China, producing a net export decline of \$21 million in the Chinese economic area. Sales to Southeast Asia were also off over \$10 million, where surprisingly good performances in Malaysia, Indonesia, and the Philippines were wiped out by large losses in Singapore and Thailand.

More worrisome, exports to Europe were up only because of remarkable gains in Ireland and the U.K. Exports to Ireland doubled, and those to Great Britain soared 40 percent, to \$154 million. But the rest of the EU was a lackluster performer. Exporters to Germany, France, and Italy all saw declines.

It was not a particularly good quarter for the state's major export sectors. However a number of smaller sectors picked up the slack. Transportation industry exporters did see a modest rise in sales over the quarter, but, for the first time in many quarters, experienced a loss from the previous quarter. The chemical sector, the first to take a hit in Asia, fell some 13 percent. Two other sectors, primary metals and lumber products, also experienced sizable losses (25 and 31 percent, respectively) in large measure due to lost sales in Asia. On the other hand, the electronics sector posted very strong numbers for the quarter. Its foreign sales of \$264 million were better than a quarter higher from last year. Other strong performers were the by now usual suspects: apparels (up 21.5 percent), the instrument industry (21.5), and the rubber sector (25.0). Exports of agricultural crops continued their rebound, with the quarter's shipments rising to about \$96 million, a 39 percent gain.

Overall Tennessee continues to wait for the other shoe to drop. With most forecasters, not to mention the performance of the rest of the U.S., suggesting continued problems ahead, the state can only hope its strong performance in the Western Hemisphere will tide it over the coming rough stretch. So far, the glass remains half full. While Tennessee's export growth for July and August were essentially zero, this easily beat the five percent drop for the nation as a whole. n

2nd Quarter 1998

NAFTA gains more than offset export losses in Asia.

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2nd Quarter 1998

The state's two biggest sectors posted weak numbers.

Tennessee's Largest Export Sectors

	Exports	Change from Last Year	Change from Last Quarter
Transportation Equipment	\$535,900,289	-3.0%	-4.7%
Chemicals	\$398,264,134	-13.0%	8.7%
Industrial Machinery	\$378,316,521	9.5%	8.8%
Electronics	\$263,812,334	27.9%	14.1%
Medical and Industrial Instruments	\$176,038,854	21.5%	14.6%
Food Products	\$128,450,359	11.4%	13.8%

2nd Quarter 1998

The electronics industry was the quarter's star performer.

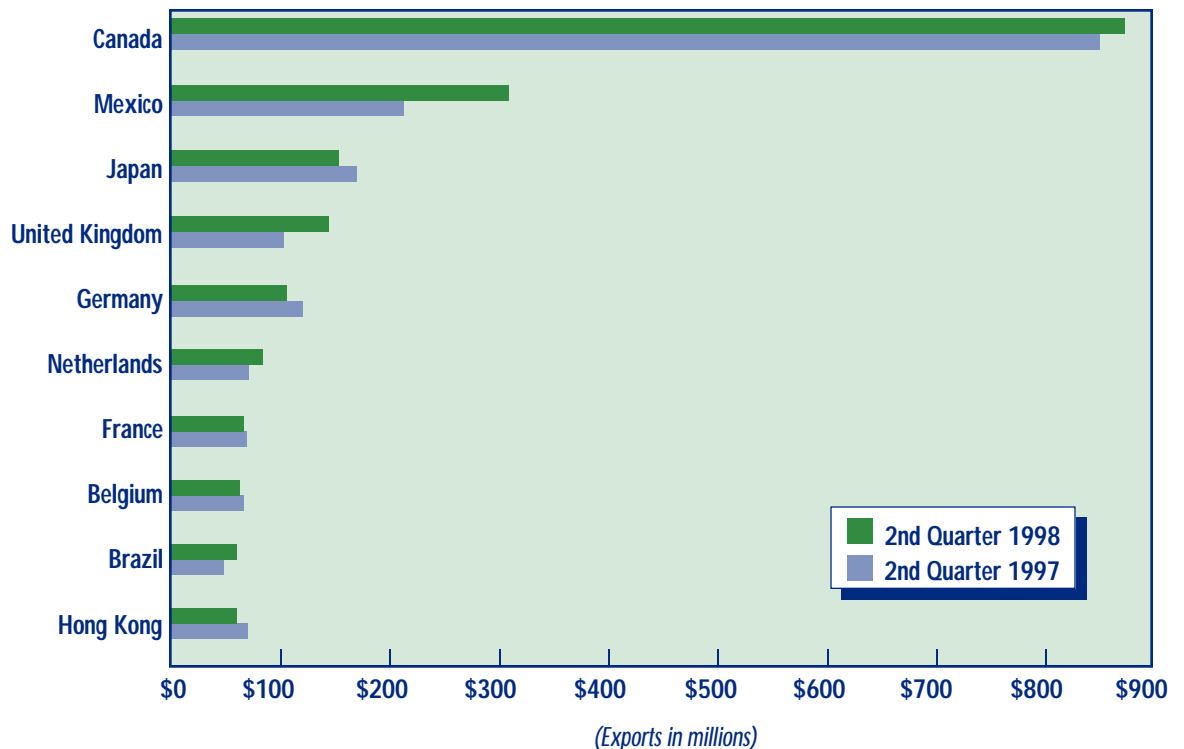
Greatest Growth and Decline in Exports by Industry

(among sectors averaging exports of more than \$1m per quarter)

	Value of Exports	Growth %	Decline %
SECTORS WITH THE GREATEST GROWTH			
Environmental Quality	\$8,478,810	102.6%	
Petroleum and Coal Products	\$2,689,530	97.0%	
Agricultural Crops	\$95,581,435	39.1%	
Fabricated Metals	\$84,965,768	35.8%	
Electronics	\$263,812,334	27.9%	
SECTORS WITH THE GREATEST DECLINE			
Lumber and Wood Products	\$20,038,595		-30.6%
Primary Metals	\$50,911,787		-25.1%
Leather Goods	\$8,618,062		-23.4%
Non-Metallic Minerals	\$4,770,570		-15.3%
Metal Mining	\$6,869,319		-15.3%

Tennessee's Leading Trade Partners

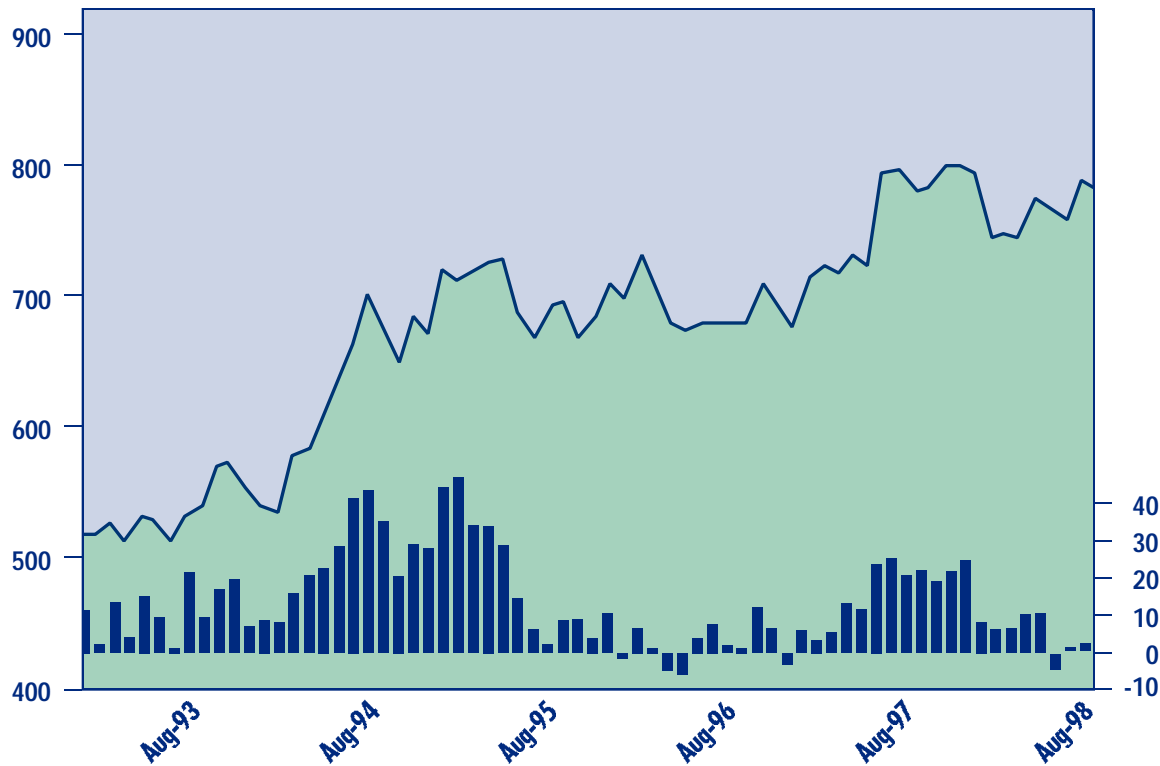
Most of the state's major markets were flat last quarter.



Tennessee Monthly Exports

Exports in \$Million

Nominal Growth Rate (%)



The 1997 boom is over.

2nd Quarter 1998



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Fastest-Changing Export Destinations

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

	Value of Exports	Gain %	Decline %
COUNTRIES WITH THE GREATEST GROWTH			
Russia	\$27,518,426	511.8%	
Turkey	\$29,317,027	158.9%	
Ireland	\$27,570,588	98.4%	
Philippines	\$19,909,051	54.9%	
Venezuela	\$17,781,383	45.3%	
COUNTRIES WITH THE GREATEST DECLINE			
Ghana	\$934,742		-86.0%
Kuwait	\$3,695,369		-49.4%
Saudi Arabia	\$13,353,277		-47.1%
Thailand	\$8,701,782		-45.2%
South Korea	\$32,954,943		-44.6%

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A large, light green world map serves as a background for the main title. The map is centered on the Atlantic Ocean, showing the continents of North America, South America, Europe, Africa, Asia, and Australia.

Tennessee International Trade Database

Check out Global Commerce on-line at
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