A Year of Living Dangerously

How Are Tennessee Exporters Coping With the Asian Flu?

by Steven G. Livingston

The global economy may be more in need of a psychiatrist than of an economist. A severe case of split personality seems to have developed. While the U.S. and Europe continue to hum right along, reporting the best economic news in years, much of the rest of the world is going through its deepest recession in a generation. Unfortunately, The Many Lives of Sybil doesn’t provide much guidance as to how long this will continue. It would be nice to think that the rest of the world’s problems will not affect us, but with today’s interdependent economies, this is probably an unrealistic hope. Now, one year into the Asian flu, we are beginning to get a clearer picture of the impact. The good news is that much of the American economy has seemingly shrugged off the difficulties overseas or has even gained because of the cheaper imports now available. But U.S. manufacturing growth has slowed to a crawl, and U.S. agriculture is down as well. Manufacturing firms actually lost more than a quarter of a million jobs over the year. This is mostly because of a combination of sales lost to depressed foreign markets and sales lost to overseas competitor firms, who can now take advantage of their weakened currencies to undersell U.S. producers throughout the world, including those here at home.

Tennessee, one of the most manufacturing intensive states in the U.S., may thus have particular reason to worry. So how is it doing? A year ago we continued on page 2
took a look at the vulnerability of state exporters to the Asian downturn. Now it’s time to return and see what has happened.

**Tennessee Exports Hold Up Better Than Most**

The news could be a lot worse. Tennessee exporters undeniably have been suffering in this new environment, but, perhaps surprisingly, the state is doing much better than the nation as a whole. A chart of export growth by month (on page 1) tells the story. Nationally, around the first of last year, export growth suddenly and steeply declined. By April, exports were actually below the level of the previous year. Tennessee did not escape this pattern, but its decline in export growth has been much more moderate. The chart ends with the third quarter, but this trend has continued through the rest of 1998.

Why has the state done relatively so well? One reason is that only about four percent of Tennessee’s exports go to the directly affected Asian “flu” victims—Indonesia, Thailand, and Korea—only two-thirds of the national average. A second is that while another 8.5 percent of state exports go to Japan, now in the midst of its own recession, exports there have held up better for Tennessee than for most other American states. Third, and perhaps most important, a surge of exports to Mexico over most of the year was enough to almost offset exporters’ problems in Asia. So there are some silver linings.

Nevertheless, though the state has done relatively well, it has still had to face significant trade losses. Like the rest of the U.S., Tennessee companies have become increasingly reliant on Asian markets. Over the entire 1990s, this region has been the source of the state’s greatest export growth. In the three years before this crisis, state exports had risen 133 percent. Agricultural exports, in particular, have been East Asian dependent. The past few years have seen more than 40 percent of its sales going to that region.

**Who’s Been Hurt?**

Over the first three quarters of last year, the state lost about a tenth of its sales to the region. Exports fell to $678 million for East Asia (excluding China), and to $505 million for Japan. Several industries have taken major hits. Chemicals and electronics are the state’s two largest industry exporters to this region of the world. Both suffered large reverses. In dollar terms, the Tennessee chemical industry has borne the brunt of the Asian flu. Its export losses amount to something over $125 million, close to equaling the losses posted by all the other state manufacturers put together. The electronics industry lost a fifth of its sales to East Asia (just under $90 million, the second biggest drop in dollar terms). In percentage terms, it has been rubber, among the larger industries, that has suffered most. It has seen its exports to Japan fall by 17 percent, and its sales in the rest of East Asia decline by 40 percent. Agricultural crops and industrial machinery are the other two large victims of the Asian flu, each with losses of well over ten million dollars. The transportation sector, on the other hand, has fallen between two stools. The state’s largest export industry shared the pain in most of East Asia, losing a quarter of its exports ($28 million), but countered this by actually increasing its sales in Japan by about $15 million. A net loss, but not nearly as bad as it could have been.

This schizophrenic performance alerts us to a seldom noted fact: a few industries have actually...
been able to increase their sales into this dire market. Both textile and apparel sales to the region are up, probably as part of the integrated production processes that take advantage of East Asia’s reduced manufacturing costs. Processed food exports are also up strongly ($15 million, some twenty percent, mostly because of greatly expanded sales in Hong Kong). In spite of the well known difficulties of many American primary metal industries, Tennessee firms in this sector have also been expanding sales into the region. And another strong performance was registered by the state’s scientific, medical, and industrial instruments sector, which has seen its exports grow by about a tenth ($20 million) across East Asia. So, as with any major economic change, not all sectors have moved in tandem, and there have even been winners, an important point that bears remembering.

The state’s performance is variegated not only by industry, but by country. In some countries (Malaysia, Hong Kong, Singapore) exporters have more or less held their own. Importantly for this state, significant increases in transportation, industrial machinery, and instrument sector exports at least kept sales to Japan roughly steady. Severe export losses have been limited to the three directly affected Asian flu nations, along with Taiwan. All four of these countries posted losses of a fifth or more. The common theme is large losses in chemical and electronics exports. The more developed markets of Taiwan and especially South Korea also proved disastrous for the Tennessee transportation industry. For both markets, these exports have declined by more than half. We might end with the strange case of the Philippines, where exports actually rose by better than a quarter, to $12 million. Here even chemical and electronics exports were up. Unfortunately, the Philippine market, however robust, is, in the East Asian context, but a drop in the bucket.

**Sizing Up the Impact**

Looking across the state, one could argue that of its local economies, Nashville and Knoxville have the most to fear from the drop in Asian exports (see the accompanying chart). But so far, automotive-related exports to Japan, the major tie of the two cities to the Asian economies, have been holding up, and Knoxville’s apparel industry has actually increased its exports to Asia. It is probably the Tri-Cities economy that has actually been hit hardest. Eastman Chemical has reported large export declines, and the lumber and paper industries important to the area have also fared pretty poorly as a result of the Asian flu. Lumber exports, in particular, are off almost $8 million, primarily due to big losses in Japan. (The Tri-Cities export percentages are not reported due to disclosure problems.) Electronics firms in the Memphis area have experienced losses, but Memphis’s primary tie to Asia is as an agricultural broker, and its direct losses are probably limited. Chattanooga and Jackson are not big Asian exporters.

In sum, what has the global downturn cost Tennessee? A full accounting would include not only lost exports, but the mixed blessings of increased imports as well. It would also account for the complex effects of trade in third markets. Most state exporters have faced stiffer competition from East Asian firms throughout the world and have lost exports because of it. However, even if we perform a simple economic impact analysis only of the effects of the global loss in exports over the first three quarters of 1998, we still find that the cost to the Tennessee economy of these foregone exports is not inconsiderable. The state lost a total of $115 million dollars in exports in East Asia over the first nine months of last year. Even if we add back into the

<table>
<thead>
<tr>
<th>Exports to Asia</th>
<th>Japan</th>
<th>S. Korea</th>
<th>Indonesia, Malaysia, and Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>10.81%</td>
<td>4.25%</td>
<td>3.15%</td>
</tr>
<tr>
<td>Tennessee</td>
<td>9.35%</td>
<td>3.44%</td>
<td>2.48%</td>
</tr>
<tr>
<td>Chattanooga</td>
<td>5.98%</td>
<td>1.21%</td>
<td>2.07%</td>
</tr>
<tr>
<td>Jackson</td>
<td>1.27%</td>
<td>0.13%</td>
<td>0.41%</td>
</tr>
<tr>
<td>Knoxville</td>
<td>7.96%</td>
<td>5.25%</td>
<td>2.58%</td>
</tr>
<tr>
<td>Memphis</td>
<td>6.62%</td>
<td>5.18%</td>
<td>4.81%</td>
</tr>
<tr>
<td>Nashville</td>
<td>18.16%</td>
<td>0.95%</td>
<td>0.62%</td>
</tr>
<tr>
<td>Other TN</td>
<td>4.06%</td>
<td>2.31%</td>
<td>0.50%</td>
</tr>
</tbody>
</table>

Not all sectors have moved in tandem, and there have even been winners, an important point worth remembering.
equation the increase in exports to Mexico, Canada, and Europe, and the gains that they have provided to the state economy, we still find that the net slowdown in state exports has cost this state some 760 jobs and more than $21 million in personal income. In other words, even after including all the good news from the rest of the world, the Asian flu still hurts. (A future *Global Commerce* will break down the economic impact of state exports by region, where we can see how costly the Asian crisis would have been if not offset by these other gains.) In a way, these figures illustrate the situation perfectly. They show the real costs involved in the loss of any of the state’s export markets, but they also show that the impact has not been catastrophic. Thanks to a strong showing by some state industries, and the precarious but real survival of the Japanese market, state exporters are, in the main, coping with the Asian flu. Perhaps that session on the couch can be put off for a while.

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**Tennessee Trade-Weighted Dollar Index**

State exporters finally got a break. After a year and a half of relentless gains, the dollar has finally crested. The Tennessee Trade-Weighted Dollar Index fell four percent, to 132.5, during this past quarter. This is its steepest quarterly drop of the past five years. The dollar’s slide was nearly worldwide. Only four of the index’s twenty-two currencies fell against the dollar during the fourth quarter of 1998, those of Brazil, Canada, Great Britain, and Sweden. This, of course, was before Brazil’s sudden devaluation. And the value of the Canadian and British currencies each changed by only about a penny. On the other hand, the dollar weakened across Europe, Asia, and Australia. Sharp rebounds of the Asian flu currencies led the way. Korea, Indonesia, and Thailand all saw their currencies gain better than ten percent against the dollar. The Indonesian rupiah’s gain of more than thirty-one percent was the single biggest currency movement over the quarter. The yen also advanced strongly, rising from about 136 to 116 to the dollar during the period. The European currencies in the index posted gains as well, albeit more modest ones, usually in the neighborhood of three to four percent (excepting, the British, as always!).

This good news for state exporters is tempered by the fact that the index still stands thirty percent higher than it was five years ago. Not only exporters have been hurt by the strong dollar over the past several years. Growing research suggests that its dramatically increased value may also have reduced both profitability and new investment across all U.S. manufacturing firms.

In spite of the sudden collapse of Brazil’s real plan, there is good reason to suspect the dollar will continue to fall in the near future. The largest current account deficit since 1987 almost ensures the greenback will weaken over the months ahead. Given all the other adversity Tennessee exporters have been facing recently, this should produce at least a small sigh of relief.
Tennessee exported $2.55 billion in goods over the third quarter of last year, a gain of a meager 0.6 percent from 1997. This was the poorest quarterly performance in more than two years. Perhaps the best that can be said is that the state continued to outperform the nation, where exports actually declined from a year ago. The East Asian crisis was certainly a big factor. Sales to East Asia dropped by almost fourteen percent. But the problem was global. Exports to South Asia were off two percent, and foreign sales to the Middle Eastern oil exporting states dropped by more than a third. The latter, of course, are suffering from continued low energy prices.

In past quarters the state has been rescued from poor performances elsewhere by strong gains in the Americas, but here too, the third quarter was a disappointment. Latin American markets fluctuated wildly. State exporters posted big drops in Bolivia, Chile, and Brazil that all but eliminated their equally big gains in Argentina, Colombia, and Ecuador. Total exports to the region were thus only up 1.62 percent. Mexico, the site of astronomical export growth in recent quarters, finally returned to earth. Though Tennessee agricultural exports absolutely exploded, more than doubling from a year ago, overall export gains south of the border were much more modest. Third quarter exports to Mexico stood at $274.4 million, a solid, but unspectacular, 5.56 percent increase. Meanwhile, exports to Canada were down for the first quarter in memory ($805.9 million, off 1.3 percent). A nearly $70 million decline in automotive exports was the biggest factor, but there were significant declines in chemical and primary metal sales as well.

Foreign sales to Japan ($177 million) and the European Union ($570 million) each grew a little more than 4.5 percent. The most noteworthy performance in Europe was that of the United Kingdom, where exports grew by just about a fifth from a year ago. The lion’s share of this gain was in the transportation sector. Indeed, except for the U.K., sales to Europe were generally flat. The brightest region by far was Australasia, where exports gained more than sixteen percent to $76.3 million. This region is a surprisingly big market for Tennessee. State exports to Australia and New Zealand are today about sixty percent of the size of all exports to China, Taiwan, and Hong Kong. East Europe also performed well, with exports to Russia, Poland, and the Czech Republic all more than doubling from 1997. We will have to wait to see how Tennessee has fared in this region after the Russian economic collapse of last summer. Finally, Turkey stood out as one of the best markets for the quarter. Sales to Turkey were up better than eighty-five percent, to $261.1 million.

Sectorally, it was a quarter of some very divergent performances. Many of the major export sectors had a very difficult time of it. Foreign sales in the transportation sector were off about a tenth, with losses in Canada and Mexico particularly severe. In the chemical industry, where the decline was pretty much worldwide, exports were off almost seventeen percent. The most stricken sector was the primary metal industry, where exports fell by more than a third. Large market losses in Canada and Latin America have reduced this industry to total quarterly exports of less than fifty million. On the other hand, several sectors did continue to turn in very good performances. Agricultural exports have stayed on the rebound. Strong sales increases were reported not only in Mexico, but in Turkey and parts of Central and South America. Rubber industry exports grew by a third, to $122.6 million, mostly because of growth in Canada, Argentina, and the U.K. Textile and apparel exports also continued to gain, increasing twenty nine and thirty nine percent respectively from a year ago. And both the industrial machinery and the medical, scientific, and industrial instrument sectors saw their sales increase by better than ten percent.

In sum, while there remain a few bright spots, it was generally a difficult quarter for state exporters. We do not expect this to change anytime soon. Anecdotal evidence suggests manufacturing exporters are continuing to have a very rough time selling into what amounts to a near-global recession. Recent events in Brazil are a further argument not to expect a quick turnaround.

The fourth quarter, though, has actually begun with mixed signals. In October, state exporters experienced continued difficulties, posting a three percent drop in exports. But Tennessee exports were surprisingly strong in November, gaining about 4.6 percent. The latter month’s good news, however, is tempered by the fact that most of the gains were limited to agriculture.
The state’s two biggest sectors posted weak numbers.

Agriculture was the quarter’s star performer.

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

### Tennessee’s Largest Export Sectors

<table>
<thead>
<tr>
<th>Industry</th>
<th>Value of Exports (in millions)</th>
<th>Change from Last Year</th>
<th>Change from Last Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation Equipment</td>
<td>$483,635,474</td>
<td>-9.8%</td>
<td>-10.3%</td>
</tr>
<tr>
<td>Chemicals</td>
<td>$364,074,020</td>
<td>-8.6%</td>
<td>-16.6%</td>
</tr>
<tr>
<td>Industrial Machinery</td>
<td>$362,571,973</td>
<td>10.0%</td>
<td>-4.1%</td>
</tr>
<tr>
<td>Electronics</td>
<td>$233,038,056</td>
<td>6.7%</td>
<td>-11.7%</td>
</tr>
<tr>
<td>Industrial and Medical Instruments</td>
<td>$170,746,734</td>
<td>12.9%</td>
<td>-3.0%</td>
</tr>
<tr>
<td>Rubber and Plastics</td>
<td>$122,659,142</td>
<td>33.6%</td>
<td>-0.4%</td>
</tr>
</tbody>
</table>

### Greatest Growth and Decline in Exports by Industry

**SECTORS WITH THE GREATEST GROWTH**

- Agricultural Crops: $104,189,081 (64.0%)
- Environmental Quality: $6,934,349 (43.6%)
- Apparels: $80,053,492 (38.7%)
- Rubber and Plastics: $122,659,142 (33.6%)
- Textiles: $55,394,337 (28.8%)

**SECTORS WITH THE GREATEST DECLINE**

- Fishing, Hunting, Trapping: $880,466 (-82.9%)
- Primary Metals: $47,543,361 (-34.1%)
- Lumber and Wood: $17,983,427 (-23.8%)
- Leather Industry: $7,332,336 (-21.6%)
- Chemicals: $364,074,020 (-16.6%)

### Tennessee’s Leading Trade Partners

**Canada**

**Mexico**

**Japan**

**United Kingdom**

**Germany**

**Netherlands**

**France**

**Hong Kong**

**Australia**

**Brazil**

(Exports in millions)
The 1997 boom is over.

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Fastest-Changing Export Destinations
(among countries averaging more than $2m in sales per quarter)

<table>
<thead>
<tr>
<th>COUNTRIES WITH THE GREATEST GROWTH</th>
<th>Value of Exports</th>
<th>Gain %</th>
<th>Decline %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>$16,109,742</td>
<td>442.5%</td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>$29,928,826</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>$26,137,795</td>
<td>86.4%</td>
<td></td>
</tr>
<tr>
<td>Bahamas</td>
<td>$2,533,921</td>
<td>81.0%</td>
<td></td>
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<tr>
<td>Ecuador</td>
<td>$6,666,670</td>
<td>77.4%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COUNTRIES WITH THE GREATEST DECLINE</th>
<th>Value of Exports</th>
<th>Gain %</th>
<th>Decline %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>$39,754</td>
<td>-99.0%</td>
<td></td>
</tr>
<tr>
<td>Kuwait</td>
<td>$4,060,205</td>
<td>-65.3%</td>
<td></td>
</tr>
<tr>
<td>Lebanon</td>
<td>$1,516,692</td>
<td>-45.2%</td>
<td></td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>$13,252,137</td>
<td>-43.2%</td>
<td></td>
</tr>
<tr>
<td>Jamaica</td>
<td>$2,531,928</td>
<td>-38.5%</td>
<td></td>
</tr>
</tbody>
</table>
Check out Global Commerce on-line at
www.mtsu.edu/~berc/intl/intlmain.html