



# Global Commerce

Tennessee and the International Economy

## TENNESSEE AND THE DOLLAR



### A SUSPENSE STORY

by Steven G. Livingston

The fate of the dollar is quite a suspense story. How far will it fall? What will be the effect? The greenback has lost nearly half of its value against the euro over the past five years, the lion's share of that in just the past two years. This has had a large effect on trade flows. The weak dollar has led to huge gains in American exports—but not, so far, to huge gains in Tennessee exports (trade report, page 5). The connection should be obvious. A weaker currency means lower prices. Lower prices mean greater global competitiveness.

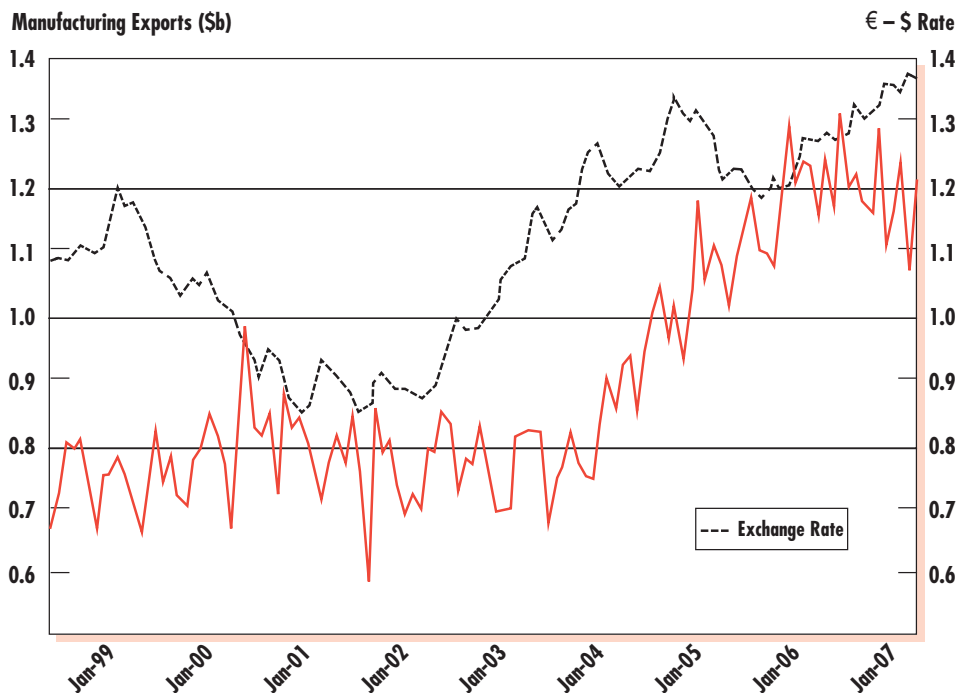
That's theory. Things may be a little more complicated in practice. To remain competitive, foreign firms may willingly reduce their own prices to compensate for their stronger currencies. This, of course, reduces their profits, but it saves their markets. Presumably, however, there is a price below which they cannot go. At that point they must sell at a higher global price and suffer the consequences. The recent explosion of American exports suggests that in at least some markets, and for some goods, this may be starting to occur. If the product itself is priced everywhere in dollars, such as for oil, this too can serve as a buffer for foreign firms. But the oil market shows that there is a point where this buffer also breaks down. Finally, foreign nations may link their curren-

cies to the dollar. This insulates their trade with America from foreign currency pressures. But again, there are costs. This time it is domestic inflation that may be the price of preserving the fixed rate of exchange with the dollar.

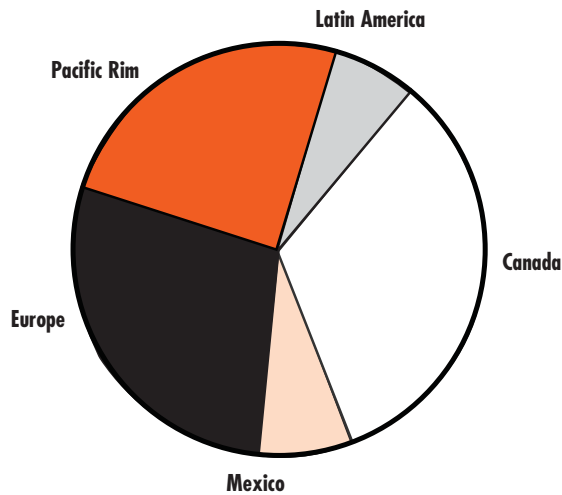
These complications tell us that the impact of changes in the dollar depends upon what is being sold and to whom it is being marketed. Is Tennessee's recent inability to take advantage of the falling dollar in any way related to the specific markets into which it sells? To investigate the impact of specific markets, we often resort to trade-weighted indices of the dollar. Though we could compare the strength of the dollar to some average of all of the world's currencies, this may not reflect the markets in which one actually does business. If the dollar is falling against a currency used neither by competitors nor in a market in which the state trades, exporters may not be helped all that much. So it's better to express the value of the dollar in terms of an average whereby each currency is

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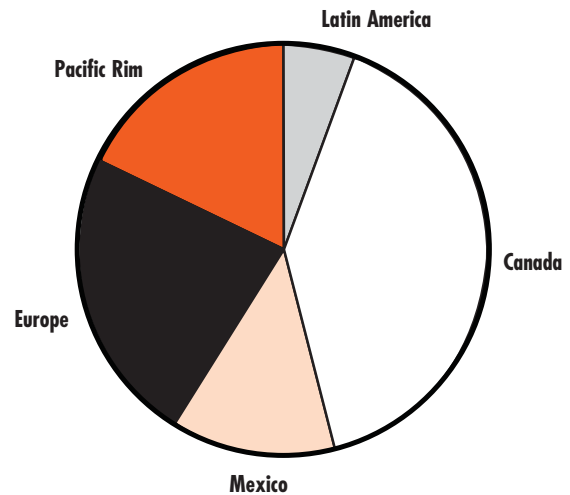
The Euro and Tennessee's Exports



## Tennessee's Changing Global Market



**1990-1992**



**2005-2007**

### THE DOLLAR

*continued from page 1*

#### Weighing Tennessee's Trade

|                      | % Exports | % Index |
|----------------------|-----------|---------|
| Canada               | 32.55%    | 35.17%  |
| Euro Area            | 14.64%    | 15.82%  |
| Mexico               | 10.54%    | 11.39%  |
| China                | 6.14%     | 6.63%   |
| United Kingdom       | 4.06%     | 4.39%   |
| Japan                | 4.02%     | 4.34%   |
| Australia            | 2.27%     | 2.45%   |
| South Korea          | 2.06%     | 2.23%   |
| Singapore            | 2.02%     | 2.18%   |
| United Arab Emirates | 1.75%     | 1.89%   |
| Hong Kong            | 1.58%     | 1.71%   |
| Brazil               | 1.50%     | 1.62%   |
| Saudi Arabia         | 1.49%     | 1.61%   |
| Taiwan               | 1.15%     | 1.24%   |
| Argentina            | 0.86%     | 0.93%   |
| Malaysia             | 0.76%     | 0.82%   |
| Kuwait               | 0.64%     | 0.69%   |
| Switzerland          | 0.63%     | 0.68%   |
| South Africa         | 0.58%     | 0.63%   |
| Sweden               | 0.58%     | 0.63%   |
| Thailand             | 0.58%     | 0.63%   |
| Turkey               | 0.57%     | 0.62%   |
| Indonesia            | 0.54%     | 0.58%   |
| India                | 0.52%     | 0.56%   |
| Venezuela            | 0.52%     | 0.00%   |

weighted by the size of the market that uses that currency. The result is a trade-weighted dollar index. The Federal Reserve, among others, compiles several dollar indices.

A national dollar index may not accurately reflect the situation facing Tennessee exporters, though. This would be the case if a state does not export to the same markets in the same degree as does the nation. And such is the case for Tennessee. This state, for example, trades more intensively with Canada than does the rest of the U.S. For that reason, *Global Commerce* has been reporting a Tennessee dollar-weighted trade index in each issue. In response to the recent changes in the dollar *and* the state's changing trade picture, we are updating that index with this issue.

Using trade data from 2005 to 2007 (and omitting volatile cotton exports), we find that the 25 nations to which the state exports 0.5 percent or more of its exports together account for 92.6 percent of the state's total exports. Twenty-four of those nations are used to compile the state's index. (We do not use Venezuela because President Hugo Chavez is promising to introduce a new currency next year; it thus seems prudent to omit that country from the index for now.) Compared to the last revision of our index, in mid-2003, we have added six new countries (the United Arab Emirates, Kuwait, Switzerland, South Africa, Thailand, and Sweden), and we have dropped the Philippines. Over this period, the state has seen some significant shifts in trade. Unsurprisingly, the largest involve the rise of China (from receiving just under two percent of the state's foreign sales to 6.14 percent today), and perhaps more of a surprise, the fall of Mexico (from 13.17 to 10.54 percent of the state's exports). Japan and the United Kingdom each take about one and a half percent less of Tennessee's exports than they did four years ago.

*continued on page 6*

2nd Quarter 2007

COTTON HAS  
DROPPED FROM THE  
TOP SEVEN.



| Tennessee's Largest Export Sectors |               |                       |                          |
|------------------------------------|---------------|-----------------------|--------------------------|
|                                    | Exports       | Change from Last Year | Change from Last Quarter |
| Transportation Equipment           | \$945,331,819 | -22.5%                | -16.3%                   |
| Computer and Electronic Products   | \$740,582,421 | -12.8%                | -6.5%                    |
| Chemicals                          | \$803,017,889 | 9.3%                  | 2.1%                     |
| Miscellaneous Manufactured Goods   | \$566,347,172 | 14.7%                 | 6.1%                     |
| Nonelectrical Machinery            | \$498,924,059 | 18.0%                 | 13.7%                    |
| Primary Metal Manufacturing        | \$235,545,550 | -6.2%                 | 4.3%                     |
| Fabricated Metal Products          | \$177,543,317 | 18.6%                 | 8.3%                     |

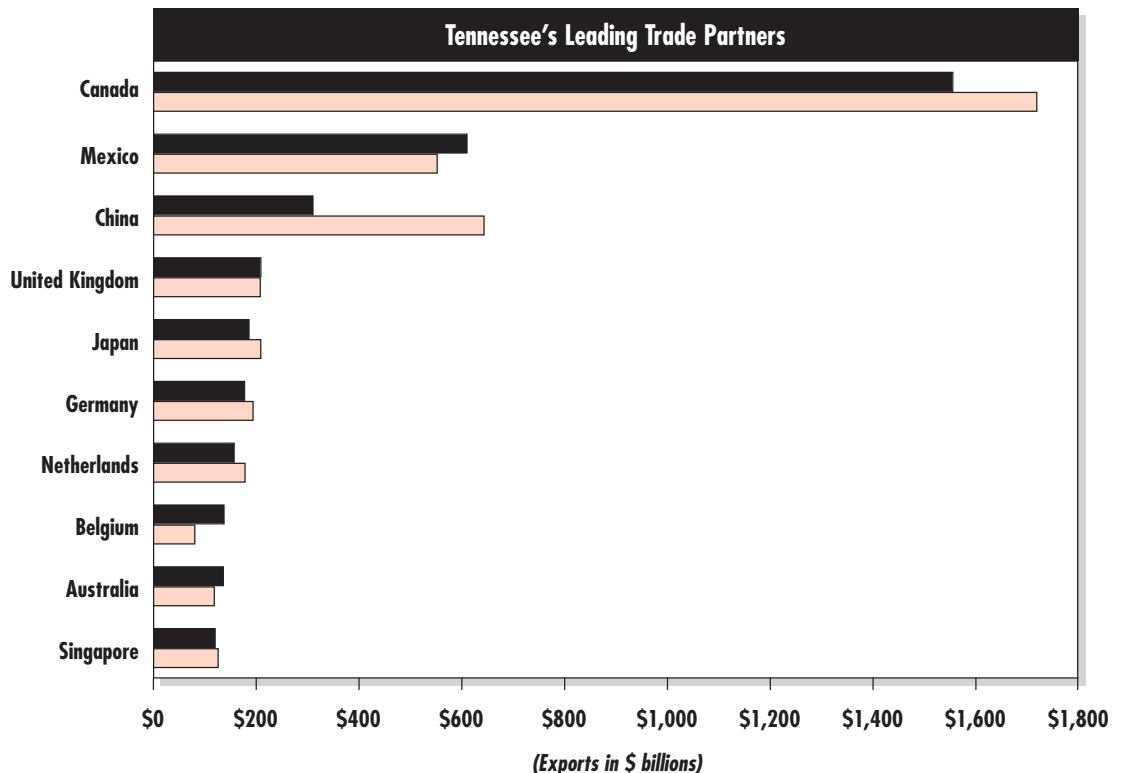
2nd Quarter 2007

| Fastest-Changing Export Destinations       |                  |        |         |
|--|------------------|--------|---------|
|  | Value of Exports | Gain   | Decline |
| <b>COUNTRIES WITH THE GREATEST GROWTH</b>  |                  |        |         |
| Iraq                                       | \$9,313,019      | 276.5% |         |
| Switzerland                                | \$61,832,420     | 202.4% |         |
| Hungary                                    | \$4,346,678      | 134.1% |         |
| Nicaragua                                  | \$4,670,996      | 131.1% |         |
| Peru                                       | \$17,501,067     | 103.2% |         |
| <b>COUNTRIES WITH THE GREATEST DECLINE</b> |                  |        |         |
| Serbia                                     | \$0              |        | 100.0%  |
| Jordan                                     | \$2,149,005      |        | -74.7%  |
| Oman                                       | \$2,310,337      |        | -66.0%  |
| Qatar                                      | \$11,409,408     |        | -64.5%  |
| United Arab Emirates                       | \$39,486,908     |        | -60.8%  |

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



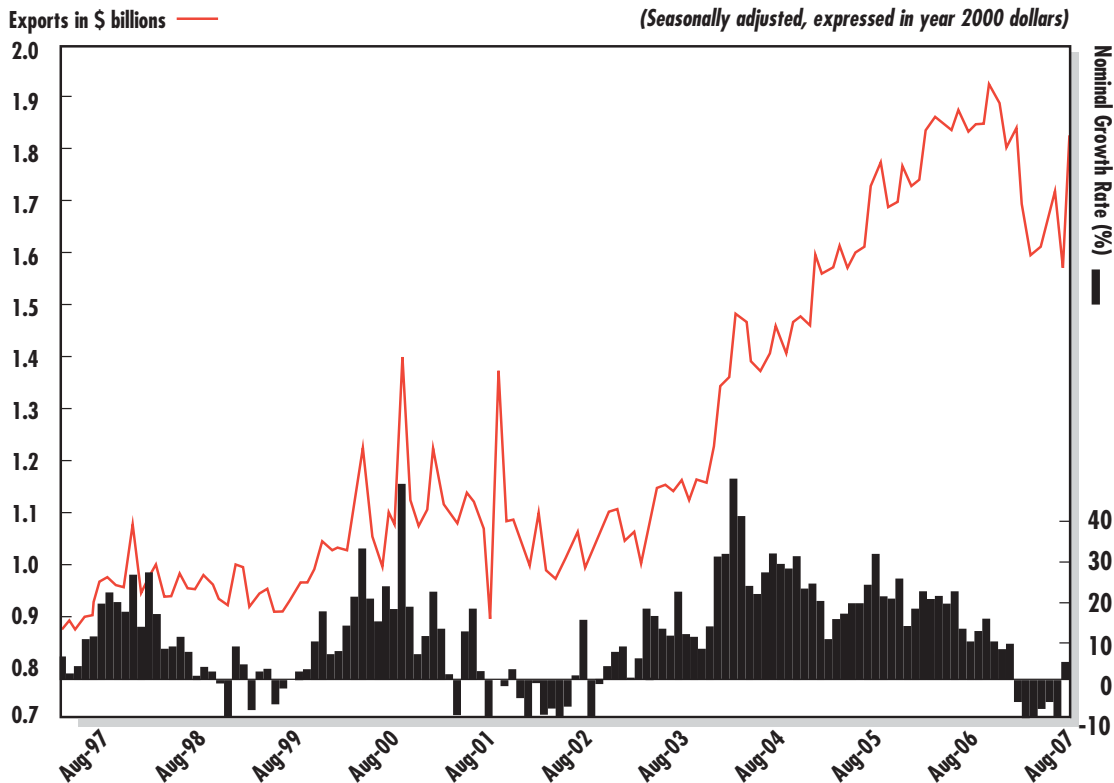
■ 2nd Quarter 2007  
■ 2nd Quarter 2006



IN FIVE OF ITS TOP  
10 MARKETS,  
TENNESSEE POSTED  
LOSSES THIS  
QUARTER.



## Tennessee Monthly Exports

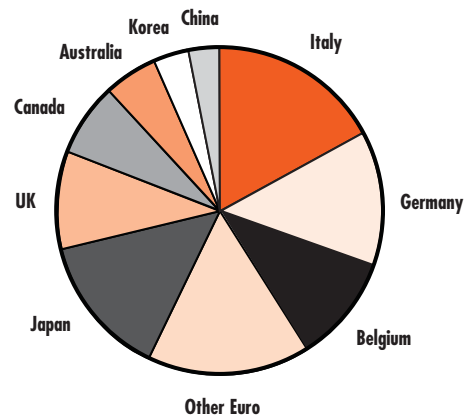


### Greatest Growth and Decline in Exports by Industry, 2nd vs. 1st Quarters, 2007\*

|  | Value of Exports | Growth   | Decline |
|--|------------------|----------|---------|
| <b>SECTORS WITH THE GREATEST GROWTH</b>  |                  |          |         |
| Miscellaneous Gas Turbine Parts          | \$10,822,611     | 1,124.6% |         |
| TV, Digital, and Video Cameras           | \$16,755,176     | 525.1%   |         |
| Miscellaneous Appliances                 | \$11,775,016     | 168.3%   |         |
| Titanium and Titanium Articles           | \$12,984,567     | 167.7%   |         |
| Cotton                                   | \$153,053,584    | 155.8%   |         |
| <b>SECTORS WITH THE GREATEST DECLINE</b> |                  |          |         |
| Helicopters                              | \$3,819,412      |          | -75.6%  |
| Terephthalic Acid and Its Salts          | \$10,145,471     |          | -71.5%  |
| Cars                                     | \$90,012,283     |          | -63.8%  |
| Cell Phones                              | \$6,297,069      |          | -49.1%  |
| Optical Media                            | \$46,065,755     |          | -47.6%  |

\*Among Tennessee's top 100 exported goods

### Tennessee's Medical Instrument Market



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**FIVE YEARS OF REMARKABLY STRONG STATE EXPORT GROWTH HAVE COME TO A SCREECHING HALT.**

In one of the best export environments in modern memory, Tennessee suddenly finds itself lagging behind. While American exports increased more than 10 percent for the quarter, Tennessee exports actually *fell* 7.6 percent, to \$5.255 billion. Five years of remarkably strong state export growth have come to a screeching halt. Tennessee's performance was not just bad; it was among the worst of the U.S. states. Only five suffered a poorer quarter, including the two states that export the least (Hawaii and Wyoming), where one might expect export figures to fluctuate quite a bit. Tennessee joined only 10 other states and the District of Columbia in turning in negative numbers for the quarter.

What is happening? Steady gains in most Tennessee exports are being walloped by large losses in what have been the state's largest export industries. We can start with cotton. Cotton exports continued their dramatic drop, this quarter falling to \$153 million from \$561 a year ago. Tennessee cotton exports are off by \$1 billion through August of this year. Meanwhile, cotton exports from the rest of America are up \$500 million. As a result, while in 2006 this state accounted for 36 percent of national cotton exports, in 2007 it accounts for just 10 percent. As explained in an earlier *Global Commerce*, these large changes do not reflect the activities of Tennessee farmers, who do not grow anywhere near this amount of cotton, but are a result of the activities of cotton brokers in Shelby County. So the silver lining here is that the economic impact of these lost exports on the state is probably limited. As a result of the fall in cotton exports, Tennessee's trade numbers look quite feeble in those markets where cotton has been king: Turkey (down \$10 million), Indonesia (off \$17 million), and, most important, China (a loss of \$330 million).

The automotive trade also fared poorly this quarter. Tennessee's Transportation Equipment sector lost nearly \$300 million in exports from a year ago (down to \$946 million). This number hides certain goods that did well. For example, foreign sales of compression-ignition engines soared (\$3 to \$49 million). Airbags and gear boxes were among the other products that performed well for the quarter. The problem was the big ticket items — cars, SUVs, body parts. State auto parts manufacturers and distributors saw body parts sales drop by almost \$50 million (over \$40 million in Canada and virtually all of the rest in South Korea). SUV and truck sales were also down but not as dramatically—about \$8 million (\$83 million from \$91 a year earlier)—almost certainly due to the temporary closure of the Spring Hill GM plant. SUV exports to Canada fell by more than 40 percent. The drop in Canada was enough to overwhelm some strong gains elsewhere, notably in the Middle East, where SUV sales climbed from essentially nothing to \$24 million.

It was car exports that really made for the poor quarter. Foreign sales of cars from Tennessee dropped from \$347 million in the second quarter of 2006 to only \$90 million in the second quarter of 2007: a decline of nearly three-quarters. The ending of Saturn sales is again a big factor. Car sales to Canada were off by two-thirds (to \$42 million). However, the major dollar loss was in the Middle East and not related to Saturn. Sales of cars to the markets of the Gulf States (mostly Altimas) declined precipitously, from \$194 million to \$16 million. (This same sales drop, incidentally, is also seen in figures from Mississippi, which include Nissan's Canton plant.) If there's any good news here, it is that this decline in Middle East auto sales appears to have ended by August—too late, however, to save the second quarter. The auto sector accounted for the state's unusually poor performance in its largest market, Canada. Total Tennessee exports to Canada fell 9 percent (to \$1.61 billion) for the quarter, the first such drop in recent memory.

The third sector with a difficult second quarter was the computer industry. There were certainly bright spots: foreign sales of printers were up about \$40 million. But exports of computers and computer parts were, in total, down more than \$100 million. The losses were worldwide. Canada and Mexico each purchased \$30 million less of computer equipment than a year ago. The biggest difficulties involved shipments of laptops, which fell from \$209 million to \$154 million this quarter.

Together, computers, automotive products, and cotton combined for a quarterly loss of more than \$800 million—enough to swamp solid growth in most other sectors, where state exports gained 10 percent, roughly the same as the national average. One result is that a new product has risen to the top among the state's exported commodities: miscellaneous medical and surgical instruments. Exports of these instruments grew by more than 50 percent for the second quarter. At \$280 million in sales, this sector's numbers were almost double those of either laptops or cotton, previous holders of the top spot. With its competitors primarily located in countries whose currencies are rising against the dollar, this sector appears perfectly poised to notch additional large gains in the coming quarters.

Overall, it was not a great quarter for Tennessee's exports. Problems continued into the summer. Not until August did state export numbers finally turn positive, with exports up 3.5 percent—not all that impressive, perhaps, but the state's best monthly performance since January. ■

**2nd Quarter's Bottom Five**

|           | Exports (\$mil) | % Loss |
|-----------|-----------------|--------|
| Tennessee | 5,255           | -7.6   |
| Colorado  | 1,869           | -9.4   |
| Vermont   | 832             | -10.2  |
| Wyoming   | 198             | -11.7  |
| Hawaii    | 129             | -48.2  |

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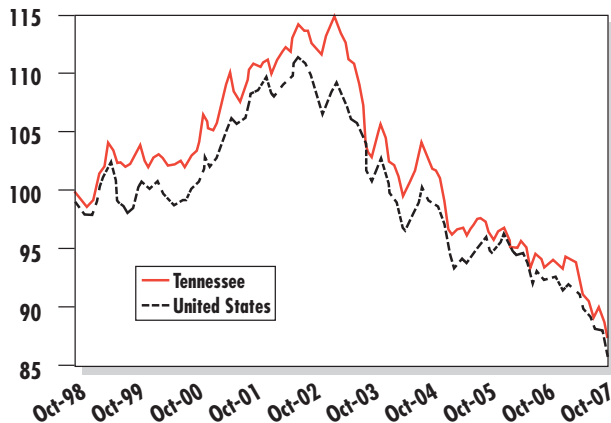


**THE DOLLAR**

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Does our index show that Tennessee faces a different currency environment than do other states? Not dramatically. But perhaps significantly. The graph below

**Tennessee Trade-Weighted Dollar Index**



shows that this state almost always faces a less favorable exchange rate situation than does the U.S. as a whole. At times the gap has been as much as seven or eight percent. This is presumably because of the state’s mix of products and the choice of countries in which to market them. It is hard to quantify what this “extra” dollar strength has meant for Tennessee exports over the past half-dozen years, but in any event this gap appears to have closed over the past several months. Since the gap has been closing, it can’t explain the poor export performance of 2007.

How much difference does the fall of the dollar itself make? Some time ago we investigated this issue and found that state exports definitely respond to changes in the value of the dollar, usually within half a year. A glance at a comparison of Tennessee’s exports against the dollar’s rate of exchange with the euro provides evidence of a continuing connection. The state’s foreign sales of nonagricultural goods have risen in tandem with the falling dollar over the previous three years, and the takeoff of Tennessee exports that began in late 2003 followed the rise of the euro that began earlier that year. The evidence is clear. But at the same time, we can’t help notice that, in 2007, the continuing fall of the dollar has not continued to produce this same result. This is not due to an unfortunate mix of markets. It merely indicates that, at the end of the day, currency fluctuations are but one part of the trade picture. Competitive companies selling good products will always remain the core of export success. ■