

Productivity Growth Drives Connecticut's New Economy

By Dennis Heffley

In our last issue's "Forward Look," Michael Gallis suggested that Connecticut and other New England states could easily miss the New Economy bus if the region fails to strengthen ties with the global network by investing in transportation. Perhaps, but there's little evidence that Connecticut is becoming, in his words, "...a giant cul-de-sac in the 21st century global network."

Surges in labor productivity fuel economic revolutions. Rising output per farm worker allowed rural labor to shift to urban manufacturing without cutting food production. Similarly, manufacturing productivity gains have released labor for services and other nonmanufacturing jobs without sacrificing manufactured goods. What may be truly new about the New Economy is the extent to which information technologies are boosting productivity in many sectors, allowing each to expand output and maintain or even trim product prices. Consumers benefit from these stable prices, particularly if productivity growth also lifts incomes.

If advances in productivity drive economic change, we might get a better sense of how Connecticut and New England are faring in the transition to the New Economy by looking at recent state-level productivity gains. Gross state product (GSP) is a broad measure of economic activity. Real GSP, which adjusts for price changes over time, provides an index of the quantity of goods and services produced—a more appropriate basis for productivity calculations and comparisons. The bar chart below shows, for each state, the percent change in productivity—real GSP per nonfarm worker—from 1982 to 1997.

Connecticut and its northeast neighbors have fared well in the productivity derby. Only New Hampshire, at 50.4%, outpaced Connecticut's 46.2% growth in real GSP per worker since 1982. Four other nearby states (Massachusetts, 41.0%; New Jersey, 38.1%; Rhode Island, 26.5%; and New York, 25.1%) round out the top six. California, often seen as the New Economy frontier, ranked 14th with productivity growth of 21.7%, somewhat above the 16.3% national average but less than half Connecticut's rate of growth.

Even downsizing, of course, can raise productivity if output falls less rapidly than employment, but that doesn't explain the state's success. Connecticut lost jobs in the early 1990s, but over the 1982-1997 period jobs rose almost 13%, from 1.43 to 1.61 million. The state's real GSP, however, grew more than four times faster than jobs—from \$71.8 billion to \$112.6 billion in 1992 dollars, or nearly 57%. This combination of moderate job growth and rapid output growth boosted real GSP per worker from \$50,064 (20th place) in 1982 to \$73,059 (2nd place) in 1997. Connecticut's impressive jump in overall productivity reflects substantial output gains and is not simply the by-product of "fat trimming" or economic retrenchment.

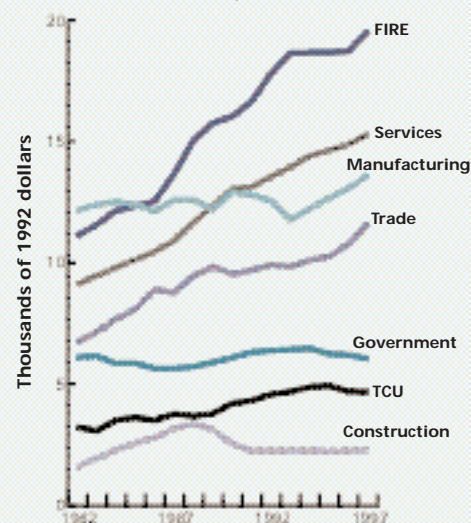
Mixing It Up

The New Economy is not just about productivity growth. Economic transitions also entail shifts in the mix of activity. We can see some of these shifts in the industry composition of Connecticut's output per worker. The line chart to the right shows each industry's contribution to real GSP per worker in each year from 1982 to 1997. An industry's contribution will depend on its own productivity as well as its share of total employment. In

any year, the vertical sum of the curves equals Connecticut's overall GSP per worker, measured in 1992 dollars.

The graph vividly shows the growing influence of nonmanufacturing sectors. Finance, insurance, and real estate (FIRE) as well as services now contribute more to overall output per worker than manufacturing, the leading source in 1982. After a lackluster showing from 1982 to

Changing Sources of Connecticut Productivity, 1982-1997



Sources: Based on data from the U.S. Bureau of Economic Analysis and the U.S. Bureau of Labor Statistics

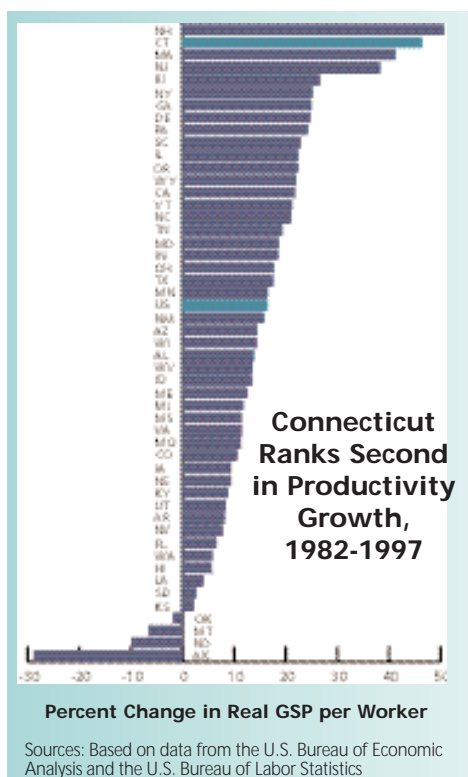
1993, the contribution of manufacturing is again on the rise, but soon may also be overtaken by wholesale and retail trade—another sector benefitting from cheap information. Government's contribution to overall productivity has been the steadiest. The contribution of transportation, communication, and utilities (TCU) grew slowly until the last few years, while that of construction rose through 1988, fell in the late 1980s and early 1990s, and has since been flat.

Connecticut's Edge

So why is Connecticut holding its own in the shift to the New Economy? We need more detailed analysis to know for sure, but several items might be important.

Y *Education*: Connecticut boasts a high level of educational attainment, including a larger percentage of persons aged 25+ with advanced degrees than any other state. Its high school students rank second in the proportion who take SAT exams—79% versus the U.S. average of 42%.

Y *Diversity*: The New Economy moves fast and will move even faster—diversity and flexibility will count. As the second graph shows, Connecticut's economy has become more diverse and less dependent on manufacturing. Even the rapid growth



of FIRE reflects the expansion of banking, investment, and other financial services rather than just the growth of Connecticut's traditional insurance base.

Y *Timing*: Connecticut holds no monopoly on the shift from manufacturing to services and other nonmanufacturing activities, but the process is further along here than in most states. Connecticut and other Northeast states with older and more fully depreciated private and public capital stocks may be better able and more willing to make the necessary adjustments and new investments.

Y *Density*: Seventy percent of Connecticut is classified as rural land, yet only three states—New Jersey, Rhode Island, and Massachusetts—have a higher population density. Cable, internet servers, cell phone networks, and other key communication technologies are cheaper to provide in high-density areas. AOL still seems unable to provide a toll-free local access number in Storrs, but most areas of the state are “well-connected.”

Y *Access*: Gallis' assertion that “Connecticut is difficult to access” is unfounded. Connecticut is uniquely positioned between Boston's complex of educational institutions and high-tech firms and New York, a focal point of international finance and trade. Major interstate highways, a protected coastline with new high speed rail service, and proximity to international and regional airports further enhance access. Access, of course, also brings the congestion that can eventually limit accessibility.

Y *Amenities*: The New Economy is not all work. With more footloose activities and the increased potential for telecommuting, states that offer a favorable environment, high-quality schooling, reliable public services, and ample recreation are increasingly attractive places to locate. High housing costs can deter potential residents, but they also *reflect* access to valued amenities.

Less than ten years ago, Connecticut and its Northeast neighbors shared fears of becoming an economic backwater in a changing economy. Those fears have largely subsided, but the notion remains that we lag behind other states in making the transition to the New Economy. Data on overall productivity growth and the changing sources of the state's economic output indicate just the opposite. Connecticut lacks a nationally recognized center of innovation—a Silicon Valley, Research Triangle, or Route 128—but this absence of a high-tech showplace has not slowed productivity growth in a variety of sectors or prevented the state's active participation in the New Economy.

How New Is The New Economy?

by Edwin L. Caldwell

A favorite aphorism long employed by economists is that a rising tide lifts all boats. This is an unfortunate metaphor to describe the behavior of our type of economy during its upswing phase. It implies that there are no exceptions—all economic entities grow during such a period and they grow by the same amount. If the tide rises by two feet, both rowboats and battleships rise by two feet.

Neither of these propositions has probably ever been true of the economy. It certainly is not true of the rising tide the nation has been experiencing since 1991, as we shall see. This rising tide has provided the longest uninterrupted upswing we have experienced since records have been kept. It only recently exceeded the previous record established in the 1960s. This rising tide has been provided by what has been dubbed “The New Economy.”

The New Economy has as many definitions as it has analysts. The broadest, and most widely accepted, holds that the New Economy is characterized by the dominance in many industries of several new, high technologies and the globalization of economic competition. One of the narrowest, and least widely accepted, characterizations holds that the New Economy will provide steady expansion of output into the indefinite future, low inflation provided by the high productivity of the new technology, and a stock market that continues to reach into the stratosphere, provided that Federal Reserve Chairman Alan Greenspan can be “propped up” well into this millennium, as suggested by presidential aspirant John McCain. We can hardly wait to see this drama unfold.

In the meantime, the rest of this article tackles the more prosaic job of examining some of the things that have happened to Connecticut's economy during the decade of the nineties according to several macro-economic indicators. The idea is to form some judgment about what the New Economy has done for or to us so far. But it's very early in the game, and any judgments are subject to revision.

Output

The chart to the right shows the average yearly growth of the real gross state product (GSP) from 1990 through 1997 for all the major industry classifications of the state. The chart certainly puts aside the proposition that our current rising tide has lifted all boats by the same amount. In fact, it did not lift mining, construction, and government at all. But it does confirm that manufacturing plays a less dominant role in the New Economy than formerly. Data not shown in the chart show that manufacturing contributed 19.9% of the state's real gross product in 1990 and 18.5% in 1997. In the latter year, the sector created \$22 billion of output to rank third behind FIRE at \$31.5 billion and the services at \$24.6 billion. In the years following World War II, manufacturing accounted for about half of the state's gross product. Thus the shift away from manufacturing started long before the New Economy was born.

