State labor productivity

Labor productivity, which measures output per unit of labor input, is one of the most closely watched economic data series. Increases in labor productivity generally lead to increases in wages and living standards, as well as to greater competitiveness in the international economy. At the national level, BLS publishes data on labor productivity (output per hour), but it has no comparable series at the State level.

In the June 2005 issue of *Economic Commentary* (Federal Reserve Bank of Cleveland), economists Paul Bauer and Yoonsoo Lee attempt to measure labor productivity growth (output per worker) in each of the 50 States and the District of Columbia for two periods: 1977–2000 and 2000–04. Focusing on the latter period, the authors look at how changes in output and employment affect labor productivity growth across States. Although collectively the States more than doubled their rate of productivity growth in the latter period (2.3 percent in 2000–04, compared with 1.1 percent in 1977–2000), Bauer and Lee find "wide variation" in the growth rates among the States, ranging from Alaska's –4.5 percent to Delaware's 8.6 percent. In addition, some States increased their productivity rates by combining large employment declines with relatively modest gains in output.

Bauer and Lee examine employment growth and output (gross State product or GSP) growth separately for each of the 50 States. They note that employment increased in only 15 States during the recent recovery period (2000–04), while average employment (all 50 States) actually *declined* by 0.2 percent. Over the same period, output increased by 2.3 percent, on average, with positive GSP growth occurring in all but three States. Bauer and Lee cite the example of Delaware, where productivity increased as a result of strong GSP growth combined with employment losses. About a third of Delaware's GSP is from finance and insurance, where deregulation has led to mergers and relocations that increase the State's output without necessarily adding to its employment. In general, Bauer and Lee find a "negative correlation" between employment growth and labor productivity growth during the 2000–04 period. The authors acknowledge that losing jobs to increase productivity is a difficult process, but they suggest that the increased efficiency and competitiveness of the remaining workers and firms may pave the way for future growth in both employment and output.

It is important to note that Bauer and Lee's labor productivity series for the States differ from the national series in two ways. First, because hours data are not available at the State level, the authors use State employment estimates to measure output per *worker* instead of output per *hour*. Second, the national estimates use gross domestic product (GDP) to measure output, but the comparable gross State product (GSP) data are available only through 2002. Thus, Bauer and Lee combine State personal income data with national GDP data to estimate GSPs for 2003 and 2004. They explain that although output per worker and output per hour series behave differently at times—especially during the turning points in the business cycle—they show similar results in the long run.

Economic role of the city

The traditional view of the economic role of cities has emphasized the role of cities as transportation hubs and the ensuing effect of economies of agglomeration in production. As Gerald A. Carlino puts it in his recent article in the Federal Reserve Bank of Philadelphia's *Business Review*, "To minimize transportation costs, firms needed to be near these hubs, and workers needed to live close to their employers to maintain reasonable commuting distances. Thus, firms and households tended to be highly clustered in cities."

While the presence of an industry in a particular city was often thus the result of accidents of natural resource availability or even simple circumstance, agglomeration economies of localization often made it efficient for other firms to locate in the same city. Such agglomeration effects could include concentrations of specialized labor that could be shared by all producers in an area. Carlino's examples include lighting technicians and set designers in New York and Los Angeles, cities known for their concentrations of entertainment industry enterprises.

Another traditional agglomeration effect comes from the sheer size, or urbanization, of an area. For some specialized firms, only a very large city can provide them a large enough customer base. Here Carlino uses the example of professional sports as he cites data indicating that New York's nearly 20 million in population supports nine teams while Jacksonville's 1 million support only one.

Carlino's main point, however, is that even with the advances in transportation and communication technology that have made location less important over more and more varied sectors of today's production economy, there is still a place for cities as agglomerators of consumption. In this view, large cities attract large numbers of generally high-knowledge high-income people who wish to partake of the wider variety of better quality "luxury" services that a bigger city can offer: the aforementioned sports teams, gourmet dining, art, culture, and the general excitement of a major city. □