Florida TaxWatch Center for Competitive Florida

ECONOMIC COMMENTARY: A monthly look at Florida's Economy

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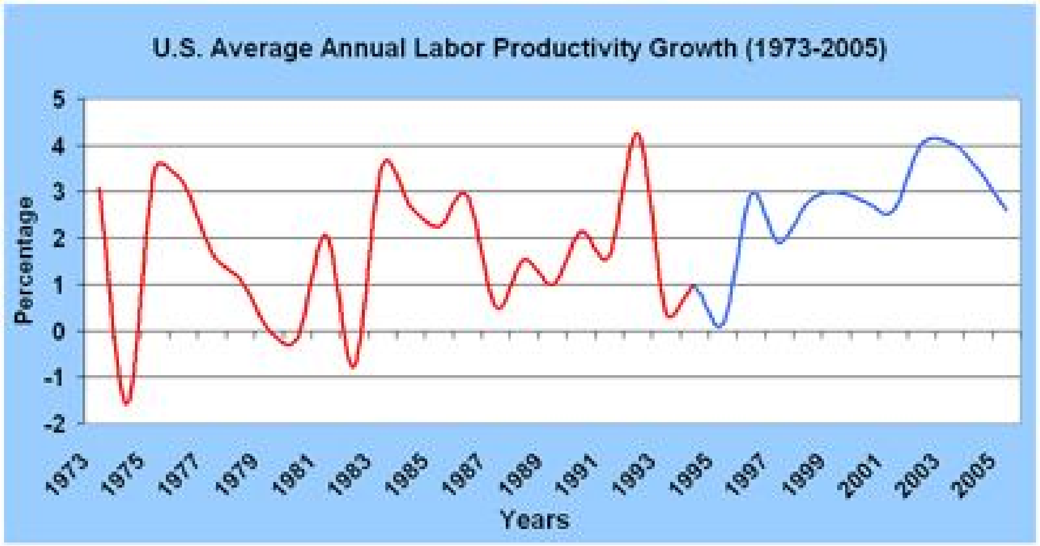
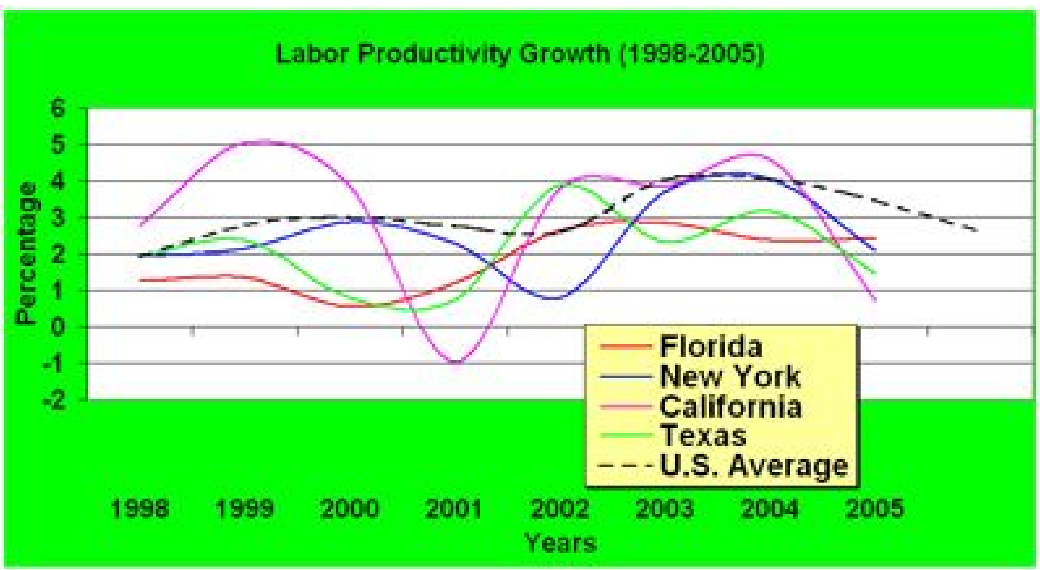
Rising Labor Productivity Bodes Well for Florida's Living Standards and Competitiveness



U.S. Average Annual Labor Productivity Growth (1973-2005)

At the end of the day we earn what we produce. So, in order to earn more we must produce more. This simple statement reveals why productivity growth is so important to economists and policymakers, and should be of interest to all of us.

While some individuals may earn more (or less) than what they produce, for a society as a whole this cannot be the case. The size of the economic pie and the amount by which it is expanding are determined by productivity growth. Over time labor productivity growth ultimately drives gains in wages, incomes, and living standards. For a state such as Florida, labor productivity growth is closely tied to and provides a measure of a state's competitiveness.



Labor Productivity Growth (1998-2005)

Beginning in the mid-1990s the trend (long term) growth rate of labor productivity in the U.S. started to sharply accelerate (see first chart at left). Between 1995 and 2005 the compound annual growth rate in labor productivity was 2.76 percent. This was in stark contrast to the twenty year period from 1973 to 1994 when labor productivity growth was unusually weak, with a compound annual growth rate of only 1.58 percent. To put these labor productivity growth estimates into a clearer perspective, at the recent annual growth rate of 2.76 percent it will take only about 27 years for the typical Floridian's 2005 income of roughly $33,500 to double in real terms to about $67,000. At the prior, slower growth rate of 1.58 percent it would take some 43 years before a Floridian's real income could double!

Although it took some time before economists fully recognized the robust acceleration in labor productivity growth, it is now widely acknowledged as the defining economic event of the past decade. Researchers have identified two primary causes for the jump in trend productivity growth. The first cause was technological innovations in semiconductor manufacturing that increased the rate of decline in semiconductor prices. More rapid declines in semiconductor prices, in turn, translated into lower prices for information and communications technology equipment. The second cause for the acceleration in productivity growth was that falling prices for information and communications technology equipment induced a surge in capital spending among businesses, causing them to "make everything digital" and to reorganize their business practices in the process. (An excellent discussion of the acceleration in national productivity growth may be found in Richard G. Anderson and Kevin L. Kliesen, "The 1990s Acceleration in Labor Productivity: Causes and Measurement." *Review, Federal Reserve Bank of St. Louis,* Volume 88, Number 3, May/June, 2006.)

For Florida's competitiveness what may be most significant is the research indicating that the productivity acceleration since 1995 has come not from its manufacturing sector, but largely from the economy's services sector. Nationally, the services sector has accounted for approximately 73 percent of labor productivity growth since 1995. As Florida is primarily a services producing state, with about 70 percent of the state's 2005 Gross State Product of $638 billion accounted for by services industries, a sustained improvement in labor productivity in services industries will boost incomes, living standards, and competitiveness throughout Florida.

At the national level, labor productivity is measured as output per hour – that is the ratio of Real Gross Domestic Product from the private non-farm business sector to the number of hours worked. Growth in labor productivity is simply the difference between the percentage change in output and the percentage change in the number of hours worked.

Recently, economists at the Federal Reserve Bank of Cleveland have developed measures of productivity growth for each state. (Paul W. Bauer and Yoonsoo Lee. "Estimating GSP and Labor Productivity by State." *Policy Discussion Papers, Federal Reserve Bank of Cleveland, Number 16, March, 2006.*) Their measures are preliminary and experimental, and differ somewhat from those used at the national level in that data on the number of hours worked are not available for states. Instead they use data on the number of workers. At the state level labor productivity is therefore measured as the ratio of Real Gross State Product (GSP) to the number of workers, and the all important growth in labor productivity is simply the difference between the annual percentage change in Real GSP and the annual percentage change in employment.

The Cleveland Federal Reserve economists have measured annual average labor productivity growth (the difference between the percentage changes in real Gross State Product and employment) for each state for two time periods: first, from 1977 to 2000; and second from 2000 to 2004. Although these time periods do not exactly correspond to the national periods of weak (1973-1995) and strong (1995-2005) productivity growth noted above, they are revealing in a number of respects.

In the 1977 to 2000 time frame, annual labor productivity growth in states averaged 1.10 percent with wide variation across states - from a high of about 2.80 percent for Connecticut to a low of -0.40 percent for Alaska. Florida's labor productivity growth was right at the average for all states at 1.10 percent per year and ranked it 26th among the 50 states. However, Florida's labor productivity growth rate trailed other large states such as New York (1.90%) and California (1.80%) and was roughly the same as Texas (1.10%).

From 2000 to 2004 annual labor productivity growth in states soared to an average of 2.30 percent (see second chart above). Again, there was wide variation across states from Delaware's high of 8.60 percent to Alaska's low of -4.50 percent. Florida's labor productivity growth was at the national average of 2.30 percent. During this period however, Florida's labor productivity growth has exceeded other large states. California and Texas have recorded labor productivity growth of only approximately 1.00 percent per year, while labor productivity growth in New York has been close to zero. Florida’s recent labor productivity growth is even more impressive when put in the following context:

- Florida’s real GSP grew about 3.70 percent per year from 2000-2004, including the national recession of 2001-2002. Employment growth averaged about 1.40 percent per year, including 2002 and 2003 when they was virtually no job growth in the rest of the nation. The difference between the average real GSP growth of 3.70 percent and average employment growth of 1.40 percent represents Florida’s productivity growth of 2.30 percent.
- Florida’s labor productivity increased during the 2002 national economic recession. Normally, labor productivity plunges in recessions.
- Florida has been the only state that has managed to achieve such a sharp increase in labor productivity by simultaneously and robustly increasing the growth of its economy and adding jobs! Typically, labor productivity accelerates when output rises faster than employment. For example, states such as Michigan and Delaware achieved sizable productivity increases by shedding jobs faster than their economies expanded. States such as Nevada experienced rapid growth in employment but a lesser growth in real GSP so its labor productivity growth was mild compared to Florida’s.

The national acceleration in labor productivity growth, led by stronger productivity growth in the services sector, bodes well for living standards and the competitiveness of the U.S. This trend, should it continue, bodes especially well for Florida’s standard of living and competitiveness owing to its large services sector. Of course, productivity increases will vary among Florida’s many and diverse services industries and will be affected by a number of factors, including national and state economic policies.

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