

National Economic Trends



What Determines Long-Run Growth?

In the first quarter of 1997, real gross domestic product (GDP) grew at a surprising 4.9 percent annual rate. The general consensus among economists is that this is not a sustainable rate. So how fast *can* the economy grow?

The level of output of an economy is determined by the level of inputs (land, labor and capital) used and the production methods used to convert the inputs into goods and services. Output can only be increased through additional inputs or more efficient use of available inputs. How fast we can increase inputs is limited, however: Land is essentially fixed. Population growth and participation rates determine the size of the labor force.

In less-developed economies, a large fraction of inputs are underutilized and the level of capital is usually low. These economies can grow rapidly by increasing inputs and/or by increasing production efficiency—for example, by moving toward state-of-the-art technology and raising the level of education. A developed economy like the United States, starting from a higher level of input use and efficiency, has less margin for high rates of growth. Innovation and improvements in existing technology are the keys to increased growth rates.

The conventional wisdom is that the potential growth rate of the U.S. economy is between 2.0 and 2.5 percent annually. This range reflects a projected growth in the labor force of about 1 percent and a trend growth of 1.0 to 1.5 percent in labor productivity (output per hour), which captures capital accumulation and technological improvement.

The chart shows the historical index of business labor productivity and the labor force in logarithms, so that the slopes of these graphs are the growth rates. Both variables show a distinct reduction in

slope at different points. Average growth in business productivity slowed from 3.3 percent annually before 1973 to 1.2 percent annually after 1980. The growth in the labor force slowed from 1.6 percent annually up to 1973 to about 1.4 percent annually since 1980, after the baby boomers had entered the workforce. Correspondingly, GDP slowed from an average annual growth rate of 3.9 percent between 1948 and 1973 to an average annual rate of 2.6 percent between 1980 and 1996, primarily reflected in the slowdown in labor productivity growth. (Hours worked grew more slowly than the labor force during the pre-1973 period, reflecting shorter work weeks.)

If recent increases in investment in new technology can foster trend productivity gains comparable to the pre-1973 period, then the United States can look forward to a rise in the potential growth rate of the economy, but sustained growth at the 4.9 percent rate seen in the first quarter of 1997 is unrealistic. In the final analysis, the keys to long-run economic growth are the *microeconomic* incentives that induce individuals to work and firms to invest in production technology, within the limits imposed by demographics and the rate of technological advances.

—Donald S. Allen

