Overall Behavior of the Economy

Now that we know some basic concepts such as economic growth, inflation, and unemployment, the question arises, why do they behave the way they do? Why is economic growth strong during some periods but weak or negative in others? There are several ways to examine this, but we'll consider the different behaviors of the economy in the short run and the long run.

Long-Run Behavior of Economic Growth

Though economies may experience upturns and downturns, they tend to have an underlying trend, reflecting long-term economic growth. Since the trend lasts longer than temporary fluctuations, it has more of an impact and thus most economists typically are more concerned with long-run economic growth than short-run growth. In the long run, economic growth is primarily driven by productivity and the factors that determine it. Labor productivity is output per hour of work (not just output). If this is multiplied by the number of hours worked, one obtains total output or GDP. Potential GDP (sometimes referred to as full-employment GDP), is used to estimate the long-run level of GDP.

Given what we just considered, potential GDP is the number of hours worked when labor is fully employed (i.e., the unemployment rate is at NAIRU) multiplied by the trend level of productivity. One point needs to be made particularly clear. Potential GDP involves employees working a normal work week and no cyclical unemployment. However, potential GDP is not the maximum level of GDP. When the economy is very strong, many employees will work overtime and some workers who are normally structurally unemployed may be hired. Therefore, GDP can exceed its potential. Now let's return to the long-run behavior of the economy. Long-run economic growth (percent change in potential GDP) can be estimated by the average percent change in the labor force (hours worked) plus the average growth rate of labor productivity. For example, if the labor force and hours worked are expected to increase by 1% per year and productivity is expected to increase by 2% per year, long-run economic growth should be about 3% per year. The economy may temporarily grow faster or slower than this rate, but this rate reflects the trend growth rate of the economy.

The following charts compare the growth rate of GDP (red line) to the growth rate of real potential GDP (blue line) since 1947. You'll notice that potential GDP grows at a relatively steady rate while GDP sometimes grows more slowly while other times grows more quickly, but always fluctuates around its potential. The economy has yet to recover from the effects of the financial crisis of 2008 as evidenced by GDP remaining below its potential. Unfortunately, that's what happens following financial crises (click here).
As can be seen in the following chart, though growth in potential GDP (blue line) is more stable than growth in GDP (red line), it still changes over time. Most economists agree that potential GDP grew more quickly in the late 1990s, but the Great Recession is expected to have a detrimental effect on long-run economic growth. How much of a negative effect will it have and for how long is still subject to legitimate debate. As can be seen in the chart, recessions normally don't have a direct effect on long-term economic growth, but just represent short-term downturns.
Financial Panics vs. Recessions

By almost any measure, the Great Recession was the most severe economic downturn since the Great Depression. What made the recession of 2007-2009 different from any recession since WW2 was that it was the result of a financial panic or crisis, which tend to result in deeper and longer downturns than other recessions. Click here (yes, click here! This is part of the required readings) for a more detailed look at how financial crises differ from recessions.

Role of Productivity

What determines the rate of increase in productivity? Productivity can be affected by many factors, but a few stand out. The quantity and quality of physical capital (structures and equipment) both play a significant role. An increase in the amount of physical is called investment. If workers have access to more capital, they can produce more in a given amount of time (become more productive). In addition, if the quality of the capital that workers have access to improves (technology improves), workers can also become more productive. It's not just physical capital that affects productivity, human capital is also a key element in determining labor productivity. Human capital arises from the quality of workers including their education, skills and health. Skilled workers can make use of the capital to enhance their productivity. Educated workers can improve their skills more readily, solve problems, etc., thus resulting in higher productivity. Other factors that affect productivity include the incentive structure and infrastructure. Companies must have an incentive to invest in new capital and technology to achieve its benefits. The primary incentive is the profits earned on investment. Thus factors that adversely affect the return on investment lead to less productivity and slower long-run economic growth over time. Similarly, workers and potential workers must recognize benefits from improving their human capital. Policies that enhance human capital lead to more long-run growth while those that reduce the benefits from increased human capital reduce long-run economic growth. Infrastructure, for example transportation and communication, also enable increases in productivity as it improves the efficiency of production.
Do workers benefit from higher productivity? As the chart below indicates, compensation per hour tends to follow productivity over time. Compensation includes wages and salaries plus fringe benefits while, in this case, productivity is measured as nonfarm business output per hour.

When unemployment rises above NAIRU, growth in compensation tends to lag productivity growth while when unemployment is relatively low, compensation tends to grow more quickly than productivity.

Though unemployment rises and falls, it tends to operate at its NAIRU in the long run and thus the economy operates at full employment. As discussed later, deviations from this rate tend to be short-lived. That is why sometimes potential GDP is referred to as full-employment GDP.

STOP AND THINK: Why do economists love productivity? What are the benefits of increased productivity to the economy as a whole and individual workers in particular? Why do most economists normally give priority to factors affecting the long-term behavior of the economy (see charts above)?

Next: Short-run Behavior of the Economy