

Outline for lecture 9

ECON 1a, Spring 2008, Warren Gibson

GDP Deflator (Text chapter 10)

- Use of GDP to compare economic well-being between two different countries at one time:
 - Must convert currencies.
 - Must convert to “per capita” figures (divide by population) for meaningful comparison.
- Use of GDP to compare economic well-being at two different times in the same country.
 - Raw numbers are deceiving because the monetary unit (dollars) may have lost purchasing power over time. This is what I call “price inflation.” The primary cause of price inflation is inflation of the money supply. (Mankiw uses “inflation” to mean “price inflation.”)
 - This is like trying to compare length measurements in different times, when the measuring stick has shrunk.
 - Some attempt is needed to compensate for the declining purchasing power so we can distinguish how much economic growth is real and how much is due to price inflation.
 - There are several ways to estimate price inflation. The first and the simplest is the GDP deflator.
- How the GDP deflator is calculated (hypothetical example p. 212).
 - Calculate nominal GDP for each year of interest by multiplying the number of items sold by their prices and adding. The results are called *nominal GDP*.
 - Choose a base year (one of the years for which you have calculated nominal GDP).
 - Recalculate the GDP for the other years using the prices for the base year.

- Calculate the GDP deflator for each year by dividing nominal by real GDP and multiplying by 100. GDP for the base year will always be 100. The figure will usually be higher in later years because we almost always have price inflation, not price deflation.
- Quarterly reports of GDP growth.
 - Real GDP is reported quarterly as annualized growth rates. The rise in GDP for a quarter (3 months) is computed as a percentage and then annualized (multiplied by 4).
 - For the second quarter of 2008, real GDP growth was first reported as 3.3%, annualized. Later, when more accurate information became available, this figure was revised downward to 2.8%. This is not very good, not very bad.
 - A recession is often defined as two consecutive quarters of *declining* real GDP, i.e., a negative growth rate. The rate for the fourth quarter of 2007 was slightly negative. The last recession was a mild one, in 2001. There was also one in 1991.
- Problems in calculating GDP.
 - There are vast numbers of different goods and services in the economy.
 - New goods come into being and old ones go away.
 - Quality changes. The BLS attempts to adjust prices to reflect quality changes (sidebar p. 230-231). These are called “hedonic adjustments.”