Econ 522, 01/23/2018

Measuring the Macroeconomy, Part 2

Measures of Price Level

- *CPI*

- *Deflators*

- Price level measures such as the CPI are examples of index numbers.

The Inflation Rate

- Inflation is the rate of change in the price level.

- To compute:

  - Select a measure of price level and two points in time.

  - The rate of change in the price level between those two points in time is the inflation rate.

- Don't confuse the price level with inflation!

Calculating Growth Rates

- Inflation is our first example of calculating growth rates. Inflation is the growth rate of price level.

- We will use growth rates throughout the semester. It's worthwhile to take some time now to make sure you understand how to calculate and interpret growth rates.

Index Numbers & Measuring Price Level

- Laspeyres Index: a measure of price level based on a fixed basket of goods. Example: CPI.

  - Weighted average of prices, where the weight on each price reflects that good's relative importance in the CPI basket. Weights remain fixed over time.

  - Tend to overstate increases in the cost of living. Complicated by substitution bias, introduction of new goods, and unmeasured changes in quality.

- Paasche Index: a measure of price level based on a changing basket of goods.

  - Weighted average of prices, where the weight on each price reflects that good's relative importance in GDP. Weights change over time.

  - Tend to understate increases in cost of living.

- Fisher (Chain-Weighted) Index: an average of the percent change of the other index types.

Relationship to Calculating GDP

- The BEA has used chain-weighting to calculate GDP since 1996.

- Chain weighted GDP in 2015 uses prices from both 2014 and 2015. Chain weighted GDP in 2016 uses prices from both 2015 and 2016.

Thinking About GDP Moving Forward

- Not going to be concerned with index number and practical measurement types of issues. Important to understand and be aware of when thinking about data.

- In considering theoretical models, we will focus on the underlying concepts and treat them as if they were perfectly measured.

Components of GDP

- Consumption

- Investment

- Government Purchases

- Net Exports

Unemployment

* Official U.S. unemployment statistics are calculated by the BLS using precise definitions.

* Reference Population: adult civilian non-institutionalized population. In classifying individuals as employed, unemployed, or not in the labor force only people in the reference population are considered.

* Employed: people who have worked in the last week, or who have a job but were temporarily absent

- Unemployed: people who are not employed, and who are available for and actively seeking employment

- Labor Force: people who are employed + people who are unemployed

- Not in the Labor Force: reference population - labor force