Discussion Handout #3 Econ 102 Prof. Eudey TA: John Stromme UW Madison, Fall 2016 Date: 09/22/16

## Goals for today

- Explore topics related to Unemployment (measurement, calculations, types, and dynamics)
- Understand CPI vs PCE measures of prices.

## Vocabulary

- Frictional Unemployment
- Structural Unemployment
- Cyclical Unemployment
- Consumer Price Index (CPI)
- Personal Consumption Expenditures (PCE)
- Cost of Living Adjustments (COLA)

## Problems

- 1. Measurement of Labor Force Data:
  - (a) How is employment data collected, where does it come from?
  - (b) How is unemployment data collected, where does it come from?
  - (c) What are 4 reasons why employment and unemployment data may be distorted, due to the way it is collected?
- 2. Make a "tree" diagram and explain how the following are calculated as a portion of the total US population:
  - (a) Labor Force
  - (b) Not in Labor Force
  - (c) Employed
  - (d) Unemployed
- 3. What is the formula for the unemployment rate?
- 4. (True/False) The only reason for an increase in the unemployment rate is because people lose their job.
- 5. Is the unemployment rate ever 0%? Why or why not? Is this a bad thing?
- 6. What do economists call "Full Employment"?

- 7. CPI vs PCE measures of prices:
  - (a) Write out the formulas for the CPI and PCE deflators.
  - (b) What is the important distinction between these two measures?
  - (c) Which one is more similar to chain-weighted GDP? Traditional real GDP?
  - (d) You are negotiating with a new employer for COLA in your contract. Should you ask them to use the CPI or PCE deflator when making the COLA?
  - (e) Why does the government continue to use CPI?
- 8. You are a lender who is offering a mortgage with a 3% interest rate for a homebuyer. At this point inflation is 1%:
  - (a) What is your approximate real rate of return?
  - (b) If the inflation rate increases, is this a good or a bad thing for you as a lender? How might you set up the mortgage contract to avoid distortions due to changes in inflation?

## For Discussion:

- 1. Many economists think that all cyclical unemployment is frictional what do you think? Is this reasonable?
- 2. The labor force participation rate has dropped dramatically since 2000. Some people argue that workers are getting discouraged (i.e. moving from unemployed to out of the labor force). Do you think this is occuring? What else might be causing labor force participation to fall?
- 3. Does it make sense for states to have different minimum wages? What about cities? Discuss in terms of COLA.