

Chapter 5, Inflation and Unemployment

I. Introduction: The Macroeconomy

- A. GNP/GDP, National Income, Disposable Income, Per Capita Income
- B. Growth, Recession, Depression, Expansion
- C. Employment, Unemployment, Unemployment rate
- D. Inflation, CPI, PPI
- E. Interest rates: Prime, Mortgage, T-Bill, Federal Funds; Rates of Return (ROR)
- F. Trade Balance: Imports, Exports, Exchange Rates

II. Inflation

A. The Inflation Rate

1. Price index: an aggregate, weighted average of a set of prices. The aggregation is across all items to be considered. The weighting is according to “importance”.
 - a. Consumer Price Index (CPI): Aggregation across all items that a typical household would normally consume, weighted by share of expenditures in a typical budget.
 - b. Producer Price Index (PPI): Similar to above, except for firms and their costs of production (that is, we use resource/inputs prices).
 - c. The GDP Deflator (uses total value of economic activity...)
 - d. Dow Jones Index uses stock values for 30 large companies.
 - e. Your semester GPA is an index. If you had 2 A’s, 2 B’s and 1 C in five 3-hour courses, 40% of your grade is A, 40% of your grade is B, and 20% is C, so your GPA is calculated as: $.4*4.0 + .4*3.0 + .2*2.0 = 1.6 + 1.2 + 0.4 = 3.2$
2. Calculation of the CPI
 - a. Determine a “base year” (a standard for comparison) and calculate the total dollar expenditure for a “basket of goods and services” for that year.
 - b. For the current year, do the same (“buy” the same market basket).
 - c. Divide current year by base year and multiply by 100.
 - 1) Note that the value for the CPI in the base year is 100.
 - 2) U.S. CPI currently uses 1982-1984 (average) as the base year (p 117)
3. Calculating percent changes in the CPI give us the inflation rate
 - a. Pick a “common” date for each year, typically December 31 (or mid-year)
 - b. Inflation in 2000 = $[(\text{CPI}_{2000} - \text{CPI}_{1999}) / \text{CPI}_{1999}] * 100$
 - c. Inflation in 1990s = $[(\text{CPI}_{1999} - \text{CPI}_{1989}) / \text{CPI}_{1989}] * 100$

B. Inaccuracy of the Inflation Rate

1. Changes in the market basket
 - a. Tastes change....!
 - b. The substitution bias (substitute away from high-price goods)
 - c. For (c), use a “chain-weighted” price index (disregard for our class)
2. Changes in quality
3. Changes in outlets (how goods and services are sold / delivered)

C. Using the inflation rate

1. Inflation and real incomes: Is your income keeping up with inflation?
2. Prices (or incomes) then and now.... “Why I remember when....”!!

- D. The Effects of Inflation
 - 1. Redistribution
 - 2. Uncertainty: Inefficiency and Risk Aversion
 - 3. Menu Costs
 - 4. International Effects
- E. Types of Inflation
 - 1. Cost-push
 - 2. Demand pull

III. Unemployment

- A. The Unemployment Rate
 - 1. Calculated as $(\# \text{ Unemployed} / \# \text{ in Civilian Labor Force}) * 100$
 - 2. Who is “unemployed” and who is “employed”
 - a. You are not in the CLF if you are under 16, in the military, in an institution”, or you have voluntarily elected not to be a part of the work force (student, retiree, homemaker, etc.)
 - b. You are in the work force if you work full- or part-time or are self-employed.
 - c. You are unemployed if you don’t have a job and you are actively seeking work.
 - d. Civilian Labor Force = Employed + Unemployed
 - 3. There is also an “employment rate” and a “labor force participation rate”
- B. Classifying the Unemployed
 - 1. Unemployed = Job loser + Job leaver + Reentrant + New entrant
 - 2. Discouraged workers are NOT unemployed
- C. The Data
 - 1. The National Unemployment Rate
 - 2. Unemployment Rates for Selected Groups of People
- D. Types of Unemployment
 - 1. Frictional Unemployment
 - 2. Structural Unemployment
 - 3. Cyclical Unemployment
- E. Natural Rate of Unemployment is Frictional plus Structural
- F. Full Employment
 - 1. When Unemployment rate = Natural Rate of Unemployment
 - 2. When Cyclical unemployment = zero

IV. Job Search Theory

- A. Wage Offer Curve: You don’t take the first job you are offered...
- B. Reservation Wage Curve: Your reservation wage decreases over time.
- C. Optimal Search Time
- D. Optimal Search Time and the Unemployment Rate