

Notes — Week 4

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Period 3

1. GDP and Prices

- (a) Focus needs to be on growth not prices
- (b) To compensate, we use a price index
 - Choose a base year
 - Choose a market basket of goods and services
- (c) Consumer Price Index (CPI)
 - Thousands of consumer items
 - Base years 1982–1984 (average of those)
 - Compiled monthly
 - $CPI = \frac{y_{curr}}{y_{base}} \cdot 100$
- (d) Real vs. Current GDP
 - Nominal or current — Not adjusted for inflation
 - Real — Adjusted for inflation
- (e) GDP per capita is useful for comparison of countries
- (f) CPI vs. GDP Deflator

GDP Deflator	CPI
Ratio of nominal GDP to real GDP	Measure of a cost of a market basket of consumer goods
Counts all goods and services produced domestically	Counts all goods and services bought by consumers

- (g) GDP Deflator
 - $r_{GDP} = \frac{GDP_{nom}}{GDP_{def}} \cdot 100$
 - Any “real” calculation uses the simple formula $r_x = \frac{nominal}{index} \cdot 100$

- (h) Inflation:
 - Winners: Debtors
 - Losers: Creditors
- (i) Interest can be conceptualized as “rent” on money
- (j) Interest rate formula:
 - $nominal = real + inflation$

2. Business Cycles

- Regular and systematic fluctuations in the level of total output as measured in terms of real GDP
 - Recession — When real GDP declines for two quarters in a row
 - Expansion — Recovery from a recession
 - Business cycles are like earthquakes because:
 - * It is known that they will occur
 - * No one knows when they will occur
 - * No one knows how intense they will be or how long they will last
- Influences on Business Cycles:
 - (a) Innovations
 - (b) Monetary Factors
 - (c) External Shocks

3. Unemployment

- Unemployed — Not working at present, but have made an effort to find work in the last four weeks. Doesn’t account for “dropouts” or “discouraged” workers
- Employed — Work for pay a minimum of one hour per week or without pay in a family enterprise a minimum of 15 hours
- Unemployment Formulas:
 - Unemployment Rate: $\frac{Unemployed}{labor\ force}$
 - Labor Force: $employed + unemployed$
 - Labor Force Participation Rate: $\frac{labor\ force}{population_{16+}}$
- Types of Unemployment:
 - Frictional (Between Jobs)
 - Cyclical (Swings in the Business Cycle)
 - Structural (Skills Supplied Do Not Match Skills Demanded)
- Natural Rate of Unemployment — The level of unemployment when there is nocyclical unemployment (5.2-6% as per Fed 2013)
- Full Employment — When the economy is at the natural rate of unemployment
- Full Employment Output — Level of output (GDP) of an economy at full employment