Topic 11 – Inflation

Econ 1102 section 28 (part 1)

Agenda

- Measuring Inflation
- Correcting for Inflation

Measuring Inflation

Which prices are important, which aren't?

Which prices do you care about?

- Houses
- Cars
- Castles
- Private Jets
- Gasoline

- Why these specific goods?
- Market Basket: The goods that a typical consumer buys

- Consumer Price Index (CPI): A measure of the overall cost of the gods and services used by a typical consumer

Is a single basket enough?

- There are actually many price indices
  - Metro regions
  - Categories of goods and services
  - Producer index

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Calculating CPI

- $CPI = C{\downarrow}CY\ /C{\downarrow}BY\ *100$
  - $C{\downarrow}CY$ - cost in current year
  - $C{\downarrow}BY$ - cost in base year

- Market Basket: 3 loaves of bread, 2 plastic bags
- Base Year = 2002

Year	Price per loaf	Price per bag	Calculation	Cost of Living
2002	$2	$1	2*3 + 1*2	$8
2003	$3	$1	3*3 + 1*2	$11
2004	$4	$0.5	4*3 + 0.5*2	$13

This is different than the RGDP calculation!

- What changes when we calculate RGDP?

- What changes when we calculate CPI?

| Measuring Inflation | Costs of Inflation | Correcting for inflation | Money and Inflation | Unemployment and Inflation |

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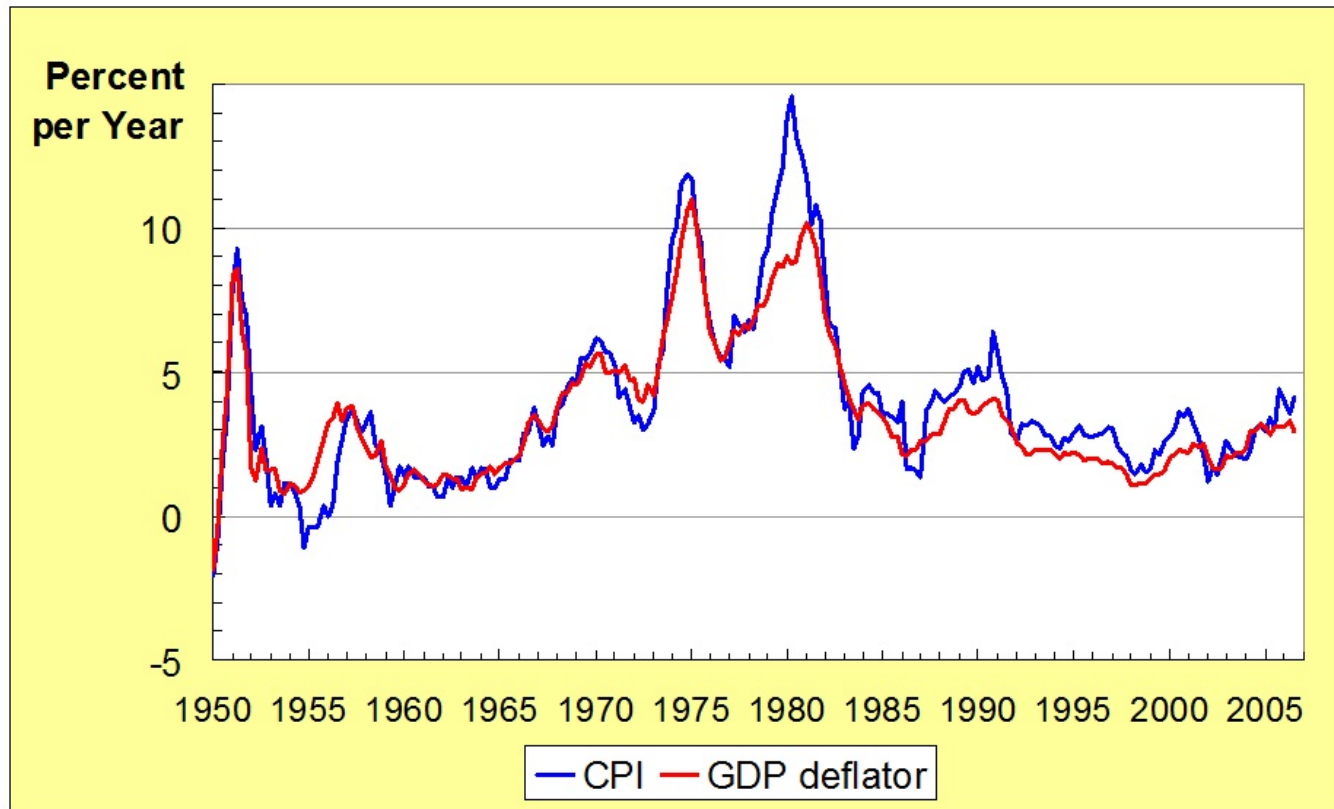 - *quantities* remain constant, *prices* change

We can use CPI to calculate consumer inflation

- $CPI\ Inflation = CPI{\downarrow}2 - CPI{\downarrow}1 \, / CPI{\downarrow}1 * 100$

- Note: This is the same formula as we used to find the GDP deflator!

- From previous example, inflation between 2002 and 2003
  - $137.5 - 100 / 100 * 100 = 37.5 \; or \; 37.5\%$

Are CPI inflation and GDP deflator the same? Not exactly

They seem close. Why do we care?

- CPI used for
  - Social Security, Poverty Level, Wage Contracts
- Comparing the two:
  - CPI Inflation: The level of inflation consumers experience
  - GDP Deflator: The level of inflation producers experience

If GDP deflator is lower than CPI, are you better or worse off?

How do we correct for inflation?

i.e. How do we use CPI to make sure inflation doesn't affect real values?

Measuring Inflation

Cost of Inflation

Correcting for Inflation

Money and Inflation

Unemployment and Inflation

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Example: Minimum Wages

- Minimum wage:
  - 1978: $2.65, 2009: $7.25
  - In real terms, who is making more?
- Depends on inflation!

$$P{\downarrow}T = CPI{\downarrow}T / CPI{\downarrow}B \; P{\downarrow}B$$

  - B: Base year, T: Target year

Example: Minimum Wages

- CPI: Base Year is 1978
  - 1978:65.2, 2009:213
- $P{\downarrow}T = CPI{\downarrow}T / CPI{\downarrow}B \ P{\downarrow}B$
- Real wages:
  - 1978: $P{\downarrow}78 = CPI{\downarrow}78 / CPI{\downarrow}78 * P{\downarrow}78 = 65.2/65.2 * 2.65 = \$2.65$
  - 2009: $P{\downarrow}09 = CPI{\downarrow}09 / CPI{\downarrow}78 * P{\downarrow}78 = 213/65.2 * 2.65 = \$8.65$

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