

Econ 1115: Principles of Macroeconomics

Lecture 15: Inflation

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Outline

- 1 Mid-term Exam
- 2 Inflation
 - CPI
 - Inflation and other Macro variables
- 3 Costs of Inflation

Generally the class performed reasonably well.

Distribution of grades

Average	82.3
Median	83.0
St. Dev.	10.4

Answers to the multiple choice questions below:

- 1. c
- 2. c
- 3. b
- 4. b
- 5. c
- 6. d
- 7. b
- 8. d
- 9. d
- 10. c
- 11. d
- 12. a
- 13. c
- 14. a
- 15. b
- 16. a
- 17. b
- 18. b
- 19. b
- 20. d

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- What is the CPI used for?

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- GDP deflator vs CPI
- What is inflation?
- Inflation and interest rates

The CPI

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- Thus is a measure of the overall level of prices in an economy
- Reflects the spending patterns of a typical household
- Calculated and reported by the Bureau of Labor Statistics from its monthly survey

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- Track the prices of each item every month
- Using appropriate weights, calculate the cost of the basket relative to base year's prices.
- Calculate inflation by computing the percentage change in price levels from the last month/quarter/year (time period)

A simple example

Component of basket	Weight	Price in 2012	Price in 2013	Price in 2014	Price in 2015
Food	0.45	120	100	120	140
Clothing	0.25	210	240	235	245
Housing	0.3	600	610	640	650
Price of basket					

Construction of the basket

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- About 80,000 items are then randomly selected
- Prices tracked monthly, or bi-monthly for 4 years.
- Staggered replacement

You can learn more about the construction of the CPI here
<https://www.bls.gov/cpi/questions-and-answers.htm>

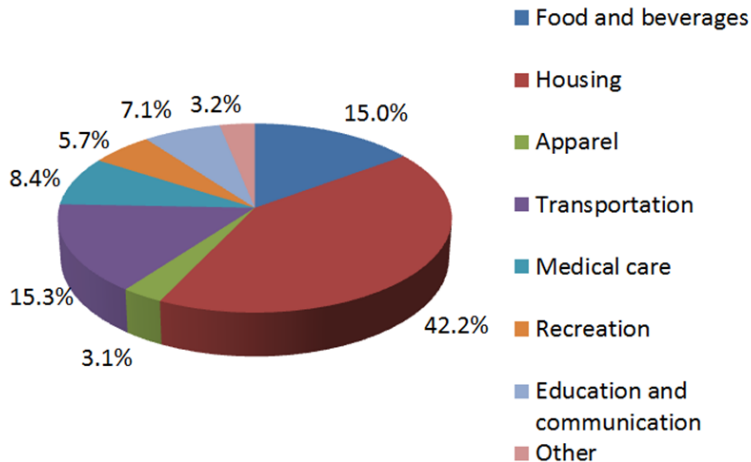
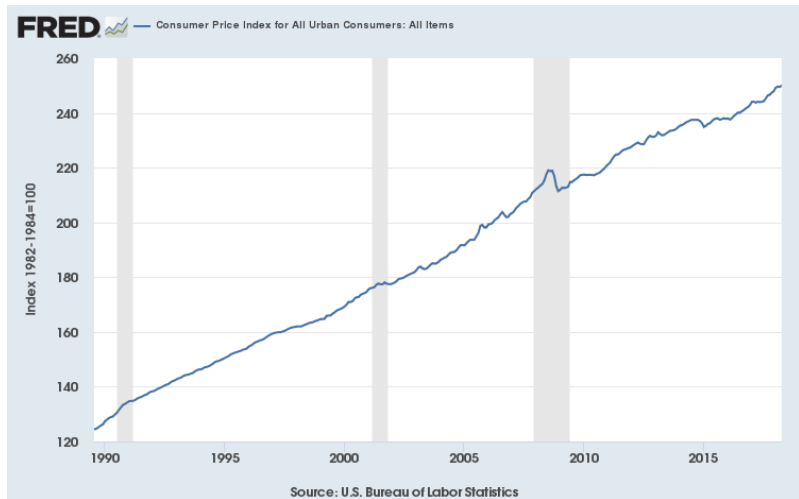


Figure: Source: Cengage, Mankiw resources



Inflation is an increase in the average/general level of prices.

Alternatively, it is the decline in the purchasing power. (\$1 now buys less stuff).

CPI vs GDP deflator

The CPI and GDP deflator basket although performing very similar roles, exclude several categories of products.

- Capital goods
- Imported consumer goods
- Fixed versus variable basket

Shortcomings of the CPI and the inflation rate
Remember, it is a national average!

- Substitution bias

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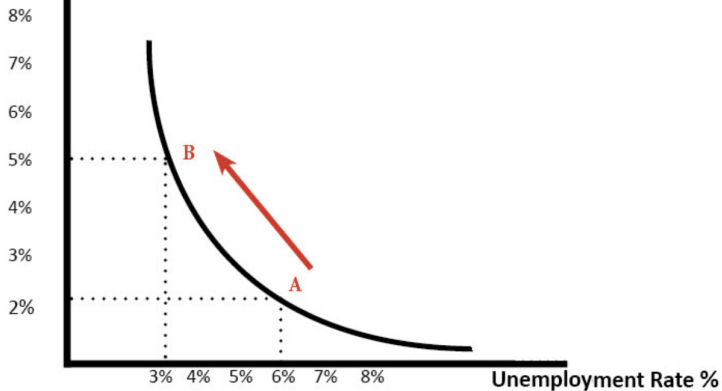
- Substitution bias
- New goods
- Changes in quality

Earlier (last week) we talked about the short-run Phillips curve.
Simply put, it is the relationship between unemployment and
inflation.

It shows the inverse relationship between inflation and
unemployment rate in a country in the short-run.

Inflation
rate %

Phillips Curve



Interest rates

- Nominal vs real variables

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- Interest rates and inflation

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- Real interest rate = Nominal interest rate - Inflation rate

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Cost-push inflation

vs.

Demand-pull inflation

How are they different?

Costs of inflation. While low inflation does not generally hurt the economy too much, there are still redistributive effects and misallocation.

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Menu costs, shoe-leather costs, tax distortions.

- Anticipated inflation vs unanticipated inflation

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- Core inflation

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- Target rate of inflation vs zero inflation

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- Anticipated inflation vs unanticipated inflation
- Core inflation
- Target rate of inflation vs zero inflation
- Negative inflation?
- Hyperinflation

Questions about the final presentation?