ECO101 Macroeconomics
AAU, Spring 2010
Eva Hromádková

Macroeconomics - Homework #1

1. Computational part - 3 points:

Problem 1 - Application of theories of consumption function
When the disposable income of Novak family was 200,000 CZK/year they have spend 150,000 - i.e. their average propensiy to consume (APC) was 0.75. On the other hand, when their disposable income has increased to 300,000, their consumption has only increased to 200,000 - i.e. their APC was now 0.67. Explain this using

1. Theory of Keynesian consumption function
2. Life-cycle hypothesis
3. Permanent income hypothesis

Problem 2 - Differences between GDP deflator and CPI
Economy produces and consumes only bread and cars. In year 2000, cars cost $50,000 each, bread costs $2 a loaf, and economy produces 100 cars and 500,000 loaves of bread. In year 2010, cars cost $60,000 each, bread costs $20 a loaf, and economy produces 120 cars and 400,000 loaves of bread.

- Using the year 2000 as the base year, compute the following statistics for each year: nominal GDP, real GDP, the implicit price deflator for GDP, and a fixed-weight price index such as the CPI.
- How much have prices risen between year 2000 and year 2010? Compare the answers given by the CPI and GDP deflator. Explain the difference.

2. Reading part - 3 points:
On the website, I posted chapters 3 and 4 from a very nicely written book "Undercover Economist" by Tim Harford. These two chapters are dealing with the description of world of perfect markets, as well as with one of the most usual departures from perfect market - externalities.

I would like you to read the text and summarize what you have read - on max. 2 pages (less is preferred, if the content is relevant). Main points that you should mention/answer in you essay:

- What are the main functions of prices in the market economy?
- Why the efficient market outcome does not have to be fair?
- How did Kenneth Arrow solve the trade-off between efficiency and fairness of market allocations?
- Why do externalities distort the informational role of prices?
- How can we price externalities? What are the problems connected to it?
- Have you learned something new by reading this text? If yes, what?