

EC134. Principles of Macroeconomics.
Professor Guillermo Vuletin
Spring 2009

Problem Set 1

Due date: 2/18/07 (HARDCOPY, during lecture)

I) Read the article “Size does matter: In Defense of Macroeconomics” by Paul Krugman. After reading the article, describe how would Robert Samuelson and Paul Krugman analyze the great depression of the 1930s? Your answer should not exceed 5 lines. (10 points)

II)

a) Read the article “Grossly distorted picture”. After reading the article, find out (using the internet) what is the Human Development Index (HDI). Describe in less than 5 lines the alleged benefit of this measure (HDI) as opposed to GDP per capita. (15 points)

b) Cuba’s GDP per capita ranks around the 100th (i.e., mid-table considering that there are 195 countries in the world). Find out some recent ranking for Cuba’s HDI. If the rankings for these two measures (GDP per capita and HDI) differ, investigate and discuss the source for such difference. Your answer should not exceed 6 lines (you are welcome to do include a simple table to help you answering this question). (15 points)

III) Suppose that the world is composed of two countries: country X and country Y. The only input of production is labor (i.e. there is not capital). Country X is inhabited by citizens of country X and country Y. Only people from country Y live in country Y. Given the following information:

GDP of Y=\$100

GDP of X=\$150

GNP of X=\$100

Calculate the value (in \$) of remittances that people from country Y living in country X send to their family members that live country Y given that those remittances represent 20% of the income they produce. (10 points)

IV) Using the following two equations we saw in class:

$$Y=C+I+G+(EX-IM)$$

$$Y_d=Y-T$$

$$S=Y_d-C$$

where Y is income (or output), C is personal consumption expenditure, I is gross private investment, G is government consumption and investment, (EX-IM) represents net exports¹, Y_d refers to disposable income, S is savings and T are the taxes. Answer the following questions:

- a) Suppose that in 1980 a country (Beefland) was running a trade deficit, the government had a balanced budget and private savings were zero. What could you say regarding the magnitude of gross private investment? (5 points)

¹ Remember that negative values of (EX-IM) represents trade deficits, while positive values imply trade surpluses.

- b) Suppose that in 1981 Beefland had the same macroeconomic situation that in 1980 but the government had a budget deficit which was equal to the trade deficit. What could you say regarding the magnitude of gross private investment? (5 points)
- c) If Beefland and Cornland were the only two countries in the world in 1981, what could you say regarding the magnitude of the trade balance of Cornland? (10 points)

V) CF Chapter 6, exercise 9 (page 129) (10 points)

VI) CF Chapter 6, exercise 11 (page 129) (10 points)

VII) The following table represents the quantities and prices of all goods and services produced in Greenland for the years 2000 and 2001:

	p2000	p2001	q2000	q2001
Lettuce	1	3	2	1
Broccoli	2	2	2	1

where p refers to price and q to quantity.

Calculate the NGDP (nominal or current GDP) and RGDP (real or constant GDP – base year 2000) for 2000 and 2001. (10 points)