

Problem Set 1

“THE DATA OF MACROECONOMICS”

The deadline for this specific problem set is Wednesday the 13th of October, at the end of the class.

1. A Spaniard textile producer sells fabrics to a Spaniard fabric primer for 500,000 € (euros). The primer uses the fabrics to prime different patterns on them, and later to sell them to Zara Company (Inditex) for 800,000 €. Zara uses the fabrics to produce shirts in its factory in US and Zara sells all the shirts in its store of 5th avenue in NYC for \$1,300,000. How all these transactions affect the GDP of Spain? How do the transactions affect GNP in Spain? How will it affect US GDP and GNP?

2. Find data on GDP and its components, and compute **the percentage of GDP for the following components** for 1975, 2003, 2008 and 2009 (use figures expressed in current prices, go to the Bureau of Economic Analysis web page, historical tables and select the years, annual data):

- a. Personal consumption expenditures
- b. Gross private domestic investment.
- c. Government purchases
- d. Net Exports
- e. National defence purchases
- f. State and local purchases
- g. Imports

3. Determine if these economic activities are included or are not included in the GDP computation. If the answer is positive, indicate the type of activity. Please, explain shortly.

- a. The repairing activities the Superintendent usually does in your apartment.
- b. Buying a used car.
- c. Payments in concept of complementary services to the above vehicle store.
- d. Production of bricks for the housing sector.
- e. Leisure time.

4. In the country of Wonderland there are three companies producing different goods and services: **Company A** is engaged in the operation of a mine using only labor. Company A produces 1 ton of ore annually and sells it for 0.5 \$ / pound to Company B. **Company B** is dedicated to work with the ore in order to produce 50 square meters of metallic iron and sell them by the meter for \$100 per square meter. Then, 40 m² of metallic iron are sold to company C that uses them to produce 150 pots a year. The other 10 m² were sold to consumers that use the metallic iron to do it yourself (DIY, bricolage). The pots are sold to consumers at a price of \$50 per unit. What is the added value of the company B? Calculate the GDP of this economy.