

Do not put your name anywhere on the assignment, other than on the back of this sheet of paper. Staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you do double-sided printing or print on the back of scrap paper, I will give you one additional point.

1) (20 points) Suppose GDP is 12,000.00, indirect business tax is \$1,000.00, corporate taxes are \$1,100.00, personal taxes are \$1,500.00, contributions to Social Security are \$500.00, net US income from abroad is \$800, retained earnings are \$700.00, and government transfers to individuals are \$600.00. Calculate NDP, NI, PI, and DPI. Show all work and briefly explain why you did what you did.

2) (15 points each) For each of the groups of people below, determine if GDP, NDP, NI, PI, or DPI is the best measure of how well off that group of people is. Explain your logic.

A) The individuals in the country.

B) The corporations in the country.

3) (10 points) The book says the average growth rate of real GDP per capita in the USA was 3.8% from 1990 until 2007. I have read in another source that potential GDP grew at less than 2.5% over that time, so the 3.8% must be too high. Assuming the book is correct, how long would it take for our output per capita to double? If my statistic is correct, then how long would it take for the output per capita to double? (Potential GDP is GDP when the unemployment rate is at the full employment level. Therefore, if you look over a long period of time, its growth rate will be approximately the same as the growth rate of GDP unless your end years are unusual years.)

4) (10 points) In the all-campus e-mail I sent out on 2007/02/28, I wrote this about saving now for retirement:

How much should you be putting away each month? If you want to have the same living standards after retirement, you should have about 20 times your annual income saved up at retirement. Therefore, if you are earning \$50,000 just before retirement, you should have saved \$1,000,000. That seems like a lot. However, it is not that hard if you start saving at a young age. If you expect to retire 45 years from now and expect to earn 5% after inflation you need to save 11% of your income. If you expect to retire in 40 years, you need to save 14% if you have no current savings. If you wait until 30 years before you retire, you need to save 27% of your income. If you wait until 25 years before you retire to start saving, you need to save 37% of your income. Start saving NOW. Of interest, if you get 7% return after inflation, you only need 5.9% for forty five years, 8.5% for forty years, 18% for thirty years or 27% for twenty five years.

Why does it only require 11% of your income to be saved if you retire in 45 years, but it requires 37% if you wait until 25 years before you retire? Why do those twenty years matter so much?

4) (15 points) Why is it difficult for developing countries to grow their economy? Give at least two reasons.

5) (15 points) Not all growth is good. Why might economic growth be bad for a country?