

Homework Assignment 7. Due: Thursday, March 24.

1. (1 point) (problem 3 on page 214) In 1990, the ratio of people age 65 or older to people ages 20 to 64 in the United Kingdom was 26.7 percent. In the year 2050, this ratio is expected to be 45.8 percent. Assuming a pay-as-you-go Social Security system, what change in the payroll tax rate between 1990 and 2050 would be needed to maintain 1990 ratio of benefits to wages? If the tax rates were kept constant, what would happen to the ratio of benefits to wages?
2. (1 point) Wes works for a large manufacturing company. He is enrolled in the company's insurance plan with the monthly premium equal to \$80. Now suppose that he decided to quit his job. The same (in quality) individual insurance policy would now cost him \$300/month. What could explain the difference in premiums?
3. (2 points) Read the Policy Debate on Prescription Drug Coverage at: http://www.swlearning.com/economics/policy_debates/drug_coverage.html (read only the main part; do not follow links unless you want to). Briefly summarize both sides of the debate.
4. (2 points) The government has hired you to advise them on the merits of a project that is being proposed. The project is expected to generate benefits of 14 million dollars today, 5 million dollars in one year from today, and 1 million dollars in two years from today. (These are the only years of concern.) The project costs nothing today, but will cost 20 million dollars in two years. Assume the interest rate is 10%. If the benefit-cost ratio is greater than 1, the project should be allowed. What is your policy suggestion?
5. (2 points) Suppose that all people living in a suburban neighborhood of some big city work in downtown area and the only way to commute there is to take highway I-1. Now assume that local authorities built a new road I-2 going by the neighborhood, which reduced the commute time to downtown by 10 minutes a day. As a result of this improvement the average house price went up by \$25000. Based on this information discuss how you would go about measuring the value of time (I don't want the exact numbers, just discuss how you would proceed and what problems you expect).
6. (2 points) Suppose that some state official advocates building a new highway. Among other arguments in favor of this project, he claims that (1) the construction will create a lot of jobs in the state, (2) it will benefit local businesses located along the proposed highway, (3) it will increase the value of the land located along the highway. Discuss the merits of these arguments.