

Finance 30220
Problem Set #8

- 1) The country of Fredonia currently has a tax code with the following properties: A \$5,000 deduction, 10% tax rate for income less than \$20,000, a 20% tax rate on income between \$20,001 and \$50,000 and a 40% tax rate on any income over \$50,000. They are considering the adoption of a flat tax with a tax rate of 25% and a \$10,000 deduction.
 - a) Compare the average and marginal tax rates under the two systems of an individual earning \$20,000 a year.
 - b) Repeat (a) for somebody earning \$60,000 per year.
 - c) Repeat (a) for someone earning \$110,000 per year.

- 2) Suppose that Bill Clinton decides to take over the cable television industry and provide free cable to every American. To finance this take-over, he raises taxes by \$500 per person per year. The Senate, however, has vowed to overturn the legislation in the next year and return cable TV to the private sector.
 - a) Suppose that current cable TV rates are \$60 per month. Show the effects of Clinton's cable TV plan on interest rates, consumption, etc.
 - b) How would your answer change if there were no threat of the legislation being overturned?

- 3) It is often reported in the media that Americans don't save enough. Analyze the effects on savings, investment, and the interest rate of the following two policies aimed at increasing savings in the U.S.
 - a) Enacting an investment tax credit. (This is essentially a reduction in the user cost of investment).
 - b) Allowing the interest earned on savings accounts to be tax free (effectively raising the return on savings).

- 4) Our social security system is essentially a *transfer* program. That is, those that are currently working are taxed and the proceeds are paid out to those that are retired.
 - a) Assuming that the social security system is financed by a lump sum tax (i.e. every working person is presented with an annual bill that is independent of any action), analyze the effects of social security.
 - b) How would your answer change if, the social security system was financed by a tax on labor income?