

Problem Set 2

QUESTION 1:

Studies indicate that producers of chewing tobacco have an aggregate supply curve given by:

$$S = 40p - 5$$

in which S indicates the number (in millions) of chewing tobacco packs that firms would like to sell when the market price is p dollars per packet. It is understood that consumers currently have a demand curve of the form:

$$D = 35 - 10p$$

- a) At what price will tobacco sell, and what quantity will be sold?
- b) The government is then lobbied by the Jaw Cancer Foundation which wants to stop the practice of chewing tobacco. In response, the government imposes a tax on chewing tobacco of one dollar per packet. What will be the new price of chewing tobacco on the market and what tax revenue will the government collect from the tax?
- c) Who bears the burden of this tax? In order to answer this question, please calculate the change in consumer surplus and the change in producer surplus that accompany the imposition of the tax. Why (in words) do the relative burdens look the way that they do? If the change in consumer surplus plus producer surplus differs from the amount of tax collected, please explain why it does.
- d) Calculate the change in consumer surplus as a fraction of original pre-tax consumer surplus, and the change in producer surplus as a fraction of original (pre-tax) producer surplus. Please explain why these fractions do or do not differ.
- e) Discuss what some of the general equilibrium effects in the economy of instituting such a tax might be. Assume growing tobacco is a labor-intensive process.

QUESTION 2:

In practice, what makes property taxes a good source of tax revenue for local governments? What makes it a problematic source of tax revenue?

DUE Tuesday, October 14, 12pm on class website