PUBLIC ECONOMICS
ECON 4821 - Spring 2016
Department of Economics
University of Minnesota
Problem Set 6

Due Date: Tuesday May 3rd, in the beginning class.

Homework must be typed and a hard copy should be handed in. There will be a 20% penalty if you do not type it.

This homework consists of two problems. The first Social Insurance Programs and the second concerns taxes and their associated deadweight loss.

1. This problem concerns some of the material covered in lecture 24. More information on this topic may be found in Chapter 14 of the Gruber text, from which some of the following questions are drawn. (50 points)

   (a) (10 points) What is the 'Monday effect' and why is it relevant for the estimation of moral hazard in workers' compensation?

   (b) (15 points) What is an experience-rated system? What is the justification for an experience-rated system?

   (c) (15 points) Why does a *partial* experience rating effectively subsidize high-layoff firms?

(d) (10 points) Several studies listed on page 416-420 of the Gruber text claim to establish that the number of people applying for disability insurance increases when the admission criteria become more lenient. Why is this evidence of moral hazard?

2. Suppose that demand D^W and supply S^W in the market for widgets are given by

$$D^W(p) := 12 - 2p$$
$$S^W(p) := 2p$$

and that demand D^S and supply S^S in the market for shmidgets are given by

$$D^S(p) := 8 - p$$
$$S^S(p) := p.$$

Suppose that the government needs to raise \$6 of revenue from taxes on either widgets or shmidgets or both. Answer the following questions.

(a) What is the lowest tax τ^W one would have to impose on widgets to raise \$6 of revenue in that market? What is the associated deadweight loss?

(b) What is the lowest tax τ^S one would have to impose on shmidgets to raise \$6 of revenue in that market? What is the associated deadweight loss?

(c) Suppose a friend suggests that because demand for shmidgets is relatively inelastic compared with widgets, the government can minimize the deadweight loss by imposing no taxes on widgets and a tax of τ^S on shmidgets. Is this good advice?