

Problem Set 12

Due Lecture 14 in class on paper

1. Gruber Chapter 12, Question 1

A number of web sites, such as www.quickquote.com, offer instant quotes for term life insurance. Use one such website to compare the prices of \$1 million 5-year term life policies for 50 year old men and women. Explain the difference in quotes for the man and the woman. Suppose the U.S. government were to pass a law requiring insurers to offer the same prices for men and women. What effect would you expect this to have on prices and insurance coverage?

2. Gruber Chapter 12, Question 4

Small companies typically find it more expensive, on a per employee basis, to buy health insurance for their workers, as compared with larger companies. Similarly, it is usually less expensive to obtain health insurance through an employer-provided plan than purchasing it directly from an insurance company – even if your employer requires you to pay the entire premium. Use the ideas from this chapter to explain these observations.

3. Gruber Chapter 12, Question 12

There are two types of drivers on the road today. Speed Racers have a 5% chance of causing an accident per year, while Low Riders have 1% chance of causing an accident per year. There are the same number of Speed Racers and Low Riders. The cost of an accident is \$12,000.

(a) Suppose an insurance company knows with certainty each driver's type. What premium would the insurance company charge each type of driver?

(b) Now suppose that there is asymmetric information so that the insurance company does not know with certainty each driver's type. Would insurance be sold if

1. Drivers self-reported their types to the insurance company?
2. No information is known at all about individual driver's types?

If you are unsure about whether insurance would be sold, explain why.

4. Insurance Regulation

Find an insurance regulation that appears to try to counteract problems of adverse selection. Describe the regulation and your source (briefly!) and explain how this regulation attempts to counteract problems of adverse selection.