

Consider the market for health insurance. Suppose that the market is comprised of 4 groups of people of differing risk categories. There are a large and equal number of people in each group, but insurers cannot tell which group a person belongs to (i.e. this is a situation of asymmetric information). Each group faces a risk of requiring medical treatment of value \$10,000.

Suppose that the willingness to pay of people in each group is as follows:

Risk	20	40	60	80
WTP	2,500	5,200	6,800	8,500
Actuarially fair premium				
Risk Premium				

- a) Complete the table of actuarially fair insurance premiums that could be charged to each group separately by an insurance company large enough to diversify the risks. How do these compare to the willingness to pay?

- b) Suppose now that the risk category is private information. What is the average riskiness of a person seeking insurance? What premium would an insurance company have to charge to break even?

- c) Will all the agents participate at this price? If not what would be the composition of risks facing the insurer? Would the premium found above be sufficient to cover the risks taken by the insurer?

- d) Continue with this logic. What will be the price of insurance in the equilibrium and which groups will participate?

- e) Is this an efficient outcome?