Microeconomics, Module 17, “Externalities” (Chapter 13)

Homework

(The attached PDF file has better formatting.)

Question: Does the Coase theorem have much application to insurance? What types of property rights might parties negotiate? Who are the relevant parties?

Answer: The Coase theorem applies to insurance just as it applies to other industries. We examine the property rights of the insurer and the insured in the claims handling process.

Suppose a large employer contracts with an insurer to provide health insurance coverage or workers’ compensation coverage for its employees. The employer (the insured) really self-insures, and the insurer is a third party administrator. Any benefits paid by the insurer to the employees is reimbursed by the employer. The employer may buy excess coverage, such as coverage for annual health benefits exceeding $10 million.

The insurer and the employer can negotiate the premium for the policy at very low transaction costs. We examine the implications of the Coase theorem for claims settlement costs. We provide the scenario in this homework assignment. You explain who should be liable for claim settlement expenses to minimize total cost. The premium is the present value of losses, benefits, and expenses, so minimizing total cost minimizes the premium.

Claim settlement costs are of two types:

- Claims department overhead: setting up claim files, estimating medical costs and disability, making out checks to injured parties or medical practitioners, and so forth.
- Investigation and defense costs for fraudulent claims or cases where the employer is not liable. For health insurance, these are claims where the physician or hospital overbills (or bills for services not provided) or the employee is not sick (but malingers to obtain time off from work). For workers’ compensation, these are cases where the disability does not stem from a work-related accident.

The insurance policy states who pays these costs. Either the insurer pays them and is reimbursed by the employer, just as for benefits and loss costs, or the insurer pays them and charges for them in the policy premium.

Ultimately, the employer pays all costs, not the insurer. Pricing actuaries don’t care whether the cost is covered by a charge in the premium or a reimbursement from the insured.

The legal incidence of these costs depends on the policy. The policy may say that the insurer pays the cost and charges for them in the premium or the insurer pays the cost and receives a reimbursement from the insured. Transaction costs are zero. Both the insurer’s management and the employer want to minimize overall costs.

- Suppose the insurer bills its claims department overhead costs to the employer after incurring them. Do the claims adjustors have an incentive to handle claims efficiently? Would the claims department prefer to adjust claims leisurely and bill the insured for the time spent or adjust claims efficiently to hold down costs? If the insurer’s management wishes to minimize total claims handing costs so that it can attract more business, would it wish to have the claims department overhead included as a charge in the premium or collected as a reimbursement from the employer? Which would the employer prefer to minimize its total costs of coverage?
- Suppose the insurer pays investigation and defense costs from its own pocket (does not collect a reimbursement from the insured) and includes a charge of $100,000 in the policy premium. A claim is reported with an estimated cost of $50,000 which seems suspect. The insurer can (i) spend $10,000

investigating the claim, with a 50% chance that the claim will be found fraudulent, or (ii) pay the claim for $50,000 and collect the full reimbursement from the insured. Which would the insurer's claim department prefer in the short run? To minimize total costs and attract business, which would the insurer's management prefer? To minimize its long-run cost of coverage, which would the insured prefer?

Question: Tell me if I understand this. If the claims department bills the employer for overhead costs, the adjustors have no incentive to handle claims efficiently. They would rather work leisurely and bill the employer for the time they spend. Does that mean the insurer makes more money?

Answer: On the contrary. Suppose the employer expects claims department overhead to be 5% of benefits paid. If the staff is inefficient and the overhead is 10% of benefits paid, the employer finds a more efficient insurer. The insurer's management wants its personnel to work efficiently, just as the employer does. Management says: "The way to get them to work efficiently is to put the overhead costs as a fixed charge in the premium."

Question: Does the same apply to claims investigation costs?

Answer: For these costs, the opposite is true. If the insurer pays these costs from its own pocket, it neglects to investigate dubious cases.

Question: How does this affect insurance practice?

Answer: The reimbursement covers benefits and investigation costs. Claims department overhead is covered by a fixed charge in the premium.

In these two scenarios, the insurer's claim department and the employer have the opposite short-term preferences. But the insurer's management and the employer has the same long-term objective: minimizing total costs lowers the employer's total costs of coverage and raises the insurer's market share. By the Coase Theorem, the property rights do not affect the total social costs. A lower total cost means a lower premium, which is better for the employer, and a higher market share for the insurer.

Question: This homework assignment shows the preferred allocation of costs to the insurer vs the employer. Do actual policies have this allocation of costs?

Answer: The insurer and the employer can agree on whatever terms they want. In practice, most policies have the result outlined in this homework assignment.