

Chapter 27 #1: Define insurance.

Insurance shifts income from uncertain good states of the world to uncertain bad states of the world. Insurance companies pool risk together and are therefore better equipped to cover unfortunate events compared to private individuals.

Chapter 27 #2: Define and provide examples of moral hazard, adverse selection, and correlated risks. Why do insurance pools try to avoid them? How do they avoid them?

Moral hazard is the change in behavior that is due to the existence of insurance. The presence of insurance increases the incentive of an insured person to act suboptimally. The antidote is to use deductibles, use contractual clauses that require optimal care etc.

Adverse selection, on the other hand, is the phenomenon that arises if insurance companies cannot differentiate and charge different risk clients. In the absence of differentiation, high risk individuals will rush to insure and will provide negative expected profits for the insurance company. The antidote is to separate classes of risk and charge differently.

Correlated risk occurs when the occurrences are likely to occur together (e.g. wars, earthquakes etc.). The antidote is not to insure for such risks.

Chapter 27 #3: Define and provide examples of nonpecuniary damages. Why might we not want to insure for nonpecuniary damages?

Non-pecuniary damages are the damages that cannot be measured in money. Pain and suffering is the paramount example. My pain and suffering if you destroy my bike cannot be measured in money. An arbitrary amount is going to be awarded to me by the court (probably less if I lose my bike and more if I lose my wife...). We don't want to insure for pain and suffering because insurance moves money from the good state of the world to the bad state of the world. We don't observe people insuring against pain and suffering maybe because people prefer to have and spend money with their favorite goods or people rather than collect money when they lose those.

Chapter 27 #4: Define and provide examples of self-insurance, experience-rated insurance, and input-monitored insurance.

Self insurance is setting aside amounts of money as compensation for potential future losses. Savings could serve as such a mechanism. Experience rated insurance is basing the premium that the insured has to pay on his past performance. Automobile insurance is an example, where after each accident the premium rises. Input monitored insurance is adjusting the premium depending on the behavior of the insured. E.g. if you install fire extinguishers in your house, your premium will go down. If you install an alarm in your car, the theft insurance premium will go down.

Chapter 27 #5: Supposed that scientists could determine whether you will get cancer by an analysis of your DNA. Assume furthermore that it is not perfect and that 10% of the time a person who will get cancer will be told that she will not and that 10% of the time, a person who is told that she will not get

cancer, will. How would the market for cancer insurance differ among the following various scenarios? Which scenario has adverse selection? In which scenario would the two different groups be put into two different risk categories?

- a) The test is outlawed.

In case the test is outlawed, nobody knows anything and there is no case for adverse selection. There is no reason to have different classes of risk.

- b) The test can be undertaken by the individual or at the request of the insurance company.

In that case again there is no adverse selection because the insurance company is in the know and can differentiate among different individuals. Therefore different risks will be classified in different pools.

- c) The test can be undertaken by the individual and it is confidential. The insurance company cannot ask for the results or request that the test be taken.

In that case we have the possibility of adverse selection because only individuals know and not the insurance company, therefore different risk pools cannot be created.

Chapter 27 #6: Why don't private companies insure against the taking of private property by the government?

The reason is adverse selection. Individuals are prone to know better whether the government is going to take over their property or not. They have more information about their area compared to third parties including insurance companies. Therefore individuals that would expect their property to be taken would be more likely to get this insurance than other people. The issue of adverse selection kicks in.

Chapter 27#7: Explain the unraveling problem in adverse selection.

If all individuals are insured against a certain risk, the insurance company expects to pay a certain amount x per insured person. It will therefore have to charge this amount x to break even. The insured people that are less likely to use the insurance or expect a damage of less than x , will not get the insurance. Then the expected amount to be paid by the insurance company will rise. The price the insurance company charges will rise accordingly. The next batch of lower than average risk people will drop out and so on. In the end, only one individual can be insured in which case there is no risk pooling and insurance will not make sense.

Chapter 28 #1: Should the law require investors to pay royalty fees to artists when they sell paintings for higher prices than the investors paid for them? What difference does it make to artist income?

When the investor buys the whole painting (that is, there are no royalties), she is reducing the risk to the artist. When the artist buys part of the appreciation and is therefore paid a lower price for the painting, he is adding risk to himself but taking away risk from the investor. Thus the investor is buying an insurance policy from the artist. When things are good, the investor does not collect as much as she would if there were no royalties; but when things are bad and the painting does not appreciate, then the investor is richer than she would have been if there were no royalties and she had paid a higher price for the painting.

In turn, if the law requires investors to pay royalty fees to artists, then the original price the paintings are bought will be lower. At the same time, the artist will suffer more risks than when she just does not get any royalties and is paid up front.

Chapter 28 #2: Why do authors often get royalties for original books even though book publishers have a comparative advantage in risk bearing?

The ability of the purchaser to determine value is much harder in the publishing world. Much of the value of the art is determined by how much the work is valued intrinsically by the purchaser. In contrast, publishers value a book by how many copies can be sold. This is often quite hard (costly) to determine. The publisher can eliminate this cost by just having a royalty schedule. A royalty schedule will enable the publisher to save the cost of estimating the number of books sold. Hence, the existence of royalties in the book publishing industry is not to shift the risk onto the author but to save on the cost of estimating book sales. Incurring such costs would for the most part be a loss to both the publisher and the author.

Chapter 28 #3: Why do lawyers often work on a contingency fee basis? What are the economic reasons for the lawyer not buying the case outright?

There are a number of reasons for contingency fees. Lawyers have a diversified portfolio of cases and are likely to be more risk neutral than their clients (unless the client is a corporation, in which case, the corporation is more likely to use its own in house lawyers, who are paid on an hourly basis). Furthermore, many clients do not have wealth to pay for a lawyer if the case loses. They could try to borrow from a bank, but a bank is at a comparative disadvantage in comparison to lawyers in evaluating the expected return from litigation.

Moreover, contingency fees align the interest of the lawyer and the client as the harder the lawyer works, the more the lawyer and the client are likely to receive.

Lawyers do not buy out the case from the plaintiffs, however, for several reasons. First, it is illegal; Second, it would create an incentive for the lawyer to lie about the value of the case and say that it was worth very little. This is an important issue given that lawyers understand the law while clients cannot independently determine the true value, at least without incurring more costs.

In the case when lawyers can buy out cases, the client's best defense would be to go to many lawyers and essentially auction off the case. The problem is that there would also be a great incentive for the plaintiff to lie about the case as this would generate a higher price. The only protection for the lawyer

would be to do a large investigation before agreeing to the contract. Finally, having sold off the case, the client would be less interested in testifying and helping with the litigation. Some of this could be overcome by a contract, but the incentives for the plaintiff to cooperate would in all likelihood be smaller than would be the case if the plaintiff shared in the award. All of these problems would greatly increase the transaction costs so some level of contingency fee seems appropriate.