

# Insurance



## **LECTURE 3**

**THEME : INSURANCE POLICIES AND  
COVERAGE**



An insurance policy covers the insured party (known also as the insured or the policyholder) for a specified period of time, called a term. When choosing an insurance policy, a person must decide what type of coverage to buy. This means deciding at what dollar amount of loss the coverage will begin (known as the deductible) and at what amount coverage ends (known as the policy limit). Both influence the cost of a policy, which is expressed as the price of a regular, repeated payment (known as the premium).

Different types of insurance policies provide different amounts of coverage. They also provide coverage in different ways. Some policies, such as life insurance, determine an amount of coverage in advance. An insurance company pays the full amount of such a policy, called its face value, whenever a covered loss occurs. Most other types of insurance policies determine how much to pay according to what kinds of losses policyholders experience. Such policies specify a maximum amount they will pay. For example, a policy covering a home against fire for \$100,000 would pay for damages up to \$100,000, but no more.

# Policy term



Policy terms commonly range from six months to many years. At the end of that term, the seller and buyer may agree to renew the contract if they wish. Only permanent life insurance does not specify a finite term. These policies, also called ordinary life insurance or whole life insurance, commit the insurance company to provide coverage for the lifetime of the person insured.

# Policy limit



Insurance policies also specify an amount at which coverage ends, known as the policy limit. Most types of insurance specify the limit as a dollar amount written in the contract. For example, an automobile insurance policy with \$10,000 of collision coverage pays up to \$10,000 for damage caused by an accident. For property insurance, the policy limit may not exceed the value of the property, which may either be a fixed amount or an amount based on figures such as the costs of replacing property.

# Deductible



- The deductible is the amount of loss a policyholder agrees to pay without protection from an insurance company.
- Insurance policies generally include an initial amount of expense that an insured person must pay when a loss occurs. This expense is known as the policy's deductible. The deductible is the amount of loss a policyholder agrees to pay without protection from an insurance company.
- Selecting a \$500 deductible on auto insurance, for instance, equals an agreement to pay up to \$500 for damage to a car in the event of an accident.

# Deductible



- Under such an agreement, the insurance company will pay for losses exceeding \$500. Therefore, if someone holding such a policy has an accident costing \$1000 to repair, the insurance company will pay \$500 toward that repair.
- The premium for an insurance policy varies according to the level of its deductible. For example, a policy with a \$500 deductible costs less than one with a \$250 deductible, because the lower the deductible, the more the insurance company has to pay for a loss.

# Premium



- An insurance company sets a policy's premium by multiplying a rate for each unit of insurance coverage by the total amount of coverage being purchased. Assume, for example, that term life insurance for 35-year-old men has a rate of \$1.10 for \$1000 of coverage for one year. Based on this rate, a 35-year-old father who wants \$500,000 of coverage to protect his family in the case of his death will pay a premium of \$1.10 times 500, or \$550 for one year of coverage. Most people pay insurance premiums once or twice a year. Other people choose to make automatic monthly payments to their insurance company from a bank account.





- Actuaries, experts in determining insurance rates, compute insurance rates using information not available to consumers. To compute rates, they first estimate expected losses in the coming year, based on statistics from previous years. Next they figure how much money will be needed to pay for those losses. They then divide that amount by the number of people needing insurance protection.



- Consider, for example, the risks faced by 1000 people, each of whom just purchased a \$25,000 car. Using statistics from past losses, an insurance company predicts that 10 of the 1000 cars will be destroyed in accidents during the next year, and 65 will be damaged. The company estimates that payments to cover the damage and destruction to these 75 cars will cost a total of \$450,000. If the company collects \$450 that year from each of the 1000 car owners, it should have almost exactly the funds it needs to cover those 75 out of 1000 car owners who experience losses.



- In this example, each car owner would actually have to pay more than \$450 to support part of the costs of the insurance company's operations, leave some profit for the company, and leave some room for error in the company's estimates. Also, 925 of the people who buy the insurance will have no accidents and will make no claims. Their payments will go to cover the losses of the 75 people who have accidents. But since none of the 1000 car owners knows whether or not they will have an accident, they each agree to pay the premium, even though it may go toward paying for a portion of someone else's losses.



- Although this example of computing premiums appears fairly simple, real life examples prove far more complicated. For instance, different cars have different repair costs. Car owners drive different distances and have different driving habits. Each accident can result in a different kind and degree of damage. In addition, car insurance policies typically cover much more than just damage to the driver's automobile.



- By U.S. state laws, for instance, drivers generally must have some coverage for damage they cause to other cars and for medical care for other drivers and passengers injured in an accident. Taking all of these factors into consideration, the task of determining insurance rates becomes quite complex. Actuaries use statistical calculations and computer programs to make these computations.