Risk

Risk is the uncertainty that a financial loss will occur due to some event. For example, there is a risk that you will get in a car accident, get injured and need medical care, or have your home broken into and your possessions stolen.

A **peril** is the risk for which you are obtaining insurance. Some examples of perils are damage to your car or medical expenses due to cancer.

A **hazard** is the event that can cause a loss. Some examples of specific hazards are auto accidents, a specific illness or injury resulting in large medical bills (like a sports-related injury), death, or theft of property.

Exposure refers to the specific amount of potential financial loss due to a hazard. For example, if you get into a car accident, it is the amount you might need to repair or replace your car.

Liability refers to the dollar amount of damages, should a hazard occur, that would be required to return someone/something to its condition prior to the occurrence of the hazard. For example, if you hit someone with your car, the liability is the amount you would need to pay to repair/replace that person's car.

Risk Management

Risk management is the process used to manage risk exposures. These are the actions you take to deal with the uncertainty of a potential financial loss. The risk management process has two steps:

Step 1: Risk Identification. In Step 1, you identify all potential risks. You want to identify every possible event that could happen that could result in a financial loss. You also want to identify the loss exposure associated with each risk. This is the amount you could potentially lose based on that risk; it's the potential dollar value of that loss.

A house fire is a risk you might identify with the ownership of property. The dollar value of the loss exposure associated with this risk is the cost of repairing or rebuilding the house, and the value of the contents lost in the fire.
Image courtesy Microsoft Photo Gallery

Step 2: Decide How to Deal with Risk. Once you have identified all the potential risks you face, you now need to determine what you will do in each of the following methods of risk management to deal with that risk:

- ***Risk Reduction***
- ***Risk Transfer***
- ***Risk Retention***

Risk Reduction

Risk reduction is the action (or actions) taken to reduce the likelihood of a hazard occurring (called *frequency reduction*) and/or reduce the severity of a loss should hazard occur (called *severity reduction*). For example, suppose you own a business, and you identify shoplifting as one potential hazard. You can reduce the likelihood of losses due to shoplifting by moving your inventory displays farther from front door. You can also install security cameras and/or use an electronic loss prevention system (those sensors that you normally see attached to clothes, or those little chips inside packaging for electronics that must be deactivated at the register so you don't set off the sensors at the exit). Another good example relates to driving. One hazard you face is damage to your car due to an accident you cause. You can reduce the likelihood of that damage occurring, as well as the severity of the damage should you get into an accident, by driving more slowly (more time to react, crash may not be as severe), by driving safer car (one that has better safety systems so the likelihood you get injured in a crash is lower), or not driving as much (less time on the road means less opportunity to get into an accident).

Seat belts (and, for young children, car safety seats) reduce the likelihood and severity of bodily injury due to a collision in an automobile. Healthy eating habits reduce the likelihood of diet-related health problems. Both are examples of risk reduction.
Images courtesy Microsoft Photo Gallery

One extreme method of risk reduction is called ***risk avoidance***. When you do risk avoidance, you decide not to take on (or no longer take on) risk. For example, if you are afraid of getting hurt or losing your car in a car accident, you can avoid that risk by not driving or getting a car.

Risk Transfer

Risk transfer is getting someone else to assume the risk of the loss for you. This normally involves payment of money by you to someone else to take on the risk that you will suffer a loss. In other words, you pay other person money, and they assume all the financial risk associated with that loss. If the loss occurs, they pay for the loss so you don't have to. The most obvious example of this is insurance.

Risk Retention

Risk retention is when you assume the risk of loss from an identified hazard yourself. In other words, you take the chance that you will suffer a loss; if you actually suffer that loss, you have to pay for all (or possibly only some) of the loss.

You can assume *all* of risk associated with potential hazard. For example, there is a possibility of financial loss due medical bills resulting from an accident/injury. If you choose not to get any health insurance and pay for medical bills out of your own pocket, you have retained all of that risk.

You can also assume *part* of risk associated with potential hazard. For example, you could suffer a financial loss due to getting sued when you hit someone with your car. You may get automobile liability insurance that will pay up to $50,000 for damages you do to someone else (or their property). If you lose lawsuit for more than $50,000, you will have to pay the amount beyond $50,000 out of your own pocket.

Risk retention may be *planned*. In other words, you know the risk of a hazard exists, and you choose to not reduce/avoid/transfer that risk. Many people do this with their vehicle if they own the vehicle and it is not worth very much. They choose not to get insurance that would repair or replace that vehicle should they cause an accident and damage the vehicle; if they do get into an accident, they either pay for the repairs out of their own pocket, or they take the loss of the vehicle and either buy a replacement or just simply do without a vehicle. Many people believe that it is cheaper for them to risk damaging or losing the vehicle than it is to pay for insurance on the vehicle to replace it.

Risk retention may be *unplanned*. This means you fail to realize that the risk of a hazard exists, or (more commonly) you know the risk exists but you assume the hazard won't occur. Some young adults assume they will stay healthy and not get injured, and they decide not to buy health insurance.

Fundamentals of Risk Transfer

A **transferor** is a person or organization that is transferring risk to another party. For example, you might want to transfer the risk of having to pay for expensive repairs to your car because you get in an accident. In this example, you are the transferor.

A **transferee** is a person or organization assuming the risk from transferor. If an insurance company agrees to take on the risk of paying for repairs to your car because you get in an accident, it is the transferee.

A transferee must be able to predict the *frequency* that a hazard will occur that will result in a loss. Based on statistical averages, the transferee estimates how often it can expect a specific hazard to occur.

Additionally, the transferee must be able to predict the *severity* of loss due to the hazard occurring. Based on statistical averages, the transferee estimates how much it can expect to pay when a specific hazard occurs. For example, assume you are trying to transfer the risk of having to pay for extensive repairs to your vehicle because you get in an accident.

Using statistical analysis, the transferee will determine the likelihood that you and other people similar to you (age, gender, driving record, etc.) get into accidents, as well as the likelihood that vehicles such as yours are involved in accidents. The transferee also uses statistical analysis to determine the likely amount it will have to pay to repair your vehicle based on historical repair costs for vehicles of your type for the various types of damage usually done to your type of vehicle.

Transferees like insurance companies use statistical analysis to determine the likelihood that a specific type of driver (like a teenage boy) driving a specific type of vehicle will get into a front-end collision. They also use statistical analysis to determine how much they can expect to pay to repair that vehicle.
Image courtesy Ariel Skelly/Image Bank/Getty Images

The transferee is able to reasonably estimate the frequency and severity of a specific loss using the Law of Large Numbers. The **Law of Large Numbers** states that the *larger* the number of potential transferors you take on, the *more accurately* you can predict the frequency and severity of a potential hazard. It is based on statistical probability. If the transferee can more accurately predict the frequency and severity of the losses it has assumed, it can more accurately estimate the amount it will have to pay for losses during a given time frame.

The transferee is able to use the Law of Large Numbers by using a risk management strategy called **pooling**. The basic concept of pooling is this: the more people a transferee can gather in its "risk pool", the better it can utilize the Law of Large Numbers to accurately predict losses for that pool, both in frequency and severity, and ultimately the total amount it will have to pay.

If the total amount of losses for pool can be predicted, the transferee can spread those losses among entire pool. It will be able to determine how much to charge each transferor for risk transfer to cover those anticipated losses, other expenses, and profits for the business. By spreading the risk of loss across a large risk pool, the transferee knows that not all of transferors will suffer losses. The money they pay helps cover the losses suffered by others in the risk pool. Also, the money they pay helps cover their losses if they occur.

The transferee must be *willing* to take on the risk of a loss. If the loss cannot be *accurately* predicted (cannot employ the Law of Large Numbers and risk pooling), or the loss will be *more frequent* or *more severe* than transferee can afford, they will not take on that risk. For example, insurance companies will not offer hurricane insurance, since the severity of the damage that occurs due to a hurricane is more than they can afford to handle (or more than they can reasonably charge their customers for accepting that risk).

Not all potential losses can be transferred. The transferor expected to retain some risk. The transferee will limit its exposure. Exposure is the maximum amount of a loss for which they will pay. They will require you to pay part of your loss. They set limits on how much they are willing to pay out, and they usually require you to pay for some of the loss.

Summary of Risk Transfer Principles

- Transferee must be able to pool enough potential transferors to be able to employ Law of Large Numbers to reasonably determine:
  - The frequency of hazards for which risk is being transferred
  - The severity of losses for hazards
- Transferee must be willing to assume risk to be transferred
  - They can afford the risk of having to pay for a loss
  - Tey can get transferor to pay enough for transferring the risk to help cover loss
- Not all risk can be transferred
- Transferee will limit its exposure to assumed risk

Most Common Method of Risk Transfer

Insurance

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Insurance is a contract between you (transferor) and the insurance company (transferee). You transfer risk to insurance company for any financial loss due to the occurrence of the hazard for which you got insurance. Some examples of hazards for which you get insurance are costs associated with automobile accidents, health problems, death, or stolen property. When you get insurance and suffer a loss, the insurance company pays for the loss so you don't have to.

Insurance only pays out the amount of the *actual* financial loss. For example, if you have $50,000 coverage for some type of insurance and only suffer $20,000 in financial loss, the insurance company only pays the $20,000 in financial loss you actually suffered. You pick your coverage limits, so don't over-insure. If your personal property is only worth $5,000, don't get $50,000 worth of insurance on it. The insurance company will only pay you $5,000 if you lose everything. The insurance company also only gives you money to repair/replace the item for which you suffer a loss (auto & property only). They do not repair/replace for you. Also, they do not force you to repair or replace property. If your computer gets stolen from your apartment, and you have insurance on it, the insurance company will give you money to replace the computer. If you want to take the money and do something different with it, you can; you are not forced to buy another computer.

Insurance Terms

The **insurer** is the company that sells insurance. It is the transferee.

The **policyholder** is the person or business purchasing insurance. It is the transferor. If you purchase automobile insurance, and you are the one responsible for making the payments on the policy, you are the policyholder. The policyholder is usually the one to receive the payout on the policy.

The **insured** are the persons or organization covered by the policy. If you are the person covered by the auto insurance policy, you are the insured. If you are on your parents' auto insurance policy, you are still the insured; however, your parents are the policyholders. They are the ones responsible for making the payments, and they will be the ones who receive any payouts on the policy.

The **policy** is the written agreement, or contract, between the insurer and the policyholder. It contains all the specifics concerning who are the insured, what is being insured, what hazards are being insured against, how much the insurance company will be responsible for paying out, and how much the insured will be responsible for paying. It also will have a variety of other specifics concerning the rights and responsibilities of the policyholder, insured, and insurer that will vary by policy.

The **premium** is the payment by the policyholder to the insurer for protection against risk. The payment might be monthly, quarterly, semi-annually, or annually. The policyholder pays the premium in advance of the coverage; you pay for your insurance before you use it. For example, if you pay your monthly auto insurance premium on May 1, it is payment for coverage from May 1 – 31, not April 1 – 30.

Once a loss is suffered by the insured for a policy, a **claim** is submitted to insurance company to pay for the loss. If you have auto insurance, and your vehicle is damaged, you file a claim with your insurance company to get the money to get it fixed.

A **deductible** is a *maximum dollar amount* you will pay if you file a claim with your insurance company. This is a form of risk retention. You will pay the amount of the deductible before the insurance company pays anything. For example, a policy with a $250 deductible means you will pay up to $250 per claim. If you have a $100 claim, you pay all of it. You must cover all expenses up to the amount of the deductible before your insurance company will start paying for any damages you suffer. If you have an $800 claim, you only pay $250; the insurance company pays the rest ($550). You determine how much you want to have as your deductible, and it will have an effect on the amount you pay for your premium. *The higher your deductible, the lower your premium will be*. This is more risk retention on your part, but it can make your insurance premium more affordable. ou do, however, run the risk of not being able to afford to pay your deductible if you don't have enough income or savings to pay it.

Co-insurance is normally associated with health insurance. With co-insurance, you pay a *percentage* of the total claim. This also is a form of risk retention. For example, assume you have an insurance policy with a 20% co-insurance requirement. You file a $500 claim. In this example, you would pay $100; the insurance company would pay the rest (the other $400). With co-insurance, the larger the claim is to your insurance company, the more you pay. This is more risk retention on your part, since you are paying a percentage of potentially larger claims. *The larger your co-insurance requirement, the lower your premium will be*. You can save money on your monthly insurance premiums if you agree to pay a larger percentage of any medical bills you have when they occur. You do, however, run the risk of not being able to afford to pay your co-insurance requirement if you don't have enough income or savings to pay it.

How Premiums are Determined

Insurance companies determine what to charge for premiums based on risk. The riskier the hazard is, the greater the likelihood that the insurance company will have to pay a claim on your policy. Also, the riskier a hazard is, the higher the amount the insurance company will have to pay for a claim. Therefore, the riskier a hazard is to an insurance company, the higher your premium will be for transferring that risk, since the likelihood and severity of a claim will be higher.

There are two things that are risky for an insurer: *risky people* and *risky things*. Examples of risky people are bad drivers who will pay a high premium for auto insurance, and smokers who will pay a high premium for health & life insurance. Examples of risky things are expensive cars which will have high auto insurance premiums, and expensive stuff which result in high property insurance premiums.

The more risk you retain, the lower your premium. You can save money on your monthly premiums by having higher deductibles & co-insurance levels on your insurance policies. You can also set lower coverage amounts (limits of liability) for insurance company; since their exposure will be relatively low, the premium will be relatively low compared to a policy that have very high coverage limits.

Save money on your monthly premiums for insurance by retaining more risk:

- Higher deductibles and co-insurance levels
  - For a claim, the insurance company will have to pay less
- Lower coverage limits
  - The insurance company has a lower maximum amount it will pay for your claims

In both cases, you reduce the amount of risk that is transferred to the insurance company, so they will not charge you as much for your insurance.