2 – Identifying Loss Exposures

**1 – Property Loss Exposures**

**Objective**: Describe property loss exposures in terms of assets exposed to loss, causes of loss, financial consequences of loss, and parties affected by loss

The elements of property loss exposure are important to an insurance professional because they provide a framework for analyzing loss exposures that may be handled through risk management techniques.

The three important elements of property loss exposures:

* Assets exposed to property loss – The types of property that may be exposed to loss, damage, or destruction
* Causes of loss – Those that may result in property being lost, damaged or destroyed.
* Financial consequences – Those consequences that may result from a property loss. A property loss can be the cause of a net income loss; however, that is considered a separate loss exposure.

In addition to describing these elements of property loss exposures, this section discusses the parties who may be affected when property is lost, damaged or destroyed.

**Assets Exposed to Property Loss**

An asset is property, which is any item with value. Individuals, families, and businesses own and use property, depend on it as a source of income or services, and rely on its value. Property can decline in value – or even become worthless – if lost, damaged, or destroyed. Different kinds of property have different qualities that affect the owner’s or user’s exposure to loss.

Two basic types of property are real property and personal property**. Insurance practitioners further divide these kinds of property into several categories:**

* **Buildings**
* **Personal property contained in buildings**
* **Money and securities**
* **Vehicles and watercraft**
* **Property in transit**

These categories overlap to some extent. Example, vehicles, when carried on trucks, can be property in transit. These categories are listed separately here because they represent types of property for which specific forms of insurance have been developed.

**Buildings**

Buildings are more than bricks and mortar. *Most buildings also contain plumbing, wiring, and heating and air conditioning equipment, which can lead to leaks, electrical fire, and explosions.* Most buildings also contain basic portable equipment, such as fire extinguishers and lawn mowers, that is required to service the building and surrounding land. Under most insurance policies, such equipment is considered part of the building. *Property that is permanently attached to the structure, such as wall-to-wall carpeting, built in appliances, or boilers and machinery, is generally considered part of the building as well*.

Boilers and machinery constitute a special class of property. They are often affixed to a building in such a manner that they become a permanent part of the building and are considered fixtures. This class of property includes any of these types of equipment:

* Steam boilers (large water tanks heated by burning gas, oil, or coal to produce steam for heating or produce power)
* Unfired pressure vessels, sch as air tanks
* Refrigerating and air conditioning systems
* Mechanical equipment, such as compressors and turbines
* Production equipment
* Electrical equipment

**Boilers and machinery share these two characteristics:**

* **They are susceptible to explosion or breakdown that can result in serious losses to the unit and to persons and property nearby**
* **They are less likely to have explosions or breakdown if they are periodically inspected and properly maintained.**

**Personal Property Contained in Buildings**

**The contents of a typical home include personal property such as furniture, clothing, electronic equipment, jewelry, paintings, and other personal possessions. The contents of a commercial building may include; Furniture (desks, file cabinets), Machinery and equipment, Stock (merchandise**).

*Although most policies use the term “personal property” (which is all property other than land and property attached to the land, such as buildings) to refer to the contents of a building, many insurance practitioners and policyholders use the term “contents” as a matter of convenience and common practice*. Property insurance policies refer to personal property, rather than contents, because the property is often covered even when it is not literally contained in the building. When the contents of a commercial building are involved, policies generally use the term “business personal property”.

**Money and Securities**

**For insurance purposes, money and securities are separate rom other types of contents because their characteristics present special problems. Money and securities are highly susceptible to loss by theft. Cas is particularly difficult to trace because it can be readily spent. In contrast, other types of property must be sold for cash before the thief can make a profit. Money and securities are also lightweight, easily concealed, and easy to transport.**

In addition to being susceptible to theft, money and securities can be quickly destroyed in the event of fire.

**Vehicles and Watercraft**

The primary purpose of most vehicles and watercraft is to move people or property, and this movement exposes vehicles and watercraft to several causes of loss. Vehicles may be grouped by vehicle type, by operator type, by typical usage, or by a combination of these characteristics. No matter which classifications are used, some vehicles (such as snowmobiles or utility vehicles) fit into more than one category, depending on the purpose for which they are owned and used. However, these categories are useful in identifying property loss exposures:

* Autos and other highway vehicles
* Mobile equipment
* Recreational vehicles

In insurance terminology, the word “auto” can also include such diverse vehicles as fire engines, ambulances, motorcycles, and camping trailers. Mobile equipment may be damaged in a highway collision, but the most frequent exposures to loss involve off-road situations. In some cases, the owners of recreational vehicles face exposures to loss both on and off the road.

Auto – as defined in commercial auto forms – a land motor vehicle, trailer, or semi-trailer designed for travel on public roads, including attached machinery or equipment, or any other land vehicle that is subject to a compulsory or financial responsibility law or other motor vehicle insurance law in the state.

Mobile equipment – various types of vehicles designed for use principally off public roads, such as bulldozers and cranes

Recreational vehicle – a vehicle used for sports and recreational activities, such as a dune buggy, all-terrain vehicle or a dirt bike.

Watercraft are exposed to special perils not encountered in other means of transit. Those perils include extreme weather conditions that can create rougher seas than the craft can handle; poor navigation, resulting in striking the ground or another obstacle; and depending on the shipping route, piracy.

**Property in Transit**

A great deal of property is transported by truck, but property is also moved in cars, buses, trains, airplanes, and watercraft. When a conveyance containing cargo overturns or is involved in a collision, the cargo can also be damaged. In addition, cargo can be destroyed without damage to the transporting vehicle or watercraft. Liquids can leak out, fragile articles can be jostled during transit, and perishables can melt or spoil.

When property is damaged or lost in transit, it must be replaced. Delays often result, because replacement property may have to be shipped from the location of the original shipment. The property owner may also incur expense to move damaged property.

Property being transported by watercraft could be lost entirely if the watercraft were to sink. Even more so than other property, ocean cargoes fluctuate in value according to their location. If the watercraft cannot reach it intended destination and the cargo must be sold in a different port, the price received for the cargo might be less than the price expected at the original destination.

**Causes of Property Loss**

**Causes of loss (or perils) include fire, lightning, windstorm, hail, and theft.** Most causes of loss adversely affect property and leave it in an altered state. A fire can reduce a building to rubble. A collision can change a car into twisted scrap. Some causes of loss do not alter the property itself, but they affect a person’s ability to posses or use the property (if lost or stolen, it can still be used but not by its owner).

The term “peril” and “hazard” are often confused. A peril is a cause of loss. Fire, theft, collision and flood are examples of perils that cause property losses. (Many property policies sue the term “cause of loss” instead of peril).

A hazard is anything that increases the frequency or the severity of a loss. Examples:

* Careless smoking is a fire hazard because it increases the frequency of fires
* Keeping large amounts of money in a cash register overnight, is a theft hazard

**Financial Consequences of Property Losses**

Financial consequences of loss depend on the type of loss exposure, the cause of low and the loss frequency and severity. When a property loss occurs, the property is reduced in value. The reduction in value can be measured in different ways, sometimes with differing results. If the property can be repaired or restored, the reduction in value can be measured by the cost of the repair or restoration. Property that must be replaced has no remaining worth, unless some salvageable items can be sold. Example:

* A fence worth $7,000 damaged by a car, and the fence owner has to pay $2,000 to have the damage repaired. The fence owner incurred a partial loss that reduced the fence’s value by $2,000
* A camera worth $400 is run over by a truck. The camera owner has incurred a total loss that reduced the camera’s value by $400

**If property is lost, is stolen, or otherwise disappears, its value to the owner is reduced just a though it had been destroyed and retained no salvage value. A further reduction in value might occur if repaired property is worth less than it would have been if it had never been damaged. This is true for items such as fine paintings or other art objects. Many collectibles are valuable largely because they are in mint or original condition. An object that has been repaired after damage from a tear, scratch, or fire is no longer in that unspoiled condition, and its value will decline. The owner faces loss in the form of cost to repair the object, as well as a reduction in value because of the altered condition.**

Property may have different values, depending on the method by which the value is determined*. The most common valuation measures used in insurance policies are replacement cost and actual cash value (ACV). In certain situations, other valuation methods are used, such as agreed value.*

**Parties affected by Property Losses**

**Property Owners**

*The party that is affected most when property is lost, damaged, or destroyed is usually the owner of the property. If the property has some value, the owner of the property incurs a financial loss to repair or replace it*. In a supermarket, a fire loss, the owner could incur a considerable financial loss because it had to rebuild and restock the shelves.

**Secured Lenders**

*When money is borrowed to finance the purchase of a car, a lender usually acquires some conditional rights to the car, such as the right to repossess the car if the owner fails to make loan payments*. This right gives the lender security*. Such a lender is called a secured lender or secured creditor*. *When a person or business borrows money to buy a home or a building the property serves as security for the loan, the secured lender is called a mortgagee (or mortgage holder), and the borrower is called a mortgagor.*

When property is used to secure a loan, the lender is exposed to loss. If the store owner had a mortgage on its supermarket building, the mortgagee would lose the security for the mortgage loan if the building burned. Similarly, if a financed car is destroyed in an accident, no vehicle would be available for the lender to repossess in the event the owner defaulted on the loan. Property insurance policies generally protect the secured lender’s interest in the financed property by naming the lender on the insurance policy and by giving the lender certain rights under the policy.

**Property Holders**

**Bailees are responsible for safekeeping property they do not own. Dry cleaners, repair shops, common carriers, and many other businesses temporarily hold property belonging to others. To estimate its property loss exposures, such a business has to consider not only its own property, but also the property held for others**.

Apply Your Knowledge – rental of a strip mall, operating a florist, employees make deliveries 2 vans:

**Assets exposed to property loss –** Because he rents the retail space form which his store operates, he does not have the exposure of a building being damaged. He does have personal property contained in the space; equipment to run his business, such as refrigerated display cabinets, telephones, file cabinets, computer equipment, a cash register, and inventory of flowers and the tools and supplies to arrange and display them. Exposure to money and securities, as he collects payments from customers. Exposure related to vehicles used to deliver flowers as well. The vehicles have a high value and could be expensive to repair or replace. Also, the exposure connected to property in transit. The flowers are valuable inventory, and if damaged in transit to a customer, they will probably have to replace them at his expense.

**Causes of loss –** some of the perils include fire, theft and collision. Fire could damage or destroy all of the types of property at the store or in a van. Theft could also involve the individual types of property including money and securities in particular, personal property in the building, vehicles and property in transit. Another peril is collision of a van with another object, which could damage both the vehicle and the property in transit in the same accident.

**Financial consequences –** each type of property, if damaged or destroyed, could incur a reduction in value. If property is damaged, the cost to repair or restore is often the amount of reduction in value. Example, if the van were involved in a collision while making a delivery, it may be possible to have it repaired for a cost that is less than the value of the van; therefore, it would not be a total loss. The value of the van after the collision would be reduced until repairs were completed. The flower arrangements in the van may be difficult to repair. Consequently, it may be more cost effective to consider them destroyed and replace them. The damaged flowers would have lost all value.

**2 – Liability Loss Exposures**

**Objective**: Describe liability loss exposures in terms of assets exposed to loss, causes of loss, and financial consequences of loss.

**Assets Exposed to Liability Loss**

The first element of liability loss exposures consists of assets exposed to liability losses. The asset can be anything of value an individual or organization owns. However, the asset that plaintiffs claim most frequently is money. Money can be used, for example, to make a payment of damages to a plaintiff or to pay attorneys’ fees and other costs of defending against claims. Assets owned by an individual or organization, such as property (including buildings, automobiles, and furniture) and investments, can be sold and converted to money that can be used to make a payment to a plaintiff. Furthermore, a plaintiff can claim income that a defendant will receive in the future.

**Causes of Liability Loss**

**The second element of liability loss exposures consists of the cause of liability losses. The cause of a liability loss is the initiation of a claim or lawsuit against an individual or organization by another party seeking damages or some other legal remedy. Even the threat of another party’s initiating such a claim or suit can cause a liability loss in the form of costs of an individual or organization incurs to investigate, and, if necessary, settle the threatened liability claim or suit.** Liability claims can arise from various activities. Common examples include: Autos, watercraft and other vehicles; Premises; Personal activities; Business operations; Completed operations; products; Advertising; Pollution; Liquor; Professional activities.

**Autos, Watercraft, and Other Vehicles**

**A significant liability loss exposure for almost all persons and businesses comes from the ownership, maintenance, and use of automobiles. In the US auto accidents produce the greatest number of liability claims**. Even people or businesses that do not own an auto can be held vicariously liable for the operation of an auto by others.

Liability loss exposures are also created by owning and operating other conveyances, such as watercraft, aircraft, and recreational vehicles.

**Premises**

**Anyone who owns or occupies real property has a premises liability loss exposure**. If a visitor slips on an icy front porch and is injured, the homeowner may be held liable for the injury. A business has a similar exposure arising from its premises. A grocery store will probably be held liable if a customer is injured after slipping and falling on a wet floor in the store.

**Personal Activities**

Individuals can become liable to others when engaged in a personal activity not business related and away from the defendant’s premises. For example, a person could hit a golf ball off a tee at a golf course and strike and injure another golfer with the ball. The activity need not be recreational; it could involve, owning a dog that escapes and bites a neighbor.

**Business Operations**

**In terms of liability loss exposures, businesses must be concerned not only about the condition of their premises but also about their business operations. Whatever activity the business performs has the potential to cause harm to someone else. Many business operations occur away from the organization’s premises. A plumbing contractor, may start a fire in a customer’s house while soldering a coper pipe. A roofer may drop debris from a ladder. The customer in either case could make a liability claim**.

**Completed Operations**

Even after a plumber, an electrician, a painter, or another contractor completes a job and leaves the work site, a liability loss exposure remains. If faulty wiring or toxic pain leads to an injury, the person or business that performed the work may be liable. Considerable time could pass in the interim, but the person or business may still be liable if faulty work created the condition that eventually caused the injury. Example, if a homeowner could prove that a natural gas explosion in her house was caused by the negligence of the contractor who installed her new furnace, the contractor may be liable for the resulting damage to the house.

**Products**

Liability resulting from products that cause bodily injury or property damage is a significant exposure for manufactures*. This exposure begins with the design of the product and might not end until the consumer properly disposes of the product*. Millions of customers use or consume mass-produced products, foods, and pharmaceuticals. A prescription drug may be dangerous, but the danger may not be known for years, after which it is too late to help those who have taken the drug.

**Advertising**

**Businesses often include photographs of people using their products in their advertisements. If a local retailer cannot afford professional models, it might use pictures of people using its products or shopping in its store. Unless the retailer obtains permission, publishing the pictures could lead to a lawsuit alleging invasion of privacy**. Using another company’s trademarked slogan or advertisement can also generate a liability claim.

**Pollution**

Many types of products pollute the environment when they are discarded. In addition, the manufacture of some products creates contaminants that, if no disposed of properly, can cause environmental impairment, or pollution. If an explosion at an oil refinery polluted a nearby body of water, the refinery owner might have a liability loss.

**Liquor**

The consumption, serving, and sale of alcohol can present liability loss exposures. Intoxicated persons can pose a threat to themselves as well as to others. Providers of alcohol can be held responsible for customers or guests who become intoxicated and injure someone while driving drunk. Both drunk driver and the person who served the alcohol can be held legally liable.

**Professional Activities**

*Negligence involves a failure to exercise the degree of care that is reasonable under the given circumstances*. It is reasonable to expect that professionals with special competence in a particular field or occupation will exercise *a higher standard of care in performing their duties that someone without special competence*. *Attorneys, physicians, architects, engineers, and other professionals are considered experts in their filed and are expected to perform accordingly*. Professional liability arises if injury or damage can be attributed to a professional’s failure to exercise the appropriate standard of care. For insurance professional’s this failure is sometimes called errors and omissions (E&O). For medical professionals – malpractice.

**Financial Consequences of Liability loss**

The third element of liability loss exposures consists of the financial consequences of such losses. In theory, the financial consequences of a liability loss exposures or limitless. In practice, financial consequences are limited to the total wealth of the person or organization. Although some jurisdictions limit the amount that can be taken in a claim, liability claims can result in the loss of most or all of a person’s or organization’s assets.

**Damages**

The damages of a liability loss can be more difficult to determine than those involved with other types of losses. Example, the ultimate value of liability claims resulting from a hotel fire injuring hundreds of guests may be hard to predict because each claim is different, and it may take years for all o them to reach settlement or be tried in court to a final judgement.

**Defense Costs**

*In addition to damages, the financial consequences of a liability loss may include costs to defend the alleged wrongdoer in court. The defense costs include not only the fees paid to lawyers but also the other expenses associated with defending a liability claim (investigation expenses, expert witness fees, premiums for necessary bonds, and other expenses incurred to prepare for and conduct a trial).* **Even in the unlikely event that all the possible lawsuits against a defendant are ultimately found groundless, defendants and their liability insurers will probably incur substantial defense costs**.

**Damage to Reputation**

The third financial consequence of liability loss may be the defendant’s loss of reputation. Such consequences are often difficult to quantify, but they do exist. Example, a tire manufacture recalled more than 6M tires after they were alleged to be a factor in rollover crashes. In addition to damages paid and defense costs for lawsuits, the manufacture suffered a damaged reputation and resultant loss of sales.

**Apply your knowledge** – Married couple own a home with a pool, He hunts for sport, Son plays little league, Daughter plays soccer, Wife drives kids and teammates to and from games. Wife also serves on the YMCA board

Assets exposed to liability loss – cash accounts, home, furniture, autos, future income, and other personal property exposed to the risk of being liquidated to pay damages to a plaintiff

Cause of Liability – The swimming pool, Husbands hunting, Son playing baseball; Daughter playing soccer, Wife driving teammates to games and board services which could result in a claim alleging that she failed to exercise the standard of care.

Financial consequences of liability loss – each of these activities could result in a claim or suit whose value is limited only by the wealth of the family. Even if the claim or suit is without merit, the defense costs and damage to the family member’s reputation may be substantial.

**3 – Personnel Loss Exposures**

**Objective**: Describe personnel loss exposures in terms of assets exposed to loss, cause of loss, and financial consequences of loss.

For many organizations, their most valuable assets are their employees because they add to the value of the organization through their physical and mental labor. Understanding the elements of personnel loss exposures provides an essential foundation for managing these exposures and protecting these assets.

Personnel loss exposure – a condition that presents the possibility of loss caused by a person’s death, disability, retirement or resignation that deprives and organization of the person’s special skill or knowledge that the organization cannot readily replace.

Key employee – an employee whose loss to a firm through death or disability before retirement would have an economic effect on the company.

**Assets Exposed to Personnel loss**

While everyone in an organization has value, some people are more easily replaced than others. Valuable key employees (key employees) present a critical loss exposure to an organization. Similarly, groups of employees who perform crucial functions, if they are all lost simultaneously, can cause a crisis for an organization.

**Individuals Employees**

**The category of individual employees includes employees with unique talents, creativity, or special skills is vital to the organization’s ability to meet its goals. These employees do not own, manage, or oversee the organization, but they add value to it.** They could be high-performing sales reps or systems engineer who help focus a firm’s efforts on customers needs during a complex project.

**Owners, Officers, and Managers**

**Owners, officers, and managers are responsible for making decisions and essential to the organization, as well as managing and motivating others. In organizations in which the owner is a key person, that person’s activities, health, and managerial competence all influence the organization’s value**. A sole proprietorship literally ceases to exist as a legal entity when its owner dies or retires. The same is true in corporations, in which ownership is typically concentrated in just a few major shareholders, most of whom are also managers. Sole proprietorships, close corporations, and corporations with separation of ownership and control should be concerned with personnel loss exposures from a manger leaving for another organization.

**Groups of Employees**

Sometimes a group of employees is critically important to an organization, even if an individual employee in that group is not. An organization may be unable to function without the contributions of an important group. With the exception of layoffs, group departure is rare, and when an entire group is laid off, it is usually because it is considered expendable. However, **over a short time period, an entire group may leave because of common dissatisfaction (such as poor management), may follow a manager to a new organization, or may be lost because of a catastrophic event**.

**Causes of Personnel Loss**

The causes of personnel losses are the actual means by which an employee is removed from the services of an employer. Causes of loss could occur inside or outside the workplace; however, the personnel loss remains the same in both instances.

**Death**

The death of an employee results in the complete, permanent loss of the employee’s services. Unless a disaster occurs, most losses from death are low frequency, and the severity of impact on the employer depends on the employee’s value to the organization. The risk of death varies widely according to the nature of the organization’s business (financial services vs exploration and extractions). Numerous events, accidental or natural, can cause death of key employees. Risk control efforts can focus on events that can result in the death of large numbers of employees at once, such as fire, explosion, severe windstorm, and terrorist attacks.

**Disability**

Although death as a cause of loss often attracts more media attention than disability, overall **disability occurs far more frequently than death. The severity of personnel losses resulting from disability can be equal to those resulting from death if the disability is permanent and total. Temporary disability and partial disability are more common than total disability.**

As with death, numerous accidental or natural events can cause disability of key employees. Risk control efforts can focus on events that can disable large numbers of employees at once and on events that disable many employees over time, such as workplace injuries.

**Resignation, Layoffs, and Firing**

Employees may leave an employer voluntarily (resignation), or involuntarily (layoff or firing). Resignation (voluntary separation) is an expected part of doing business. The frequency of resignations depends, in part, on the type of industry. The severity of resignation depends on who is resigning. If a key person leaves or if a group of employees sharing a similar function departs simultaneously, the severity of the personnel losses may be high.

**Involuntary employee separations generally are not considered a personnel loss because the organization has determined that it is better off without the employee. Example, a layoff is the result of a change in the organization’s goals – meaning that the laid-off employees are no longer needed for the organization to operate efficiently – their departure will have a minimal effect on the organization’s success. Employees are typically fired for cause – that is, for not performing their jobs effectively or behaving in an unacceptable manner.** Usually, organizations rationally consider all the costs and benefits of retaining an employee before firing him or her.

**Retirement**

**While death and voluntary resignation often occur suddenly, retirement is usually planned. With plenty of notice, an organization can usually prepare for the retirement of even key personnel by locating and training replacements and creating a corporate succession plan. However, as with resignation or death, when a key person decides to retire suddenly, the losses can be severe**.

**Kidnapping**

Kidnapping of a key employee can be a significant cause of loss for employers, especially for those with operations outside the US. Some kidnappings result from political unrest, but employers are more likely to face financially motivated kidnappings, such as kidnapping for ransom.

Kidnapping is a fairly low-frequency event that tends to occur mostly in high-risk locations. The most obvious loss to an employer is the absence of a key employee. In this sense, kidnapping losses are similar to death and disability losses; the severity depends on the importance of the employee and the cost of temporarily or permanently replacing him or her.

**Financial Consequences of personnel Losses**

Because employees are assets of an organization, the financial effect of the loss of these assets (personnel losses) on an organization is similar to the effect of property and liability losses in that they reduce the value of the organization**. The major difference is that personnel losses typically manifest themselves as net income losses. These are some of the financial consequences of personnel losses:**

* **Loss of the value the employee contributed to the organization. (in cases in which a key person is lost, this may be severe, with the organizations value lowered at least for the short term)**
* **Replacement costs (recruitment, interviewing, and training of replacement personnel)**
* **Losses to the organization’s value caused by negative publicity**
* **Losses caused by low morale, such as reduced productivity and increased illness**.

**Apply your Knowledge** – Real Estate Agency – Roger 30-year EE plans to retire next month; Susan EE for a year considering a job from another agency, she is a good worker but is still learning how to best serve her clients and has few referrals. Both Roger and Susan were injured in an auto accident and taken to the hospital. Both Roger and Susan will be totally disabled for 4 months. Describe the agency’s personnel loss exposures in terms of the three elements.

Assets exposed to personnel loss – Roger and Susan are valuable assets to the agency because they add to the value through their physical and mental labor. While both have value, Susan can be replaced more easily than Roger. Roger is a key employee because of his referral business, which provides substantial income to the agency.

Causes of personnel loss – the 4 month disability is an immediate cause of loss for the agency. Roger’s planned retirement is another cause of loss. By the time Roger recovers from the accident, it will be past his retirement date. So, in effect, the agency might as well consider Roger’s disability to be permanent. Susan’s potential resignation to go to work for another agency once she recovers from her disability is another possible cause of loss.

Financial Consequences of personnel loss – The referral business may not continue if Roger is not working at the agency. However, Roger’s employer probably knows about his planned retirement date. Therefore, his replacement has likely been hired and trained and may have met with Roger’s clients to assure them that the same excellent level of service will continue after Roger’s departure. The cost to replace Roger were probably incurred before the auto accident, and Rogers loss of value to the agency minimized. Furthermore, the accident may generate sympathy in the market that may result in more business for the agency. Susan has new referrals, and her absence will not be as much of a loss to the agency economically whether she comes back in 4 months or decides to work for another agency.

**4 – Net Income Loss Exposures**

**Objective**: Describe net income loss exposures in terms of assets exposed to loss, causes of loss, and financial consequences of loss.

Understanding the elements of net income loss exposures and how they result from other causes of loss provides and essential foundation for managing such exposures.

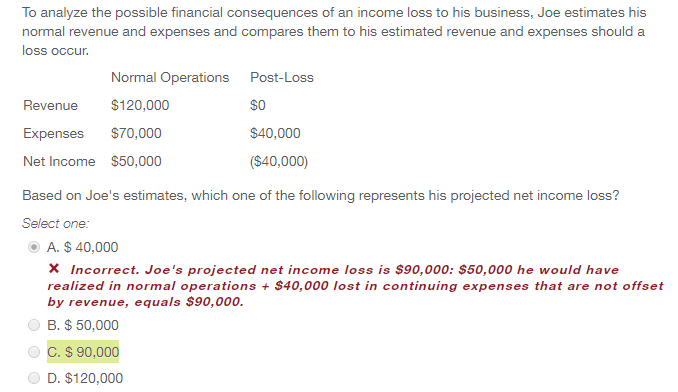
A net income loss exposure is a condition that presents the possibility of loss caused by a reduction in net income.

**Assets Exposed to Net Income loss**

**The asset exposed to loss in a net income loss exposure is the future stream of net income of the individual or organization. The future stream of net income includes revenues minus expenses and income taxes in a given time period. If income taxes are considered to be a part of an organization’s expenses, a net income loss is a reduction in revenue, an increased in expenses, or a combination of the two**.

Example, a fire at an organization’s production facilities could not only destroy the facilities (a property loss exposure), but also force the organization to stop operations for a few weeks, resulting in a loss of sales revenue (a net income loss exposure). Similarly, if a tornado damaged a retail store of a self-employed business owner, the inability to earn income while the store is being repaired represents a net income loss exposure.

Net income losses are often the result of a property, liability, or personnel loss (all of which are direct losses). Therefore, net income losses are considered to be indirect losses**. A direct loss is a loss that occurs immediately as the result of a particular cause of loss, such as the reduction in the value of a building that has been destroyed by fire/tornado/hurricane.**

**An indirect loss is a loss that results from, but is not directly caused by, a particular cause of loss. The reduction in revenue as a result of the fire/tornado/hurricane**. Estimating indirect losses is often challenging because of the difficulty in projecting the effects that a direct loss will have on revenues and expenses. A litigation manager working for a restaurant chain may be able to project with some certainty the amount needed to settle a lawsuit brought by a customer accusing the restaurant of food poisoning (a direct liability loss). However, projecting the effect on future restaurant sales (an indirect loss) of any publicity relating to the lawsuit would be more difficult. ****

In the insurance industry, the term “net income losses” is usually associated with property losses, and some insurance policies provide coverage for net income losses related to property losses. There are many other causes of net income losses.

**Causes of Net Income Loss**

Various circumstances can lead to a net income loss. For many of these causes of loss, it can often be difficult to discern when the direct property loss, liability loss, personnel loss, or business risk loss ends and when the indirect net income loss begins.

**Property Loss**

A property loss is a loss sustained by a person or an organization resulting from damage to property in which that person or organization has a financial interest. **Damage to property can cause a reduction in that property’s value, sometimes to zero.** Example, when a car is stolen, the owner suffers a total loss, as a result of the theft, the owner would incur a net income loss by renting a replacement. The owner’s expense will increase, but **the added expense may be necessary in order to allow the owner to continue commuting to and from work.**

Similarly, a nuclear power plant that just endured an earthquake may incur net income loss when it pays the extra expense of immediately shipping in a replacement water pump. By incurring the additional shipping costs to receive the pump more quickly, the plant may be able to prevent a larger direct loss of radiation contamination and resume operations soon.

**Liability Loss**

Liability losses are caused by a claim of legal liability from someone who is usually seeking monetary damages against a person or an organization. The direct costs that a person or organization can incur as a result of a liability claim include damages and defense costs. In addition, a liability loss can result in a net income loss. Example, if a driver of a car develops a history of poor driving and injures multiple parties in a series of accidents who claim liability against the driver, the costs of renewing the driver’s personal auto policy, if available, will likely be substantially higher. Many doctors also incur an increase in net income losses when their professional liability insurance coverage renews at a higher rate as a consequence of successful claims of malpractice made against them.

Another example of increased net income losses can occur when two organizations merge or one organization acquires another. Part of the negotiations associated with drafting the agreement joining the organizations involves whether either of them is facing pending or expected litigation. If so, the organization being sued will often have to sacrifice some form of net income.

**Personnel Loss**

A personnel loss is often caused by a key person’s death, disability, retirement, or resignation. Such a loss deprives those dependent on that person of a special skill or knowledge that cannot be readily replaced. Example, a family incurs a net income loss as a result of a personnel loss when a home maker is temporarily disabled because of an auto accident and the family must pay someone else to perform many of the essential services needed to maintain the household. The wages paid to the worker to perform these services constitute net income loss.

An example of personnel losses that effect an organization, contractors recruiting employees to work in areas of the work where hostile military conflicts are ongoing. The frequent personnel losses caused by death or disability of the contractors’ current employees force the contractors to pay higher salaries to attract new employees and retain existing ones.

**Business Risks**

Business risk refers to risk that is inherent in the operation of a particular organization. These are examples of potential net income losses from business risk that may affect individuals or organizations:

* Loss of goodwill – organizations are concerned with maintaining good-will among customers and other stakeholders. Goodwill can be lost in many ways, including providing poor service offering obsolete products, or mismanaging operations. For a not-for-profit, goodwill is equivalent to reputation. Goodwill has broader implications than just reputation in for-profit organization, because goodwill may have a monetary value. *To maintain goodwill, many organizations choose to pay for certain accidents for which they are not legally responsible, to avoid adverse publicity.*
* Failure to perform – Net income losses may occur as a result of some type of failure to perform, including a products failure to perform as promised, a contractor’s failure to complete a construction project as scheduled, or a debtor’s failure to make scheduled payments.
* Missed opportunities – An organization may suffer a net income loss as a result of a missed opportunity for profit. Example, an organization that delays a decision to modify its product in response to market demand might lose market share and profit that could have been made on that updated product.

**Financial Consequences of Net Income Losses**

The financial consequences of a net income loss are a reduction in revenues and increase in expense, or a combination of the two. **To determine the severity of a net income loss, it is sometimes necessary to project what revenue and expenses would have been had no loss occurred. Once a loss occurs, the difference between the projected net income and the actual net income earned after the accident is the net income loss.** The worst-case scenario for a net income loss is a decrease in revenues to zero and a significant increase in expenses for a prolonged period.

Apply Your Knowledge - Sally single mom of 2 boys, Sally owns a Hose and rent a garage apartment to a couple, the rent pays ½ the mortgage on the home, Sally is a reporter for a newspaper w/advertising income declining for years.

Property loss – The house could become uninhabitable from flood, fire or another disaster. If that happened the value of the home would decrease sharply – direct property loss. The family would incur the indirect consequential loss of paying for a hotel room until the home is repaired which could take months. If the garage apartment is uninhabitable the renters would move out and the monthly rental would stop. Without the rental income Sally may not be able to pay the full mortgage herself, which can lead to the bank to default and foreclosing on the property, Sally would then lose her home.

Liability – if the husband of the young couple slipped on the outdoor stairs injuring his knee, he may decide to sue. He could claim the stairs where not properly maintained and presented a hazardous condition. Sally would incur the direct costs of her defense but may also incur the indirect costs of repairing the steps and losing income from being off work on the days she must attend trial of the lawsuit. The indirect costs would increase Sally’s expense and thereby lower her net income.

Personnel loss – The newspaper that Sally works for has been losing advertising income for years. If it management decides it must cut expense, it may decide to do so by laying off workers, including Sally. She will probably be able to find other employment eventually, but until she does, her family will lose the income she would have earned.

**5 – Loss Exposure Identification methods**

**Objective**: Describe the following methods of loss exposure identification: Document analysis; Compliance review; Inspections; Consultations

For individuals, common property and liability exposures can be identified by a property-casualty insurance producer as an assessment of insurance needs. Similarly, individual’s net income loss exposures can be identified by life insurance products as part of a needs assessment for life and health insurance products. For organizations, loss exposure identification I more complex, using a variety of methods and sources of information.

**Document Analysis**

Documents used and produced by an organization can be a key source of information regarding loss exposures. **Some of these documents are standardized and originate from outside the organization, such as questionnaires, checklists, and surveys, websites, news releases, and reports from external organizations**. Other **documents are organization specific (internal), such as financial statements and accounting records, contracts, insurance policies, policy and procedure manuals, flowcharts and organizational charts, and loss histories**.

**Checklists and Questionnaires**

Standardized documents published outside an organization, such as insurance coverage checklists and risk assessment questionnaires, broadly categorize the loss expoures that most organizations typically face. Although commercial publishers and trade associations have developed checklists and questionnaires, most are created by insurers.

A questionnaire captures more descriptive information than a checklist. **An advantage to using the questionnaire, it can be designed to include questions that address key property, liability net income and personnel loss exposures and may capture information about the values exposed to loss**.

Questionnaires produced by insurers are known as insurance surveys because most of the questions on these surveys relate to loss exposures for which insurance is generally available. In contrast with insurance surveys, risk management or risk assessment questionnaires have a broader focus and address both insurable and uninsurable loss exposures. However, **a disadvantage of risk assessment questionnaires is that they typically can be completed only with considerable expense, time, and effort and still may not identify all possible loss exposures**.

**Financial Statements**

Risk professionals with accounting or finance expertise sometimes begin the loss exposure identification process by reviewing an organization’s financial statements, including the balance sheet, income statement, statement of cash flows and supporting statements**. As well as identifying current loss exposures, financial statements and accounting records can be used to identify any future plans that could lead to new loss exposures.**

**An organization’s balance sheet is the financial statement that reports the assets, liabilities, and owners’ equity of the organization as of a specific date**. Owner’s equity, or net worth, is the amount by which assets exceed liabilities. **Asset entries indicate property values that could be reduced by loss.** Liability entries show what the organization owes and enable the risk professional to identify obligations (such as mortgage payments) that the organization must fulfill if it were to close temporarily as a result of business interruption.

**The income statement shows and organization’s revenues, expenses, and net income (profit or loss) for the particular accounting period.** *Reports an organization’s profit or loss for a specific period by comparing the revenues generated with the expenses incurred to produce those revenues.*

**The statement of Cash flows (also called the statement of sources and uses of funds) is the financial statement that summarizes the cash effects of an organization’s operating, investing and financing activities during a specific period**. *Summarizes the cash effects of an organization’s operating, investing, and financing activities during a specific period.*

Funds-flow analysis on the statement of cash flows can identify the amounts of cash either subject to loss or available to meet continuing obligations. A statement of cash flow would indicate the amount of cash that is typically on hand to pay for any losses resulting from loss exposures that have been retained by the organization.

The primary advantage of financial statements from a risk professional’s perspective is that they help to identify major categories of loss exposures. Property loss exposures can be seen in the asset section of the balance sheet, and the income statement discloses the amount of net income that could be lost during a suspension of operations.

*A major disadvantage of using financial statements for identifying loss exposures is that although the identify major categories of loss exposures, they do not identify or quantify the individual loss exposures. Example, the balance sheet may show $5M in property exposed to loss, but it does not specify ow many properties make up that $5M, where they are located, or how much each property is worth*. Moreover, the real and personal property values recorded are based on accounting conventions and not accurate for purposes of insurance risk management.

*Another disadvantage is that financial statements depict past activities* – revenue that has already been earned, expenses that have already been incurred, prior valuations of assets and liabilities, and business operations that have already taken place. They are of limited help in identifying projected values or future events. Therefore, even after using financial statements for loss exposure identification, risk professionals till need to project what events might occur in the future, determine how these future events could change loss exposures, and analyze an quantify potential losses accordingly.

**Contracts**

A contract is an agreement entered into by two or more parties that specifies the parties’ responsibilities to one **another. Analyzing an organization’s contracts may help identify its property and liability loss exposures and help determine who has assumed responsibility for which loss exposures**. It is often necessary to consult with legal experts when interpreting contracts.

Contract analysis can both identify the loss exposures generated or reduced by an organization’s contracts and ensure that the organization is not assuming liability that is disproportionate to its stake in the contract. Ongoing contact analysis is part of monitoring and maintaining a risk management program.

A contract can generate liability loss exposures in two ways.

* The organization can accept financial responsibility for another party’s losses through a contract, such as a hold-harmless agreement (also referred to as an indemnity agreement). Example, a manufacturer may enter into a hold-harmless agreement with a distributor that agrees to indemnify the distributor is the distributor is found liable for injuries caused by a defect in the manufacturer’s product.
* *If an organization breaches a valid contract*. Example; is a manufacturer agreed to deliver goods to a distributor and then fails to deliver those goods, the manufacturer has breached the contract and *the distributor is entitled to bring claim against the manufacturer*.

Alternatively, an organization can reduce or eliminate the financial consequences of its liability exposures by entering into a contract that transfers its liability to another organization. Example; an organization can enter into a hold-harmless agreement under which the other party agrees to indemnify the organization in the event of a liability claim.

**Insurance Policies**

**Analyzing insurance policies reveals many of the insurable loss exposures that an organization faces**. However, an organization does not necessarily face every loss exposure by its policies. Furthermore*, the organization may face many other loss exposures that either cannot be covered by insurance policies or are covered by policies the organization has chosen not to purchase.*

To identify insurance coverage that an organization has not purchased, and therefore potentially identify insurance loss exposures that have not been insured, a risk professional can compare his or her organization’s coverage against an industry checklist of policies currently in effect.

**Organizational Policies and Records**

**Loss exposures can be identified using organizational policies and records, such as corporate by-laws, board minutes, employee manuals, procedure manuals, mission statements, and risk management policies. Policy and procedure manuals may identify some of the organization’s property loss exposures by referencing equipment, or pinpoint liability loss exposures by referencing hazardous materials with which employees come into contact with.**

Some documents may indicate impending changes in loss exposures. For example, **the board minutes may indicate management’s plans to sell or purchase property, thereby either reducing or increasing its property loss exposures.**

One drawback to using policies and records to identify los exposures is the sheer volume of documents that some organizations generate internally. It may be virtually impossible to have one employee, or a group of employees examine every internal document. In these instances, insurance and risk management professionals would need to examine a representative sample of documents. This makes the task manageable but increases the likelihood that some exposures will be overlooked.

**Flowcharts and Organizational Charts**

**A flowchart is a diagram that depicts the sequence of activities performed by a particular organization or process. An organization can use flowcharts to show the nature and use of the resources involved in its operations as well as the sequence of and relationship between those operations**.

A manufactures flowchart might start with raw material acquisition and end with the finished product’s delivery to the ultimate customer. Individual entries on the flowchart, including the processes involved and the means by which products move from one process to the next, can help identify loss exposures – particularly critical loss exposures.

Example, every item produced must be spray-painted during the production process. This activity presents a critical property loss exposure, because an explosion at the spray-painting location might disable the entire production line. A simplified flow chart might reveal difficulties with getting furniture through customs at LA airport/Seaport that could disrupt the entire supply chain.

**Organizational chart depicts the hierarchy of an organization’s personnel and can help identify key personnel for whom the organization may have a personnel loss exposure. This chart can also help track the flow of information through an organization and identify bottlenecks that may exist**. Although organizational charts can be fundamental in properly identifying personnel loss exposures, an individual’s place on an organizational chart does not guarantee that he or she is a key employee. The organizational chart does not necessarily reflect the importance of the individual to the continued operation or profitability of the organization.

**Loss Histories**

**Loss history analysis, that is, reviewing an organization’s own losses or those suffered by comparable organizations, can help a risk professional to identify and analyze loss exposures**. Loss histories of comparable organizations are particularly helpful if the organization is too small or too new to have a sizeable record of its own past losses, or if the organization’s own historical loss records are incomplete

Any past loss can recur unless the organization has had a fundamental change in operations or property owed. Accordingly, loss histories are often an important indicator of an organization’s current or future loss exposures. However, loss histories will not identify any loss exposures that have not resulted in past losses.

**Compliance Review**

**A compliance review determines an organization’s compliance with local, state, and federal statutes and regulations**. The organization can conduct most of the compliance review itself if it has adequate in-house legal and accounting resources. Otherwise it may have to use outside experience.

*Compliance reviews can be expensive and time consuming*. Furthermore, because regulations are often changing, remaining in compliance requires ongoing monitoring. As a result, conducting a compliance review simply to identify loss exposures is often impractical. However, the cost of **compliance review can be justified by the possibility that monitoring and maintaining compliance can prevent significant losses that the organization would otherwise incur**.

**Inspections**

Some loss exposures are best identified by inspections, that is, information gathering visits to critical sites both within and outside an organization. Such visits often reveal loss exposures that would not appear in written descriptions of the organization’s operations and therefore should lead to a more complete list of loss exposures.

Inspections should ideally be conducted by individuals whose background and skills equip them to identify unexpected loss exposures. Additionally, the inspector should take the opportunity to discuss the particular operations with front-line personnel, who are often best placed to identify nonobvious loss exposures. An inspection can overlap the method discussed next – consultation.

**Consultation**

Thorough loss exposure identification includes consultations with employees inside the organization and expert practitioners outside the organization, to render a more complete and objective picture of the organization’s loss exposures.

While an inspection can only reveal what is happening during the inspection, a consultation or an interview can elicit information about what occurred before the inspection, what might be planned for the future, or what could go or has gone wrong that has not been properly addressed.

Interviews with employees can be conducted to gather information about their jobs and departments. Questionnaires can be designed for use in conjunction with these interviews to ensure that they are comprehensive and eliciting as much information as possible.

To obtain an external perspective, practitioners in fields such as law, finance, statistics, accounting, auditing, information technology, and risk management can be consulted. The special knowledge of experts in identifying particular loss exposures is an invaluable resource.

One area of specialization that often requires such expert services is hazard analysis (a method of analysis that identifies conditions that increase the frequency or severity of loss). Examples, concerns about environmental hazards might require a specialist to take air or water samples and a specialized laboratory to analyze them. Although hazard analysis is focused on loss exposures that have already been identified, the results of the analysis often identify previously overlooked loss exposures.