5 - Selecting Risk Financing Techniques

**1 – Risk Financing Goals**

**Objective**: Describe common risk financing goals for organizations

To manage its risk and maintain a tolerable level of uncertainty, an organization should pursue risk financing goals.

Risk financing goals must support both the organization’s risk management and financial goals. Determining how to achieve these goals. Determining how to achieve these goals leads to selection of the most appropriate risk financing techniques.

To achieve the financial goal of maximizing market value, most publicly traded organizations should pursue risk financing goals. Although their overall goals may differ, privately held and not-for-profit organizations should also do this). Organizations must choose the goals that best support their overall business goals.

**Pay for Negative Financial Consequences of an Event**

Risk financing makes funds available to pay for the negative consequences of an event, which can be sudden or gradual. An example of the latter is an organization that suffers a decline in customer loyalty. Rick financing, when though of in its broadest sense, can provide a source of funds to take action that offsets this decline. However, risk financing is usually related to offsetting the negative financial consequences of a sudden event, such as flood or earthquake.

Further, the availability of funds may be important when operations have been disrupted, such as when property must be replaced. Paying for the negative consequences of an event is also important from a public relations perspective. If an organization does not want to tarnish its reputation by not paying liability losses that result from legitimate 3rd party claims.

**Maintain Liquidity**

Liquid assets are essential to providing funds to meet or modify the negative financial consequences of events. A liquid asset can easily be converted into cash at its fair market value. Marketable securities are liquid because they can be sold in the stock or bond market. Some assets such as machinery and equipment, are not liquid because they would be difficult to sell quickly.

When an organization retains its financial risk, it must determine the amount of cash it needs to pay for the consequences of an event, as well as determine the timing of those cash payments. In deciding how to make financial resources available to pay for its retained risk**, an organization must consider its various sources of liquidity: the liquidity of its assets, the strength of its cash flows, its borrowing capacity, and (for a publicly traded organization) its ability to issue stock**.

The higher an organization’s retention, the greater its need for liquidity. Likewise, organizations that retain risk and experience greatly varying consequences – and therefore, greater uncertainty – also need substantial liquidity.

**Manage Uncertainty**

*Managing uncertainty is needed to achieve the main financial goal of most publicly traded organizations, which is to maximize market value by maximizing the present value of expected future cash flow. Future cash flow is a projection of the amount of cash that will flow into an organization in a given period less the amount of cash that will flow out of the organization during the same period.* The present value of the future cash flow is derived by calculation (called discounting) that accounts for the time value of money.

In theory, investors value a publicly traded organization by projecting the size of its future cash flow. To estimate the organization’s current market value, they use a discount rate to adjuster the expected cash flow to the present.

*The higher the uncertainty associated with future cash flow, the greater the discount rate. The greater the discount rate, the lower the present value of an organization’s cash flow and the lower the current market value that investors assign the organization. Therefore, increased uncertainty in an organization’s cash flow reduces the organization’s market value*.

Achieving the risk financing goal or managing the uncertainties of an organization’s cash flow and more can be challenging. *An organization often has difficulty determining the maximum level of uncertainty it can tolerate. To do so, it can apply a risk management process that has been integrated into an organization’s overall governance, strategy, reporting processes, values, and culture through a risk management framework. Risk management framework is a foundation for applying the risk management process throughout the organizatio*n.

**Comply with Legal and Regulatory Requirements**

Lega and regulatory requirements come from a variety of government entities. **The United States Securities and Exchange Commission (SEC) is an agency of the US Government that is responsible for enforcing federal securities laws such as Sarbanes-Oxley Act of 2002. Sarbanes-Oxley sets stringent standards for all US public company boards. Such standards include requirements that senior executives take personal responsibility for the accuracy and completeness of corporate financial reports by certifying and approving the integrity of their reports quarterly. Sarbanes-Oxley also modifies reporting requirements for financial transactions, including off balance sheet transactions, pro-forma figures, stock transactions of corporate officers, and timely notice of material changes in financial condition**.

Another example of legal and regulatory compliance in the US Concerns organizations that raise funds by issuing bonds. These organizations are legally required to purchase insurance. An organization may be subject to a covenant imposed by the bond purchasers that requires it to insure its property for a specific amount. The insurance laws of most states require organizations to purchase liability for their vehicles or, alternatively, to qualify as self-insurers.

Similarly, state workers compensation statutes require most employers to purchase workers compensation insurance or qualify as self-insurers.

**Minimize the Cost of Risk**

Cost of risk is a concept applied to hazard risk - that is, the possibility of accidental loss arising from property, liability, personnel, and net income loss exposures. Hazard risk contrasts with business risk (also called speculative risk), which present not only the possibility of loss but also the possibility of gain.

Managing the cost of risk involves minimizing the cost per unit of risk transferred and retaining when a sufficient return would result. The return from retaining the risk can be measured by the savings in risk transfer costs, assuming the organization has the option to transfer its risk.

**Although managing cost of risk is only one of the several risk financing goals, it is the primary measure used by many organizations to gauge the effectiveness of their risk management programs.** Likewise, cost of risk serves, at least in part, as a personal performance measure for many risk management professionals.

An organization usually seeks to minimize its cost of risk because any reduction in hazard risk expense increases its net income. The following expenses form part of the cost of risk, regardless of whether losses are retained or transferred:

* **Administrative expenses** – Administrative expenses include an organization’s cost of internal administration and purchased services such as claim administration and risk management consulting. Theses expenses also include any insurance premium taxes paid. An organization should incur administrative expenses to the extent necessary to properly mange its risk financing program. Often an organization can save administrative expenses by modifying procedures or eliminating unnecessary tasks, such as a firm with a loss retention program can save expenses by outsourcing the claim administration function.
* **Loss control expenses** – Loss control expenses are incurred to prevent losses or reduce the severity of losses that do occur. An organization can best analyze its loss control expenditures by conducting a cost-benefit analysis. Resources should be allotted to a loss control measure as long as the marginal benefit exceeds marginal cost. However, moral and ethical issues also influence the choice of taking loss control measures – such as equipping corporate vehicles with anti-lock brakes and side curtain air bags.
* **Retained losses** – Retained losses are a major part of an organization’s cost of risk. **When deciding whether to retain a loss, an organization can compare the projected cost of retaining the loss with the cost of transferring it.**  Retaining some types of losses that have significant delays in claim reporting and settlement offers an additional benefit. Such **losses, which include Liability claims, are known as long-tail losses. Long-tail losses are not paid to claimants immediately but instead are paid over time. Therefore, an organization can invest those amounts until losses are paid**. An organization **should measure the value of such deferred loss payments when analyzing the cost of its loss retention program. Deferring loss payments lowers the organization’s cost of risk. When deciding whether to retain or transfer its losses and organization should also take into account the value of the cash flow benefit from retaining losses. A premium paid to an insurer to transfer losses is usually due at the beginning of the policy period, whereas retained losses are paid at later dates, generating a cash flow benefit to the organization, and therefore, lowering its present value costs**.
* **Transfer costs** – Transfer costs are the amounts an organization pays to outside organizations to transfer loss consequences. In the context of hazard risk, transfer costs often include insurance premiums. In return for the premium, the insurer accepts the uncertainty of the cost of the insured’s covered losses and agrees to reimburse the insured for covered losses or to pay covered losses on the insured’s behalf. By minimizing its transfer costs, an organization can maximize the net present value of its cash flow. If can minimize its transfer costs by employing an effective insurance broker or negotiating directly with insurer and other organizations that agree to pay for its loss consequences.

Apply your knowledge: Frank is a risk manager for a real estate management company. He has been asked to study whether the company should invest in additional exterior lighting around the buildings it manages to prevent crime. How should Frank decide whether resources should be spent on the lighting?

Frank should know an organization can best analyze its loss control expenditures by conducting a cost-benefit analysis. Resources should be allotted to the loss control measures of adding exterior lighting as long as the marginal benefit exceeds marginal cost. Employees, tenants, and customers are likely to feel safer with the additional lighting, which could increase sales and net income. Employees may have few WC injuries as well, which would also increase net income. Fewer crime victims could result in fewer liability claims alleging the company should have installed better exterior lighting. Frank should also consider the loss control measure for humanitarian reasons: his employer may allocate resources to install the exterior lighting so that people re not victims of preventable crimes, regardless of the cost-benefit analysis.

**2 – Retention and Transfer**

**Objective**: Describe the following aspects of retention and transfer: Retention funding measures; Limitations on risk transfer measures; The advantages of both retention and transfer

While retention and transfer are separate risk management techniques, most risk financing measures involve both retention and transfer. Therefore, after setting risk financing goals, and individual or organization should determine the best mix of retention and transfer.

Determining this mix requires understanding how both retention and transfer operate, the advantages of each, and how each enables an individual or organization to meet risk financing goals. This information can be combined with consideration of the specific loss exposure characteristics, plus any characteristics specific to the individual or organization, to determine the most appropriate levels of retention and transfer.

**Retention and Transfer in the Same Risk Financing Measure**

Retention – losses are retained by generating funds within the organization to pay for the losses.

Transfer – the financial responsibility for losses and variability in cash flows is shifted to another party.

Because most of risk financing measures involve elements of both retention and transfer, the distinction between the two is eroding. Therefore, it is more appropriate to view pure retention and pure transfer as the extreme points on a continuum of risk financing measures, with almost all risk financing measures, including insurance, falling somewhere between the two extremes**. That is, most risk financing measures are risk sharing mechanisms, part retention and part transfer.**

An insurance policy has a deductible and a policy limit, the insured retains the deductible and losses that are over the policy limit, the insured transfers to the insurer losses that are above the deducible but below the policy limit.

**Retention**

Retention can be the most economical form of risk financing. However, it also exposes the individual or organization to the most cash flow uncertainty. Retention can be either planned or unplanned.

*Provided loss exposures have been adequately identified and analyzed (assessed), retention is an intentional form of risk financing and is also called planned retention.*  Planned retention allows the risk professional to choose the most appropriate retention funding measure.

*Unplanned retention occurs when either losses cannot be insured or otherwise transferred or an individual or organization fails to correctly identify or asses a loss exposure. In these two situations, retention becomes the risk financing method of last resort, which is why retention is often called the default risk financing technique. Unplanned retention can have a severe effect on risk financing goals and limits the choice of retention funding techniques*.

**Retention Funding Measures**

Retention funding measures rely on funds that originate within the organization. In order of increasing administrative complexity, these four planned retention funding measures are available to an organization:

**Current expensing of losses** – is the least formal funding measure (and therefore the least expensive to administer), but it also provides the least assurance that funds will be available, especially to pay for a major loss. **Current expensing relies on current cash flows to cover the cost of losses.** This strategy may be feasible for losses with a low expected value but becomes less advisable as the expected value of the loss increases. Generally, the larger the potential loss an organization wants to retain relative to its cash flows, the more formal and better funded the type of retention should be.

**Unfunded loss reserve – appears as an accounting entry denoting potential liability to pay for a loss.** Although this reserve recognizes in advance that the organization may suffer a loss, the organization does not support that potential for loss with any specific assets. A typical example of an unfunded loss reserve is the reserve for uncollectible accounts. Organizations establish this reserve based on an estimation of the portion of accounts receivable that will not be paid.

**Funded loss reserve – is supported with cash, securities, or other liquid assets allocated to meet the obligations that the reserve represents**. Example, a reserve for taxes payable at the end of the coming quarter is usually supported by cash to pay them when they become due. Funded loss reserves can be fairly informal, such as identifying assets that would be sold in the event of a loss, or highly complex transactions such as forming a captive insurer.

**Borrowing funds – an approach that indirectly uses an organization’s own resources to pay for losses and in time sues its own earnings to repay the loan**. The suffer a resulting reduction in their line of credit or ability to borrow for other purposes. This reduction ultimately depletes their resources. Consequently, the individuals and organizations are indirectly using their own resources to pay for losses and, in time, use their own earnings to repay the loan. In the short term, the external source of capital is paying for the loss. In the long term, however, the individuals and organizations pay the entire loss

**Advantages of Retention**

The advantages of using retention as a risk financing technique include: Cost savings; Control of Claims process; Timing of cash flows; Incentives for risk control

The primary advantage that retention offers is cost savings. Retention is typically the most economical risk financing alternative and can generate cost savings in several ways. Suppose that an organization is deciding whether to retain its commercial auto liability loss exposures or transfer them through a commercial auto policy. If the organization chooses to retain the risk, then it can save money by avoiding the costs that are often included in the insurance premiums:

* Administrative costs – underwriting, claims and investment cost incurred by the insurer as well as the additional amounts added to these costs in order to generate the profit needed by the insurer
* Premium taxes – taxes on insurance premiums imposed by many states
* Moral hazard costs – Costs that are often included in underwriting and claims to verify information submitted or claims filed (often included with administrative costs)
* Social loading costs – if the state funds a residual poo through which high-risk are able to purchase insurance that was unavailable, the insurers who sell insurance in the state will pass the costs of residual pool on to all insureds who have purchased policies
* Adverse selection costs - cost of being pooled with high risk policyholders. (this applies only to those that typically have losses below average losses)

In addition to cost savings, retention allows an organization to maintain control of the claims process. This control allows greater flexibility in investigating and negotiating claims settlements.

Another advantage of retention is the timing of cash flows. Most transfer measures require the individual or organization to make an up-front payment (premium). At some point after the loss occurs, the individual or organization is reimbursed by the other party.

Retention avoids the up-front payment and can shorten the delay between the time of the loss and the payment by the other party. It also allows the organization to maintain any use of the funds that would have otherwise been paid. These funds can either be used in day-to-day operations or invested to generate additional income.

Retention also has the advantage of being an incentive for risk control. When individuals or organizations pay for their own losses, they have a strong incentive to prevent and reduce those losses. This encourages risk control in order to maximize the reduction in loss frequency and loss severity. Not without consequences in terms of the cost of risk control measures, these efforts should ultimately reduce loss costs.

**Transfer**

The opposite of pure retention is pure transfer. A pure transfer shifts the responsibility for the entire loss from one party (transferor) to another party (transferee). Most, if not all, transfer arrangements contain limitations that prevent them from being regarded as pure transfers.

**Limitations on Risk Transfer Measures**

**The are two main limitations on risk transfer measures**

* **1st Risk transfer measures (including insurance) are not typically pure transfers but some combination of retention and transfer. Most, if not all, risk transfer measures involve some type of limitation on the potential loss amounts that are being transferred. These limitations can be deductibles, limits, or other restrictions so that the transferor pays at least some portion of the loss.**
* **2nd The ultimate responsibility for paying the loss remains with the transferor. Risk financing does not eliminate the transferor’s legal responsibility for the loss if the transferee fails to pay.**

The transferor is reliant on the good faith and financial strength of the transferee as well as on the judicial enforceability of the transfer agreement. The transferee might not pay because of lack of funds, a dispute about whether the loss falls within the transfer agreement’s scope or financial limits, or as a result of a successful court challenge to the agreement’s enforceability.

**Advantages of Transfer**

Despite the limitations, **there are significant advantage to using risk transfer measures as part of a risk financing program: Reducing exposure to large losses; Reducing cash flow uncertainty; Providing ancillary services; Avoiding adverse employee and public relations**.

**The principal advantage of risk transfer measures is that the reduce exposure to large losses.** Retaining large loss exposures increases the probability that the individual or organization will incur financial distress. Financial distress can have negative effects on relationships with suppliers and customers and may ultimately lead to bankruptcy**. Retaining large loss exposures also increases the probability that the individual or organization will need to either raise funds from external sources, such as stock or bond issue, or borrow funds, which can be costly.**

Risk transfer measures can help lessen cash flow uncertainty by reducing the effect of losses associated with retaining large loss exposures. **Many publicly traded organizations try to reduce uncertainty about cash flows and earning on those cash flows because investors dislike uncertainty about cash flows. Therefore, as well as achieving the risk financing goal or managing cash flow uncertainty, risk transfers can increase an organization’s attractiveness to investors and thereby potentially increase the overall value of the organization**.

Risk transfer has the advantage that **ancillary services can be included in the transfer arrangement; for example, insurers often offer risk assessment and control services as well as claims administration and litigation services. Being able to access these services can be a major factor in deciding to transfer some loss exposures.**

The level of efficiency and expertise that some organizations, such as insurers, have developed in these areas often make the risk transfer agreement very appealing to organization that cannot provide these services efficiently. Although it is possible to obtain these ancillary services outside of transfer arrangements through third-party providers, this can be expensive.

Finally, risk transfer can have the advantage of avoiding adverse employee and public relations because as well as transferring responsibility for the loss itself, the organization can transfer the responsibility for the claim administration process. Therefore, any issue with claims administration are less likely to harm the reputation of the organization and consequently are less likely to generate adverse employee and public relations.

Because most risk financing measures involve elements of both retention and transfer, selecting a risk financing measure involves determining how much of a particular loss exposure the individual or organization is willing to retain.

**3 – Selecting Appropriate Risk Financing Measures**

**Objective**: Explain how the following factors influence the ability of a risk financing measure to meet an individuals’ or organization’s risk financing goals: The mix of retention and transfer; Loss exposure characteristics; Characteristics of the individual or organization.

To select the appropriate risk financing measures to be used in a risk management program, an individual or organization needs to evaluate the relative advantages of all the available measures and consider the ability of each to meet the risk financing goals.

**Mix of Retention and Transfer**

An organization’s risk financing program needs to balance retention and transfer in light of the specific risk financing goals that the organization is trying to accomplish. This balance can be achieved through the appropriate mix of risk financing measures.

Some loss exposures may be fully retained, others mostly transferred, and the remainder addressed with risk financing measures that balance retention and transfer.

**Because retention can be the most economical risk financing measure, it enables an organization to meet its risk financing goal of minimizing the cost of risk***.* However, depending on the magnitude of the actual losses sustained, retention programs may have difficulty paying for losses

The ability to pay for the negative financial consequences of an event (or losses) depends on the structure of the retention measure implemented and the relative strength of the individual’s or organization’s cash flows. Example; if a loss exposure suffers a substantial loss that was retained, the ability to pay for the loss depends on whether the retention measure was pre-funded (such as funded reserve) or post-funded (such as cash flows or borrowing), how large the loss is relative to what was expected when the retention decision was made, and how large the loss is relative to cash flows or assets of the individual or organization.

Retention also generates the highest level of cash flow uncertainty and may threaten an organization’s liquidity level. Often, how an organization structures and manages retention determines how effective it is at achieving risk financing goals compared with transfer.

**Risk transfer measures typically offer the greatest certainty regarding the ability to pay losses, offer the greatest cash flow certainty, and are useful in preventing liquidity problems, but they may be costly to arrange.** Furthermore, some organization are required by statute or contractual obligation to transfer some loss exposures to insurers.

Example; mortgage lenders require insurance, these requirements add to the overall cost of transfer and therefore affect the benefit of transfer relative to retention.

**Ability of Retention and Transfer to Meet Risk Financing Goals**

|  |  |  |
| --- | --- | --- |
| **Risk Financing Goal** | **Retention** | **Transfer** |
| **Pay for Negative Financial Consequences of an event** | Depends on magnitude of losses and structure and management of retention measure, as well as the relative strength of cash flows | **Primary benefit of transfer measures** |
| Maintain Liquidity | Depends on magnitude of losses and structure and management of retention measure, as well as the relative strength of cash flows | Generally reduces the level of liquidity needed |
| Manage Uncertainty | Typically exposes the individual or organization to more variability in cash flows | Important benefit of transfer measures |
| Comply with Legal and Regulatory Requirements | Depends on structure and management of retention measure | Secondary benefit of transfer measures |
| **Minimize the Cost of Risk** | **Primary benefit of retention** | Rarely the most cost effective option |

**Loss Exposure Characteristics**

**The frequency and severity of losses associated with each loss exposure are vital to determining whether a loss exposure should be fully retained or whether some form of transfer is appropriate**.

|  |  |  |
| --- | --- | --- |
|  | **Low Frequency** | **High Frequency** |
| Low Severity | Retain | Retain |
| High Severity | Transfer | Avoid (if possible)  Retain (last resort) |

The high-frequency, high-severity quadrant covers losses that occur frequently and are severe. These loss exposures should be avoided. Neither retention nor transfer is adequate to handles these types of loss exposures. If risk control measures can be applied to reduce the frequency or severity of the losses (or both), the loss exposure can be reclassified into the appropriate quadrant to be re-evaluated in terms of risk financing options.

The exhibit indicates that **risk financing through retention is the appropriate technique for most loss exposures. It is only for loss exposures with low-frequency, high-severity losses that risk transfer measures are appropriate**.

**Characteristics of the Individual or Organization**

The optimal balance between retention and transfer varies for each individual or organization, depending on specific characteristics. Therefore, individuals and organizations will make different decisions in selecting the appropriate risk financing measures. Even if two organizations have the same set of loss exposures, difference between the organizations may result in vastly different selections. Specific characteristics that can affect the selection of appropriate risk financing measures include; Risk tolerance; Financial condition; Core operations; Ability to diversify; Ability to control losses; Ability to administer the retention plan.

**Risk Tolerance**

Individuals and organizations vary widely in their willingness to assume risk. A risk adverse organization may decide not to produce a product because of the high instance of associated product liability, whereas another organization may view that same product as a primary source of revenue.

The level of risk an organization is willing to assume directly affects its optimal balance between retention and transfer. All else being equal, **the higher an individual’s or organization’s willingness to accept risk, the higher the likelihood that more risk will be retained**.

**Financial Condition**

**The financial condition of the individual or organization has a significant effect on ability to retain risk. The more financially secure an individual or organization is, the more loss exposures can be retained without causing liquidity or cash flow problems**.

However, even financially secure individuals and organizations need to be careful. They may experience short-term liquidity problems if a significant loss has been retained and shore-term cash flow or liquid assets are not sufficient to cover the loss.

**Core Operations**

**An organization is often better able to retain the loss exposures directly related to its core operations because it has information advantage regarding those operations**. That is, the organization knows and understands its core operations and the loss exposures associated with them better than any outside party, including insurers. Because of this information advantage, an outside party would likely need higher compensation to enter into a transfer agreement.

**Ability to Diversify**

**If an organization can diversify its loss exposures**, similar to the way many individuals and organizations diversify their investment portfolios**, it can gain the advantage of offsetting losses that arise from one loss exposure with the absence of losses associate with the other loss exposures**. The organization is better able to accurately forecast future losses and therefore allow the organization to retain more loss exposures.

**Ability to Control Losses**

Because risk control reduces loss frequency and/or loss severity, **the more risk control an organization is able to undertake, the more loss exposures it is typically able to retain**. All else being equal, the reductions in frequency and/or severity make it more likely that an organization will have the ability to fund the retention of that particular loss exposure.

**Ability to Administer the Retention Plan**

**Risk retention requires more administration that risk transfer. Such administration may include claim administration, risk management consulting, or retention fund accounting. Organizations that have a better ability to fulfill these administrative requirements are able to use retention more efficiently.**

Determining the optimal balance between risk transfer and risk retention measures keeps the risk financing program aligned with the individual’s or organization’s overall risk management goals. For the portion of those loss exposures that an individual or organization decides to transfer, a variety of risk financing measures are available.

**4 – Using Guaranteed Cost Insurance**

**Objective**: Explain how guaranteed cost insurance operates and how effectively it meets risk financing goals.

**Guaranteed cost insurance, in which a specified premium is paid for predetermined amounts of coverage, is the type of insurance most people are familiar with.** And as a main risk financing measure used by organizations, it is one with which insurance and risk management professionals should be wholly familiar.

Guaranteed cost insurance operates by transferring the financial consequences of loss exposures from the insured to an insurer. However, it can be difficult to meet all of a large organization’s risk financing needs through a single insurance policy. By layering coverage, an organization can meet many of its risk financing goals.

**How Guaranteed Cost Insurance Operates**

**This section the term “guaranteed cost insurance” to refer to insurance policies in which the premium and limits are specified in advance. The premium is guaranteed in that it does not depend on the losses incurred during the coverage period**.

Designed to cover property, liability, personnel, and net income loss exposures from various causes of loss, guaranteed cost insurance policies have been widely offered by insurance industry for many years. Insurance is a funded risk transfer measure: the insurance buyer (insured) transfers the potential financial consequences of certain loss exposures to an insurer.

The insured pays the insurer a relatively small, established financial cost in the form of an insurance premium. In exchange, the insurer agrees to pay for all of the insured’s losses that are covered by the insurance policy, typically subject to a deductible and policy limit. The insurer also agrees to provide necessary services, such as claims handling and liability claim defense.

**Organization that have large loss exposures often have difficulty finding a single insurer that is willing or able to supply adequate guaranteed cost insurance coverage. These organization often purchase multiple guaranteed cost insurance policies as part of their overall insurance program, which is typically divided into two or more layers: a primary layer and one or more excess layers**.

The primary layer is also referred to as the working layer because it is the layer used most often to pay losses.

An excess layer can help insureds who want more coverage than is offered by the primary layer. Insurance policies issued to provide coverage in excess layers are often referred to as excess coverage.

In between primary and excess layers in an insurance program, an organization may use an umbrella policy. A buffer layer is used when the umbrella policy requires underlying coverage limits that are higher than those provided by the primary layer.

**Ability to Meet Risk Financing Goals**

Before using guaranteed cost insurance for risk financing, an organization should assess the extent to which such insurance meets the organization’s risk financing goals. *An additional benefit offered by guaranteed cost insurance is that a business can generally deduct insurance premiums for tax purposes*.

|  |  |
| --- | --- |
| **Risk Financing Goal** | **How Guarantee Cost Insurance Meets the Goal** |
| Pay for Negative Financial Consequences of Event | Insurance can meet this goal, provided the loss exposures are covered by the guaranteed cost insurance policies. |
| Maintain Liquidity | Insurance can meet this goal because the organization requires less liquidity with guaranteed cost insurance compared with retention or other risk financing measures. |
| Manage Uncertainty | Insurance can meet this goal because much of the uncertainty about future losses is transferred to the insurer. |
| **Comply with Legal & Regulatory Requirements** | **Insurance can meet this goal, especially regarding loss exposures that are required (by law or contractual obligation) to be transferred.** |
| Minimize the Cost of Risk | Insurance can meet this goal, but it is not ideal because insurance premiums are designed to cover not only expected losses, but also insurer administrative costs, adverse selection and moral hazard costs, premium taxes, and any social loadings. |

**5 – Using Self-Insurance**

**Objective**: Explain how self-insurance operates and how effectively it meets risk financing goals

Organizations that wish to employ their own system for retaining and paying losses may adopt self-insurance. Many organizations use self-insurance for loss exposures, such as workers compensation, that result in losses paid over a period of time.

Self-insurance – a form of retention under which an organization records its losses and maintains a formal system to pay for them - is a type of alternative risk transfer (ART) – those risk financing measures that do not fall into the category of guaranteed cost insurance. It can play an important part of an organization’s ability to meet its risk financing goals.

**How Self-Insurance Operates**

Self-insurance is a formal retention plan. In contract, an informal retention plan allows an organization to pay for its losses with its cash flow or current (liquid) assets, without any established payment procedures or method or recording losses.

**Self-Insurance is particularly well-suited for financing losses that are paid out over a period of time, thereby providing a cash flow benefit (compared with guaranteed cost insurance) to the organization retaining its losses. Accordingly, workers compensation, general liability, and automobile liability loss exposures are often self-insured because they have claim payouts that extend over time.**

Self-insurance is usually combined with transfer, such as an excess insurance policy that covers infrequent, high-severity losses. It is typically used to finance high-frequency losses because it is more efficient than filing numerous small claims with an insurer.

**To function effectively amid a large volume of claims transactions, self-insurance requires claims administrative services similar to those provided by an insurer**:

* **Recordkeeping** – needs a system to track its self-insured claims
* **Claims adjusting** – claims must be investigated, evaluated, negotiated, and paid
* **Loss reserving** – must determine reserve amounts needed for estimated future payments on self-insured losses that have occurred. The reserves can be funded or unfunded
* **Litigation management** – controlling the cost of legal expenses for claims that are litigates, such as evaluating and selecting DC, supervising them during litigation, and keeping records of their costs. It also involves techniques including auditing legal bills and experimenting with alternative fee-filling strategies.
* **Regulatory requirements** – most states, an organization must qualify as a self-insurer before it can self-insure workers comp or auto liability exposures. The qualification requirements specify items such as financial requirements; filing fees, taxes, and assessments that must be paid; excess coverage requirements; and periodic reports that the organization must submit to the regulatory body to qualify as self-insurer.
* **Excess insurance** – many state require a self-insurer to purchase excess insurance.

Ability of a Self-Insurance Plan to Meet Risk Financing Goals

|  |  |
| --- | --- |
| **Risk Financing Goal** | **How Ga Self-Insurance Plan Meets the Goal** |
| Pay for Negative Financial Consequences of Event | Self-Insurance can help meet this goal if an organization carefully chooses the loss retention level, purchases appropriate excess coverage, and has sufficient cash flow or liquid assets |
| **Maintain Liquidity** | **Self-insurance can help meet this goal if an organization chooses the loss retention level, purchases appropriate excess coverage, and accurately forecasts paid amounts for retained losses** |
| Manage Uncertainty | With self-insurance, retained loss outcomes are uncertain. The high the retention, the higher the degree of uncertainty of retained loss outcomes |
| Comply with Legal & Regulatory Requirements | A self-insurer must meet certain legal requirements. In most states an organization must qualify as a self-insurer for WC and Auto Liability |
| *Minimize the Cost of Risk* | *A self-insured organization must administer its own claims (either with its own staff or a third-party administrator) but can save insurer operating expenses, profits, and risk charges***. These significant savings are the primary benefits of self-insurance** |

**6 – Using Large Deductible Plans**

**Objective**: Explain how large deductible plans operate and how effectively it meets risk financing goals

**Large deductible plans – a rating plan whereby the insured assumes a substantial per accident or per occurrence deductible, generally ranging from $100,000 up to $1M.**

For organizations that are able to retain financial consequences of loss up to or in excess of $100K per occurrence, large deductible plans can be ideal. In return for a large deductible, an organization receives a lower premium (avoiding a potentially unaffordable ne for certain loss exposures) and still benefits from the insurer’s claims handling and other services.

Similar to self-insurance, large deductible plans are more common for certain loss exposures than others. Before adopting a large deductible plan, organization should carefully consider whether they can guarantee the payment of losses under the deductible amount and how the plan will address their risk financing goals.

**How Large Deductible Plans Operate**

Both self-insurance and large deductible plans are common for workers compensation, auto liability and general liability policies. **A large deductible plan is similar to a self-insurance plan combined with excess coverage insurance in that it exposes the organization to a relatively large amount of loss. In exchange for this exposure, the insurer provide a premium reduction relative to guaranteed cost insurance.**

**A key difference between self-insurance and large deductible plans is that with self-insurance, the insured is responsible for adjusting and paying its own losses up to the attachment point of the excess coverage insurance. Under a large deductible plan, the insurer adjusts and pays all claims, event those below the deductible level. The insurer then seeks reimbursement from the insured for those claims that fall below the deductible**. In effect, the insurer is guaranteeing the payment of all claims. The insured usually must provide the insurer with a form of financial security (such as a letter of credit) to guarantee payment of covered losses up to the deductible.

**Ability to Meet Risk Financing Goals**

Before adopting a large deductible plan, an organization should evaluate the plan’s ability to meet the organization’s risk financing goals.

|  |  |
| --- | --- |
| **Risk Financing Goal** | **How a Large Deductible Plan Meets the Goal** |
| Pay for Negative Financial Consequences of Event | The plan meets this goal because the insurer pays for losses as they become due, including losses less than the deductible for which the insured eventually reimburses the insurer. |
| Maintain Liquidity | The plan meets this goal because the liquidity is maintained if the deductible level is carefully selected. The liquidity needed is lower with a large deductible plan than with retention, but higher than the liquidity needed with guaranteed cost insurance |
| Manage Uncertainty | The plan meets this goal because the organization can effectively manage cash flow uncertainty if the deductible amount is chosen carefully. The plan will meet this goal better than self-insurance but not as well as guaranteed cost insurance |
| Comply with Legal & Regulatory Requirements | The plan meets this goal because it can meet legal requirements for purchasing insurance because and insurer issues a policy guaranteeing that all covered claims will be paid |
| **Minimize the Cost of Risk** | The plan may meet this goal because the insurer administers the claims process, even for the small claims the insured has retained. **The plan will meets this goal better than guaranteed cost insurance but not as well as retention plans**. |

**7 – Using Captive Insurers**

**Objective**: Explain how captive insurers operate and how effectively they meet risk financing goals

Organizations that are willing to retain a significant share of their own losses in exchange for greater flexibility often for their own insurer, called a captive insurer, or captive. Specifically, insurance professionals and organizations can familiarize themselves with the following considerations.

**Single-Parent Versus Group Captives**

**A Captive insurer, or captive (a subsidiary formed to insure the loss exposures of its parent company and the parent’s affiliates**), can be owned by a single parent or multiple parents. **Single-parent captives, also called pure captives, typically operate as a formalized retention plan and only provide insurance coverage for their parent or sibling organizations, known as affiliated business.**

**A captive owned by multiple parents is called a group captive. Group captives typically operate as formalized pools in which several organizations group together to share the financial consequences associated with their collective loss exposures. Because of the sharing of loss exposures with other parents, group captives act more like transfer measures**.

If a significant portion of the captive’s revenues are generated by underwriting loss exposure from unrelated, third-party organizations (unaffiliated business), captive operate much more as a transfer measure than as a retention measure. Captives also have the potential to transfer the financial consequences of some of the insured loss exposure to other insurers through a variety of arrangements, including reinsurance.

**How Captive insurers Operate**

**A captive requires an investment of capital by its parent(s) to pay losses an manage its accounting, auditing, legal, and underwriting expenses. Just as any other insurer does, a captive collects premiums, issues policies, invests assets, and pays covered losses. Over 7,000 captive insurers operate worldwide, with many large organizations using one or more captives to finance their loss exposures**.

Deciding how a captive will operate involves these considerations;

* What type of loss exposures the captive will insure
* Where the captive will be domiciled
* Whether the captive will accept unaffiliated business

**Similar to self-insurance, captives are commonly used to cover loss exposures that substantially drain the cash flow, such as work comp, general liability, and auto liability.** An advantage to covering these types of losses through a captive is that the captive can earn investment income on the substantial loss reserves necessary for these exposures.

**Captives are also used to cover property loss exposures that are difficult to insure in the primary insurance market, as well as loss exposures that fall under specialized types of business, such as products liability and environmental liability**.

The decision about types of loss exposures covered by the captive is often made before the captive’s formation. In such cases, the captive is specifically formed to handle particular exposure for the parent. Once in operation, may captive expand their operations to manage a wider variety of loss exposures.

Many jurisdictions, known as domiciles, encourage captives to locate within their territories by offering favorable regulations and low (or no) taxes. These domiciles see captive insurance as an industry that boosts their economies by providing employment income, such as annual registration fees. Examples; Barbados, Bermuda, Dublin, Isle of Man, Guernsey, Singapore, and the Cayman Islands. In the US – Colorado, Hawaii, Tennessee and Vermont.

Although a captive insurer can be domiciled anywhere in the world, most organizations choose a domicile that is favorable toward the formation and operation of captives. Corporate governance concerns about transparency of financial transactions have increased the appeal of onshore captive domiciles and offshore domiciles.

When selecting the domicile for a captive, the captive’s parent should consider these factors:

* Initial capital requirements, taxes, and annual fees
* Reputation and regulatory environment
* Premium and investment restrictions
* Support of infrastructure in terms of accountants, bankers, lawyers, captive managers, and other 3rd party service providers within the domicile.

*Some organizations operate a captive not only to underwrite their own loss exposures but also to insure third-party business – that is, business that is not directly related to the captive’s parent ad affiliates.* Some organizations use their captives in this way to enable them to operate in the insurance business. Others have found a benefit to writing third-party business over which they have some control, such as warranties on the products they sell.

*There are several considerations when deciding whether to insure third-party business. For Example; many domiciles have different capital and regulatory requirements for captives that are involved in such business. There requirements are much more restrictive than those for captive that are writing only affiliated business. Furthermore, writing third-party business may require additional actuarial, underwriting, and marketing expertise that the captive does not currently offer. Finally, insuring third-party business adds risk to the captive resulting from the possibility of adverse results from that business*.

**Special Types of Group Captives**

In addition to the single-parent and group captive structures, there are several special type of group captives. These are the most common ones:

* Risk Retention Group (RRG) – a group captive formed under the requirements of the Liability Risk Retention Act of 1986 to insure the parent organizations)
* Rent-A-Captive – an arrangement under which an organization rents capital from a captive, to which it pays premiums and receives reimbursement for its losses
* Protected Cell Company (PCC) – a corporate entity separated into cells so that each participating company owns an entire cell but only a portion of the overall company

The liability Risk Retention Act allows the formation or RRGs to provide liability coverage other than personal insurance, workers compensation and employers liability. RRGs were formed in response to the lack of liability insurance coverage available in the insurance markets during the mind 1980s.

A rent a captive arrangement allows an organization to use a captive without supplying its own capital to establish such a company. Each insured keeps its own premium and loss account, so not risk transfer occurs among members. However, unlike a PCC structure, no statutory separation of capital and assets exists in a rent-a-captive structure. Because of this, the capital rented by the insured in a rent-a-captive structure could be diminished by losses of another insured in the structure.

A PCC is otherwise similar to a rent-a-captive. An organization pays premiums to the PCC and receives reimbursement for its losses while also receiving credit for underwriting profit and investment income.

As with a rent-a captive, each organization keeps its own premiums and loss account in a separate cell from those of other members. Because the PCC is required by statute to be separated into cells, each member is assured that other members and third parties cannot access its assets in the event that any of those members become insolvent. This protection is not necessarily provided by a rent-a-captive.

**Ability to Meet Risk Financing Goals**

Before forming a captive, an organization should evaluate the captive insurer plans’ ability to meet the organization’s risk financing goals

|  |  |
| --- | --- |
| **Risk Financing Goal** | **How a Captive Plan Meets the Goal** |
| Pay for Negative Financial Consequences of Event | The Captive can meet this goal if properly capitalized and managed |
| Maintain Liquidity | The Captive can meet this goal if it is properly capitalized |
| Manage Uncertainty | The Captive can meet this goal by charging level premiums to the parent and affiliates and by retaining earning in the years with lower losses to pay for higher losses in the other years. |
| Comply with Legal & Regulatory Requirements | The Captive can be structured to meet all legal requirements, although captives are rarely licensed to operate as a primary insurer in the US |
| **Minimize the Cost of Risk** | **The Captive can reduce an organization’s costs over time if properly funded and managed, despite large start-up costs.** |

**8 – Using Finite Risk Insurance Plans**

**Objective**: Explain how finite risk insurance plans operate and how effectively they meet risk financing goals

A finite risk insurance plan is often used for especially hazardous loss exposures (such as those leading to environmental liability and earthquake damage) for which insurance capacity is limited or unavailable.

To fully understand this form of alternative risk transfer (ART), risk professionals need to be familiar with the advantages and disadvantages of how a finite risk insurance plan operates and its ability to meet organization’s risk financing goals.

**How Finite Risk Insurance Plans Operate**

Finite Risk Insurance Plan – a risk financing plan that transfers a limited (finite) amount of risk to an insurer.

**Finite risk insurance differs from guaranteed cost insurance in that a large part of the insured’s premium under a finite risk insurance agreement creates a fund (experience fund) for the insured’s own losses. The remaining amount of the premium is used to transfer a limited portion of risk of loss to the insurer. The insurer under a finite risk insurance plan usually shares with the insured a large percentage of its profit from the plan**.

Unlike a guaranteed cost insurance policy, the premium for a finite risk insurance plan is a very high percentage of the policy limits. Example, an insurer might provide a limit of $10M for a $7M premium. The insurer’s risk is limited because the most it would ever have to pay is $10M, and it has the opportunity to earn investment income on the $7M premium until losses are paid. By charging a substantial premium for the risk and applying a relatively low policy limit, the insurer has only a small chance that its losses and expenses will exceed its premium and earned investment income.

**As with most ART measures, finite risk insurance combines many of the advantages of both risk retention and risk transfer. An insured that can control its losses receives profit sharing, including investment income, on the cash flow of the experience fund. In addition, the insured is protected by a limited amount of risk transfer in the event that losses are much higher than expected**.

A finite risk plan often enables an insured to obtain higher limits than it could get using guaranteed cost insurance. Underwriters are willing to provide the higher limits because premiums and limits are combined over several years under a single plan. In addition, by using finite risk plan, an insured can certify to third parties that it has insurance that might not otherwise be available.

**Ability to Meet Risk Financing Goals**

|  |  |
| --- | --- |
| **Risk Financing Goal** | **How a Finite Risk Plan Meets the Goal** |
| Pay for Negative Financial Consequences of Event | The plan can meet this goal because the insurer pays for losses as they become due. However, because of the limited risk transfer, the insured ultimately pays for almost all of its own losses |
| Maintain Liquidity | The plan cannot meet this goal because premium payments are usually paid upfront |
| Manage Uncertainty | The plan can meet this goal because cash flows are smoothed over multiple periods; however, large premiums may be due at outset. |
| Comply with Legal & Regulatory Requirements | This plan can meet this goal because the insurer issues a policy guaranteeing that all covered claims will be paid |
| Minimize the Cost of Risk | The plan can meet this goal because the profit-sharing feature encourages and rewards successful risk control efforts and thereby reduces an organization’s cost of risk |

**9 – Using Pools**

**Objective**: Explain how pools operate and how effectively they meet risk financing goals

**Participating in a pool can be a cost-effective alternative to guaranteed cost insurance for organizations. Pools are particularly common for workers compensation loss exposures, and the pool will process and pay workers compensation claims on behalf of its member organizations**.

**How Pools Operate**

**A pool is made of up member organizations. Each insured member of the pool contributes premium based on its loss exposures. In exchange, the pool pays for each insured’s covered losses**. In some pools, the member also contribute capital.

Pools can be arranged in a variety of ways, including as a stock insurer or as a not-for-profit unincorporated association governed by its members. However, the structure of most pools is less formal than the structure of a group or captive.

A pool operates like an insurer by collecting premiums, paying losses, purchasing excess insurance or reinsurance, and providing other services such as risk control consulting. Pools can be formed to cover various types of loss exposures and are well-suited for organizations that are too small to use a captive insurer.

In the US, WC pools are common and permitted in most states. The individual states regulate the formation and operation of these pools. Public entities are commonly members of workers compensation pools.

**Pools achieve saving through economies of scale in administration, claims handling, and the purchase of excess insurance or reinsurance. Each pool member might realize a savings in premium compared with guaranteed cost insurance, yet still benefit from risk sharing with the other pool members. A suitably designed pool can reduce an organization’s cost of risk and keep cost uncertainty associated with retained losses at a tolerable level.**

**Ability to Meet Risk Financing Goals**

|  |  |
| --- | --- |
| **Risk Financing Goal** | **How a Pool Meets the Goal** |
| Pay for Negative Financial Consequences of Event | A pool can meet this goal because there is risk sharing with other members of the pool. However, ultimately, the pool must pay for its own losses |
| Maintain Liquidity | A pool can meet this goal if adequately funded and managed, reducing and organization’s necessary level of liquidity |
| **Manage Uncertainty** | **A pool can meet this goal through risk sharing with other members. *This risk sharing can be a major benefit of a pool if it has enough loss exposures to benefit from the law of large numbers*** |
| Comply with Legal & Regulatory Requirements | A pool can meet this goal if organized and managed within state regulations |
| **Minimize the Cost of Risk** | **A pool can meet this goal through economies of scale in administration** |

**10 – Using Retrospective Rating Plans**

**Objective**: Explain how retrospective rating plans operate and how effectively the meet risk financing goals

Retrospective rating plans provide an opportunity for organizations to receive a lower premium when they do not experience as many losses as anticipated. This provides an incentive for organizations to prevent and control losses. However, it also requires them to pay additional premium if their actual losses exceed expected losses.

Several aspects of a retrospective rating plan’s operation should be considered, including optional loss limits, minimum and maximum premiums, administration, and the overall benefits.

**How Retrospective Rating Plans Operate**

Retrospective rating plan – a rating plan that adjusts the insured’s premium for the current policy period based on the insured’s loss experience during the current period; paid losses or incurred losses may be used to determine loss experience.

A retrospective rating plan is a type of risk financing plan. Under it, an organization buys insurance subject to a rating plan that adjusts the premium rate after the end of the policy period based on a portion of the insured’s actual losses during the policy period.

*Comparison of Retrospective Rating and Experience Rating Plans*

*Retrospective rating is frequently confused with experience rating because both consider the insured’s loss experience.* ***Experience rating adjusts the premium for the current policy period to recognize the loss experience of the insured during past policy periods. In contrast, retrospective rating adjusts the premium for the current policy period to recognize the insured’s loss experience during the current policy period****.*

Retrospective rating plans are used to finance low-to-medium-severity losses and are generally combined with other risk financing plans (such as excess liability insurance) to cover high-severity losses. An organization must have a substantial insurance premium, usually amounting to several hundred thousand dollars per year, to benefit from a retrospective rating plan.

At its inception, a retrospective rating plan appears to operate in the same way as a guaranteed cost insurance plan. The insured pays a premium (the deposit premium) at the beginning of the policy period, and the insurer issues an insurance policy and agrees to pay covered losses up to the policy limit. However, in a retrospective rating plan, the insured’s losses during the policy period are considered in calculating a major portion of the premium.

The insurer (using a rating formula agreed on at policy inception) adjusts the premium after the end of the policy period to include a portion of the insured’s covered losses that occurred during the policy period. If the premium due is more than the original deposit premium, the insurer will collect additional premium from the insured.

I the premium due is less than the deposit premium, the insurer will issue a refund to the insured. Because the premium is adjusted upward or downward based directly on a portion of covered losses, the insured is, in effect, retaining a portion of its own losses.

Organizations commonly use retrospective rating plans for losses covered by their workers compensation, auto liability, and general liability policies. The also use retrospective rating plans to finance auto physical damage and crime losses.

**Loss Limit**

Retrospective rating plan premiums may be calculated using a loss limit. The loss limit can vary and is negotiated by the insurer and the insured. For example, **the loss limit under a retrospective plan might be $100,000 per occurrence. In this case the first $100,000 of each covered loss occurrence is included in the retrospective premium, and the amount of each loss occurrence that exceeds $100,000 and is less than the policy limit is transferred to the insurer**.

**Minimum and Maximum Premiums**

The adjusted premium under a retrospective rating plan is subject to a minimum and maximum amount, called the minimum premium and maximum premium, respectively. Example, *a retrospective plan might have a minimum premium of $200,00 and a maximum premium of $1M. If the insured experiences no losses during the policy period, the minimum premium of $200,000 still applies. If during the policy period, the insured experiences a total of $1.4M in losses subject to the policy loss limit, the premium is limited to the max premium of $1m*.

*Because the premium for a retrospective rating plan includes a portion of the insured’s covered losses during the policy period and is subject to a maximum and minimum amounts, an insured retains a portion of its losses. If an insured incurs high-than-average losses during a policy period, the final adjuster premium under a retrospective rating plan is higher than the premium that the insured would pay under a guaranteed cost insurance plan to cover the same losses*.

The opposite is true if losses are lower than average. The portion of losses not retained is transferred to the insurer, which is compensated through risk transfer premium charges that are built into the retrospective rating plan premium. The retrospective rating plan premium also includes charges for other component, such as residual market loadings, premium taxes, and insurer overhead and profit. Such charges are also found in guaranteed cost insurance policies.

**Administration**

***Retrospective rating plan require only a moderate amount of administration by the insured***. The insured’s responsibility is limited to making premium payments and arranging for any required security, such as a letter of credit, to guarantee future payments. The insurer is responsible for many of the administrative tasks, such as claims adjusting, making necessary filings with the states, and paying applicable premium taxes and fees. Because a portion of the premium includes the insured’s covered losses, the insured should periodically audit the insurer’s claims handling, loss payment, and loss reserving practices.

**Benefits of Retrospective Rating Plans**

**An organization can save certain expenses by retaining a portion of losses under a retrospective rating plan instead of transferring all losses under a guaranteed cost insurance plan. *One significant expense saved is insurer risk charges***, which are charges that an insurer includes as part of its risk transfer premium to cover the chance that losses will be higher than expected.

**Retrospective rating plans encourage risk control**. *With a retrospective rating plan, an organization that is able to prevent and/or reduce its losses quickly realizes a premium savings compared with what it would pay under a guaranteed cost insurance plan. This direct link between losses and premium is a major incentive for an insured to control its losses.*

**If designed correctly, a retrospective rating plan also provides financial stability.** *If the loss limit and the maximum premium are set so as to reduce the uncertainty of the insured’s premium adjustments to a level that it can tolerate, then the insured benefits from the relative stability that the retrospective rating plan provides for its earnings, net worth, and cash flow.* If the plan covers more than one type of loss exposure, then the insured also benefits from the stability provided through diversification by retaining losses from different types of loss exposures under a single plan.

**Ability to Meet Risk Financing Goals**

|  |  |
| --- | --- |
| **Risk Financing Goal** | **How a Retrospective Plan Meets the Goal** |
| Pay for Negative Financial Consequences of Event | The plan can meet this goal because, as with any insurance plan, the insurer pays for losses as they become due |
| Maintain Liquidity | The plan can meet this goal if the loss limit and the maximum premium are chosen carefully |
| **Manage Uncertainty** | **The plan can meet this goal because it helps manage some cash flow uncertainty, but because of the retrospective nature of the premium, some cash flow uncertainty remains** |
| Comply with Legal & Regulatory Requirements | The plan can meet this goal because the insurer issues a policy guaranteeing that all covered claims will be paid |
| Minimize the Cost of Risk | The plan can meet this goal because it includes a significant amount of retention and can reduce an organization’s cost of risk over the long run |

**11 – Using Hold-Harmless Agreements**

**Objective**: Explain how hold-harmless agreement operate and how effectively they meet risk financing goals

**Business often use hold-harmless agreements to transfer the financial consequences of risk to another that is not an insurer. They are commonly included in various types of contracts or agreements, such as construction contracts, maintenance contracts, rental and lease agreements, purchase orders, and sales agreements**.

**How Hold-Harmless Agreements Operate**

**Hold-harmless agreements are a noninsurance risk transfer measure**. A hold-harmless agreement can be a stand-alone contract or a clause within a contract. Example, “to the fullest extent permitted by law, the lessee shall indemnify, defend, and hold harmless the lessor, or agents, and employees of the lessor from and against all claims arising out of or resulting from the leased premises”

Hold-harmless agreements are commonly used to assign responsibility for losses arising out of a particular relationship or activity. It is common for manufacturers to enter into hold-harmless agreement with distributors whereby the manufacture agrees to assume the liability losses the distributor suffers as a result of distributing the manufactures products. This type of hold-harmless agreement is a risk financing measure that transfer the financial responsibility for liability losses from the distributor to the manufacture.

**The party that uses a hold-harmless agreement to transfer the financial consequences of loss to another party is commonly referred to as the indemnitee, and the other party, which agrees to indemnify the indemnitee is referred to as the indemnitor**. To increase the likelihood that the indemnitor will have the financial resources to perform its duty to indemnify, the contract or agreement may require the indemnitor to demonstrate proof of financial responsibility, such as a certificate of insurance showing that the indemnitor has a specified amount of insurance that will cover the liability assumed under the hold-harmless agreement.

Ability to Meet Risk Financing Goals

|  |  |
| --- | --- |
| **Risk Financing Goal** | **How a Hold-Harmless Agreement Meets the Goal** |
| **Pay for Negative Financial Consequences of Event** | **The agreement can meet this goal provided loss exposures are covered by the agreement and the other party has the financial ability to pay losses subject to the agreement** |
| **Maintain Liquidity** | **The agreement can meet this goal because the organization requires less liquidity with a hold-harmless agreement compared with retention or other alternative risk transfer measures** |
| Manage Uncertainty | The agreement can meet this goal subject to the extent of the agreement |
| Comply with Legal & Regulatory Requirements | The agreement can meet this goal, especially regarding loss exposures that are required (by law or contractual obligation) to be transferred |
| Minimize the Cost of Risk | The agreement can meet this goal subject to any other contractual demands the other party requires before accepting the hold-harmless agreement |

**12 – Using Capital Market Solutions**

**Objective**: Explain how these capital marketing solutions operate and how effectively they meet risk financing goals: Securitization; Hedging; Contingent Capital Arrangements

In a capital market, bonds and other financial assets with a maturity of more than one year are bought and sold. Innovative approaches to risk financing have used capital market solutions as additional alternative risk transfer measures.

Because these capital market solutions involve significant time and expense to implement, only a few large organizations (including insurers and reinsurers) have used them to finance risk. However, these products can be used to finance any type of insurable risk.

**How Securitization Operates**

Securitization is the process of creating a marketable investment security based on a financial transaction’s expected cash flows.

**An organization can use securitization to exchange income producing assets for cash provided by the purchaser of the security**. Example, a bank might securitize its mortgage receivables and sell them through an intermediary (called a special purpose vehicle, or SPV) to investors

1.) the bank lends money to purchase real property

2.) the mortgagors make a promise to repay the mortgage, these are receivables to the bank

3.) the bank, through an SPV, may sell a mortgage backed security to investors

4.) the bank collects from the investors and transfers the mortgage to the investors.

In this type of transaction, the bank is no longer exposed to any risk of non-payment of the mortgagors. The risk has been transferred from the bank to the investors through the mortgage backed securities. These securities appeal to investors when they offer a sufficiently attractive return for the perceived risk of nonpayment by the mortgagor. The bank exchanges one asset for another. It sells its mortgage receivables, which are subject to the possibility of default and other risk, and it receives the investors’ money in exchange. Through securitization, risk inherent in the mortgage receivables is transferred from the bank to the investors.

Insurance securitization is a unique form of securitization. The cash flows that arise from the transfer of insurable risks are similar to premium and loss payment under an insurance policy. It is the process of creating a marketable insurance-linked security based on the cash flows that arise from the transfer of insurable risks.

*The most common insurance securitizations are catastrophe bonds*. Insurers or reinsurers sell insurance policies that cover losses related to natural catastrophes. For example Hurricanes, because of the catastrophic nature of these loss exposures, insurers and reinsurers may have difficulty using pooling and the law of large numbers to adequately mitigate the catastrophic risk. One solution is to transfer that risk to the capital markets where investors holding diversified portfolios have a larger poos of assets to absorb catastrophic losses.

Similar to mortgaged backed securities, insurers and reinsurers can purchase insurance from an SPV, which will use premiums to sell catastrophe bonds to investors. Investors, in turn, pay the principal to the SPV.

At the end of the bond term (typically one – three years) provided no covered catastrophe has occurred, an investor receives both the principal an interest payment from the SPV. If a catastrophe did occur, the investor receives less in return.

Depending on the terms of the bond issued, the investor may receive only the principal with no interest or income, or only a portion of the principal. The premiums paid by the insurer are used by the SPV to offset the cost of the bond issue and to cover any interest payments (payment to the investor) promised by the bond.

The payoff on catastrophe bonds is linked to the occurrences of major catastrophes during the bonds term. The investor assumes the risk that a hurricane might occur during the bond’s term in exchange for a higher rate of return that may be offered by a US Treasury Bond or a corporate bond.

If a hurricane does occur and causes losses that exceed a specified dollar threshold, the investor’s return on the bond is reduced. If total property losses are high enough to trigger a reduced return on the bond, either the investor’s interest income or the interest income and principal repayments on the bond may be lowered, depending on the terms of the bond and the extent of the losses.

*The SPV uses the savings in the interest and principal repayments to pay cash to the issuing insurer or reinsurer, which uses the cash to offset its hurricane losses****. Through the process of insurance securitization, the risk of loss caused by hurricane has been securitized by linking it with the returns provided to investors in a marketable security*.**

Securitization passes on to investors some of the catastrophe risk that an insurer has accumulated through its insurance policies, thereby reducing the insurer’s overall risk. From the investor’s perspective, insurance linked securities help diversity the investor’s portfolio because the insurable risk embedded in insurance linked securities is not closely correlated with risk normally involved in investments.

**How Hedging Operates**

Hedging – a financial transaction in which one asset is held to offset the risk associated with another asset.

To deal with the consequences of risk to which it is exposed, an organization can use hedging. One asset – often a contract, such as an option or futures contract – is held to offset the risk of another asset. **Hedging as a risk financing measure is well suited to business risk created by price changes.**

Commodities (such as energy, metal, or agricultural), foreign exchange rates or currencies, and interest rates are all frequently hedged. The risk transferred is the exposure to loss from declines or increases in an asset’s market price. The asset concerned is one that the hedging party hold for an extend period as a normal part of doing business.

Example, if a manufacturer knows that it is going to require a substantial quantity of oil to support its manufacturing activities. ***If it is concerned about the volatility in oil prices, it can hedge against changes*** in oil prices by entering into a contract to but the oil at a certain price and time at some point in the future. This type of hedging of speculative business risk allows an organization to protect itself against possible price-level losses by sacrificing potential price level gains.

*Any price or other financial value that is uncertain in the future and that can be objectively measured, such as a stock market index, common stock price, commodity price, or consumer or industrial price index, can be the basis for a hedge. Those prices or financial values are called underlying assets. The hedging contracts that are based on those underlying assets are called derivatives*.

For the derivative contract to be a successful hedging contract, two parties must be willing to hedge the underlying asset. There are several exchanges in which derivative contracts are traded that are easily accessible by organizations seeking to hedge.

**One advantage of hedging is that hedging against possible net income losses from price changes can reduce an organization’s business risk loss exposures. Consequently, an organization that uses hedging has a greater capacity to bear both business risk and hazard risks while also reducing its dependence on traditional financial and insurance markets for its risk transfer needs**.

**A disadvantage of hedging is that it can destabilize not only an organization’s general risk financing plans but also its entire financial structure. If an organization’s retained earnings or capital is seriously jeopardized by unwise speculative investments in hedging instruments, the earning or capital may no longer reliably pay for retained losses. Consequently, the financial security that they provide could be greatly impaired**. The goal of reducing an organization’s cost of risk for losses by generating high returns for loss reserves must be balances against the goal of ensuring that funds will be available when needed to pay for losses.

*Finally, the value of the derivative contract might not correspond exactly with organization’s losses. As hedging contracts are based on some general measure or index, if the general measure or index does not provide a payout that is highly correlated with an organization’s losses, the risk financing measure does not provide the needed protection*.

**How Contingent Capital Arrangements Operate**

**In a contingent capital arrangement, an organization pays a capital commitment fee to a party that agrees in advance to purchase the debt or equity after a loss, thereby allowing the organization to raise cash. The organization does not transfer tis risk of loss to investors. Instead, it receives a capital injection in the form of a debt equity after a loss occurs to help it pay for the loss. Because the terms are agreed to in advance, the organization generally receives more favorable terms than it would receive if it were to try to raise capital after a large loss, when it is likely to be in a weakened capital condition**.

Example, a publicly traded company may have a capital arrangement with an investment bank that requires the bank to purchase a specified number of manufactures shares at a predetermined price if the manufacturer suffers a significant loss.

The manufacturer pays the investment bank a fee at the beginning of the agreement. If the loss occurs, the investment bank purchases the shares at the predetermined price, providing the manufacturer with the capital necessary to rebuild. If no loss occurs, the agreement expires without any stock sale occurring. Similar agreements with bonds issues have also been structured.

|  |  |
| --- | --- |
| **Risk Financing Goal** | **How Capital Market Solutions Meets the Goal** |
| Pay for Negative Financial Consequences of Event | They can meet this goal because of some of the financial consequences of the losses are transferred to investors |
| Maintain Liquidity | They can meet this goal because capital market solutions can reduce the necessary level of liquidity that an organization needs to maintain |
| **Manage Uncertainty** | **They can meet this goal because some of the financial consequences of the losses are transferred to investors** |
| Comply with Legal & Regulatory Requirements | They can meet this goal if correctly structured |
| **Minimize the Cost of Risk** | **They cannot typically meet this goal**. Capital market solutions are expensive relative to other risk financing measures. |