Accounting and Tax Aspects of Risk Financing Techniques
Ronald Wilhelm
University Community

Every organization is faced with the possibility of a financial loss due to perils such as fire, tort liability, or employee injury. Despite a degree of preparedness, there will be impact because funds will be diverted that could have been invested in ongoing operations or new capital. This article first analyzes risk financing programs available to risk managers to fund recovery from accidental losses. It then addresses how tax deductibility treatment may influence the selection of the optimal program. Finally, it draws conclusions about how a risk financing program can help to maximize after tax cash flow.

Introduction

Within an organization's management team, the risk manager has the responsibility of identifying loss exposures and selecting risk control and risk financing techniques to reduce the potential for losses and to fund recovery from actual losses. Instead of addressing business loss potential such as loss of market share, risk managers generally attempt to fund recovery from accidental losses through risk financing techniques. These programs can range from various kinds of commercial insurance to alternatives, such as self insurance or use of captives. (A captive is an insurance company controlled, in whole or in part, by the company being insured.)

A risk manager first needs to identify and quantify loss exposures. One process involves identifying the various types of exposures such as damage to property, loss of income, and liability for lawsuits. These exposures can be identified through surveys, balance sheet reviews, analyses of organizational flow charts, manufacturing processes, personnel policies, and on-site inspections.

An analysis of the loss exposures will look at both frequency of occurrence and severity of financial loss. Probabilities are assigned to the exposures identified in order to assign priorities. Once loss exposures have been identified and prioritized, risk financing alternatives can be addressed within three broad financing techniques: retention, which is the use of internal funds; hybrid, which is the use of internal and external funds; and transfer, which is the use of external funds. (Head & Blinn, 1996).

The risk manager will analyze these types of programs in light of the overall goals of the firm (in particular the risk acceptability profile) articulated by top management. Net present value methodology should be used as part of the selection criteria; tax deductibility, too, should play a part in the selection process.

General Accounting Aspects of Risk Financing

Statement of Financial Accounting Concepts 2, ”Qualitative Characteristics of Accounting Information,” provides guidance in determining the issue of materiality when considering risk financing techniques. Briefly stated, if the item would influence a reasonable person relying upon the financial statement, then the item should be included. Loss can be defined as a decrease in the value of an asset or the incurrence of a liability. Statement of Financial Accounting Standards (SFAS) 5 provides for the recognition of loss in financial statements when there are two conditions: (1) decrease in the value of an asset or incurrence of a liability is probable, and (2) the amount of the loss can be reasonably estimated. Under SFAS 5 a loss should be accrued when it meets this two condition test.
The tax law is different, however. A loss that is recorded for accounting purposes may not necessarily be deductible for tax purposes. In order to account for such "book-tax" differences, Accounting Principles Board Opinion 11 "Accounting for Income Taxes" (APB 11) provides that the tax effect of differences between financial and tax reporting be reported as a deferred tax liability. This essentially recognizes the timing differences.

Deferred tax liabilities represent estimated amounts of income taxes to be paid in the future for all events in the financial statements in current or prior years. SFAS 96 superseded APB 11 in 1987, and provided that the deferred method of APB 11 for tax purposes be changed to the liability method. SFAS 109 established financial accounting and reporting standards for the effects of income taxes that result from activities during the current and preceding years. This latest SFAS attempts to reconcile the difference in financial treatment of loss between the accounting and tax requirements, but deferred liabilities still exist much like those under APB 11.

For insured programs such as guaranteed cost programs, the risk of loss is transferred to an insurance carrier. SFAS 5 does not apply when this occurs. The accounting approach is simple, in that the cost (premium charged by the carrier) is known and can be recognized as a charge pro rated over the policy term (usually one year). The only additional adjustment that would apply to this type of program is the final audit by the insurance carrier which would affect the estimated premium charged during the policy. This change results from the difference between the estimated premium exposures at policy inception and the audit based upon actual exposures determined at the end of the policy period. If a premium discount (premium size credit) applies to the insurance program, the premium net of discount should be recorded over the policy period.

However, other types of insurance programs, such as dividend and retention plans, require somewhat different accounting treatment. This is because although risk of loss is transferred to an insurance carrier, the insured may receive dividends based upon the actual loss history of the program. That is, if actual losses are less than the losses expected by the insurance company when the policy is created, the insurance company may rebate some of the premium it charged.

In such a case, the rebate should be recognized as a reduction of premium expense. But this should not be done when the dividend is declared. Instead, rebottion should be deferred until the accounting period when the dividend is received. This is because dividends cannot be guaranteed by an insurance carrier on unexpired policies and are only declared for expired policies by the carrier's Board of Directors based upon profitability.

Self-insured (retained risk) techniques or programs are used when the firm intentionally plans to absorb certain amounts of loss without transfer to a third party such as an insurance carrier. Under SFAS 5 the accounting approach is somewhat more complex than for the insured programs where risk of loss is transferred to a third party. The primary difference centers around identifying and measuring expected losses, which are defined as being probable and measurable. Under an insured program a premium is paid to a third party: the premium is probable and measurable. However, when losses are intentionally retained by the firm, the loss may be difficult to establish in time and hard to measure. For example, if an employee is injured on the job a date of injury is known but what will this injury ultimately cost the firm? Another example would be the customer who slips and falls at one of the firm's locations. The customer is injured and carried away by ambulance to the hospital. The customer is overheard to say that she was going to tell her lawyer about this situation. From the accounting perspective, how would the possible loss be accrued when the firm will have to absorb the loss?
To address this situation, a loss contingency is used for financial reporting. A loss contingency is defined as "an existing condition, situation, or set of circumstances involving uncertainty as to possible gain (a "gain contingency") or loss (a "loss contingency") to an enterprise that will ultimately be resolved when one or more future events occur or fail to occur. Resolution of the uncertainty may confirm the acquisition of an asset, or the reduction of a liability, or the loss or impairment of an asset or the incurrence of a liability" (FASB Statement of Standards, 1996/97 Edition). The risk manager can use historical loss experience and statistical analysis to make a reasonable estimate for a loss contingency. The firm should record an accrual for the minimum expected loss or the best estimate of the ultimate loss.

However, in the case of loss contingencies that are unknown to the firm, the situation is somewhat different. This is due to the fact that the occurrence of a loss is not known to the firm during the financial reporting period (unlike the slip and fall incident above). The risk manager may have access to historical information regarding loss frequency and costs which might be used to estimate future loss contingencies. For example, there may be industry-wide statistics available on slip and fall frequency (how often this type of loss occurs) and severity (what are the usual costs) which can be used to make a reasonable estimate. Also, there may be sufficient firm loss history on slips and falls recorded historically which can serve as the basis for a statistical estimate of future loss. Where a reasonable estimate can be made, an accrual can be made and thus an expense shown. However, where a reasonable estimate cannot be made because of insufficient information, then no accrual should be made.

The following special accounting features for different types of self insured programs also would apply:

- For self insurance programs, the insured firm is responsible for administration costs. These should be paid out of operational cash flow or a self insurance fund. The costs should show as an expense in the period in which they are incurred.

- For captive insurance programs where the insured owns the insurance company and where there is no reinsurance (agreement between companies whereby one company cedes or transfers all or a portion of a loss to another company for a premium) premiums paid are treated as deposits and thus are not expenses. Instead, the insured firm should accrue estimated loss contingencies. If reinsurance agreements exist, then the firm should only record losses that are below the amount covered by the other insurance company.

SFAS 94 "Consolidation of All Majority-Owned Subsidiaries" also applies to the captive arrangement. SFAS 94 requires consolidation of all majority-owned subsidiaries unless control is temporary or does not rest with the majority owner (FASB Statement of Standards, 1996/97 Edition).

- For a group captive formed by several firms, insurance policies may be issued to the individual participants. The minimum premium charged should be expensed over the policy period; payments in excess of the minimum premium should be recorded as a deposit. Estimated losses up to the maximum associated with the policy contract should be accrued. In addition, SFAS 60 "Accounting and Reporting by Insurance Enterprises" also applies. Premiums are recognized as expense over the period of the contract and claim costs are recognized when insured events occur (FASB Statement of Standards, 1996/97 Edition). In a consolidation, all the activities of all of the included companies are aggregated and reported in one financial statement. Transactions among these companies are ignored. Thus further premium expense, not premium revenue are shown.
• Risk pools involve organizations joining together to form a pool which is similar to a group or mutual captive insurance company. Policies are provided to the participants based on group or individual loss experience. The accounting is similar to insurance enterprises noted above.

• For risk financing involving retrospective rating, paid loss retrospective rating, or compensating balance programs, a combination of accounting practice used by firms purchasing insurance from a third party and the accounting guidelines used by entities that are self insured would apply.

For retrospective rating policies, the minimum premium should be amortized over the term of the policy. Any payments in excess of the minimum premium should be recorded as a deposit and separate accruals up to the maximum premium under the program should be made.

Finite Insurance Programs

Finite insurance is a relatively new and growing risk financing technique that leading edge companies are considering and implementing when appropriate. The concept underlying finite insurance is that because insurance helps organizations bear risk, insurance is a form of capital and it therefore makes sense for organizations to view insurance along with other longer term capital needs (Hamer and Dickson, 1995).

Finite insurance can be defined as a transfer by a ceding "enterprise" to an assuming "enterprise" of liability for potential losses in a transaction in which the primary element of risk is financial rather than underwriting. An important feature of such an arrangement is that the risk to the assuming enterprise is limited or finite. An example of finite insurance is a loss portfolio transfer. This is an agreement to transfer liability to pay a loss, with sufficient cash to cover the loss and loss adjustment expense (at a profit margin). The risk involved is timing risk or the rate at which claims are actually paid out versus the rate at which the investment income will be received from the cash or premium transferred (Monti and Barile, 1995).

The accounting rule most relevant is FASB 113 "Accounting and Reporting for Reinsurance of Short-Duration and Long-Duration Contracts." Previous to FASB 113, enterprises looked to FASB Statement 60 "Accounting and Reporting by Insurance Enterprises" issued in 1982 to provide guidance. Under FASB 60 the long established practice originating in accounting requirements set by governmental insurance company regulators allowed enterprises to report insurance activities net of the effects of reinsurance. Statutory accounting developed to satisfy the requirements of state insurance regulation. As respects reinsurance, statutory accounting differs from Generally Accepted Accounting Principles (GAAP) in that reserve credits taken for reinsurance with unauthorized companies, or not collected in a timely manner, would be recorded as a charge against surplus. For GAAP, reinsurance balances are reported gross of credits or offsets. The credit or offset is reported as an asset (IASA, 1994). This approach followed the previous standard, APB 10, which further stated that "it is a general principle of accounting that the offsetting of assets and liabilities in the balance sheet is improper except where a right of setoff exists." (FASB Statement of Standards, 1996/1997).

Because there was concern that improper offsets could be taken by an enterprise which could lead to the failure of the enterprise, FASB 113 provides new guidance about when offsets can be taken in the context of whether the contract is for short or long term duration and whether the contract is considered prospective reinsurance (for future liabilities) or retroactive reinsurance (for already incurred liabilities).
To understand these pronouncements, one must understand contract features that limit the amount of risk to which the reinsurer is subject (such as cancellation provisions) or otherwise delay the timely reimbursement of claims. For short-duration contracts, there are requirements that the reinsurer assumes significant insurance risk and that it is reasonably possible that the reinsurer may realize a significant loss from the transaction. Therefore, reinsurance receivables and prepaid reinsurance premiums are to be recorded as assets. Estimated reinsurance receivables are recorded consistent with contract features. If there is no significant risk of loss to the reinsurer, such receivables are recorded as deposits.

Whether the contract is considered short duration (property and casualty) or long duration (life insurance) is a matter of the facts of a given contract. If the contract has a long duration which meets the recommended conditions, costs are amortized over the remaining life of the underlying reinsured contracts; if of short duration, amortization occurs over the contract period of the reinsurance (Monti and Barile, 1995).

As respects long-duration contracts, FASB 97 "Accounting and Reporting by Insurance Enterprises for Certain Long-Duration Contracts and for Realized Gains and Losses from the Sale of Investments" specifies that such contracts that do not subject the insurer to mortality or morbidity risks are investment contracts. If the contract does not involve a reasonable possibility of significant loss, there is no indemnification. Whether or not this occurs is based upon the present value of all cash flows between the ceding and assuming enterprises under reasonable outcomes. Significance of loss is evaluated by comparing the present value of all cash flows with the present value of amounts paid or deemed to have been paid to the reinsurer. For example, in a loss portfolio transfer where the investment income match is (or can contractually be changed to match) the claims payments, there is little chance of loss to the assuming enterprise. (Statement of Standards, 1996/1997).

Monti and Barile point out the concern that where retrospectively rated contracts are involved, there may be no contract rights or duties for future accounting periods. Premiums payable should be recognized over the contract period and if this is not feasible must be accounted for as deposits. The authors cited observe that insurance contracts underlying finite contracts are usually prospective and therefore there should be a distinction between prospective and retrospective finite contracts. Even if risk transfer is reflected in the finite contract, there is concern is that many retrorated contracts would fail to qualify under FASB No. 113. Monti and Barile conclude that unless the FASB recognizes more clear cut guidelines for recognition, multi-year retro-rated covers may largely disappear from the market. (Monti and Barile, 1995)

**Tax Aspects of Risk Financing Techniques**

For risk financing techniques, the timing of income tax deductions is not always clear. For example, take the case of Spring Canyon Coal Company, 43 F2d 78 (10th Cir., 1930), cert. den. 52 S. Ct. 33 (1931). In it, a fund equal to what would have been paid to the state insurance pool was established. However, the court held that the fund did not meet the "paid and incurred" requirement of Treasury regulations and thus mere payments to the fund did not give rise to a tax deduction. This evolved into the tax doctrine that accruals are not deductible until the "liability is fixed" and the amount is "determinable with reasonable accuracy." (Porat, 1991)

Porat states that modern financial theory explains why insurance is consistent with value maximization. This is because it provides the tax advantage of taking present deductions while self insurers can only deduct losses when incurred. A second tax advantage cited by Porat concerns the replacement of impaired assets. An asset can be replaced using insurance proceeds for which the insured is not taxed. A third advantage is that insurance premiums may be paid when the firm is profitable and subject to maximum tax rates, while the self insured loss may occur when the firm is unprofitable and subject to a low tax rate (or no tax rate at all).
Porat concludes that the U.S. tax law favors market insurance to stabilize earnings when the firm suffers large casualty losses in a single accounting period. This concept that the tax law favors market insurance over other types of risk financing activities is central in the risk management literature. (Porat, 1991)

**Tax Treatment of Risk Financing Techniques**

- **Guaranteed Cost Programs:**

  This type of program calls for a payment of premium to an insurer during the policy period based upon estimated exposures. A final audit is completed to verify actual exposures. The premiums may be deducted under IRC Section 162. However, if a refund is made by the third party (e.g., insurance carrier) the refund should be included in income under the tax benefit rule.

- **Incurred Loss Retrospective Rating Plans:**

  This type of program includes a minimum premium, a standard premium, and a maximum premium based upon a basic premium. Under IRC Section 162, deductions for the standard premium are allowed. Premiums paid in excess of the standard premium also are deductible.

- **Paid Loss Retrospective Rating Plans:**

  This type of program calls for a payment of the basic premium to an insurer, plus enough money to cover losses and loss adjustment expenses. Additional premiums are paid in subsequent years. Deductions of premiums paid would be allowed under Sec. 162. Variations in the above program include notes, or letters of credit, in lieu of payment of premium. These may not result in immediate tax deduction under the requirement of economic performance.

**Captive Insurance Arrangements**

As noted above, a "captive" insurance company is one which is owned by a company being insured. Captives are usually located in low tax countries. This creates a tax shelter. Han and Lai (1991) studied the tax deductibility of premiums paid to captives by a parent company. At the time, about one-third of the largest 500 companies in the country had formed captive insurers. Growth was dramatic during the decade of 1970, but was impacted in early 1980 by Tax Court and IRS rulings regarding the tax deductibility of premiums paid to captives which did not also cover the exposures of unrelated firms. As evidence of a period of confusion, Han and Lai cite Revenue Ruling 88-72 which they report held that no level of outside risk would result in risk shifting and premiums paid to captives writing outside risks would not be deductible. In the case of Gulf Oil Corp v. Commissioner, 89 T.C. 1010 (1987), aff'd, 914 F2d 396 (3rd Cir., 1990), the court held that the addition of two percent of unrelated premiums in a captive formed by Gulf was *de minimis* and wouldn't satisfy the court that risk transfer had occurred. Therefore, the premiums paid by Gulf to its insurance subsidiary were not deductible. This created a question as to what level of unrelated premium would allow for tax deductibility.

Smith (1986) reasoned that a parent company's total risk could increase by including outside business which could have a larger variance than the parent's. Therefore, he supported the IRS ruling that writing outside risks does not constitute a risk shifting. Hofflander and Nye (1984) proposed that if a firm's expected net income and the variance of the net income do not vary under different risk management strategies, then the IRS should hold the
same position: no tax deductibility. Han & Lai (1991) went on to develop a theory to resolve the different opinions found in Tax Court rulings. They reasoned that using mean variance portfolio analysis, the degree of tax deductibility of premiums paid to the captive should be higher as more outside risk is included in the captive. Lai and Witt (1995) noted that the IRS position has been that premiums paid to wholly owned captives by parent corporations are not tax deductible because, the captive is part of the economic family. Cases such as Carnation, 71 TC 400 (1978), aff'd 640 F. 2d 1010 (9th Cir., 1981) and Clougherty Packing, 84 TC 948 (1985), 811 F. 2d 1297 (9th Cir., 1981) featured rulings that premiums paid by the parent were not tax deductible because there was no risk shifting and risk distribution. Rather, these payments were viewed as loss reserves and classed as self insurance or no insurance. This economic family doctrine provides that a wholly owned captive and its parent could be perceived as part of the same corporate family because the parent ultimately bears the profits or losses of the captive.

Lai & Witt (1995) reviewed the concepts of risk shifting and risk distribution. In Carnation Co. v. Commissioner, 71 TC 400 (1978), aff'd 640 F. 2d 1010 (9th Cir., 1987) the parent purchased insurance from an unrelated fronting insurer which reinsured 90% of the coverage with a captive that was wholly owned by Carnation. The tax court denied tax deductibility. The decision was not based on the economic family theory but on the issue of risk shifting and distribution. In Humana, Inc. v. Commissioner, 881 F2d 247 (6th Cir., 1989) the court ruled that there was tax deductibility between brother sister companies (Humana, Inc and Health Care Indemnity) because there was risk shifting. This ruling essentially avoided the economic family concept because there was concern that under Moline Properties v. Commissioner, 319 U.S. 436 (1943) the doctrine of separate legal entities had already been established. The paradox was that if there was recognition of separate legal entities under the law, then how could the court reach a conclusion that if the captive and the parent were separate legal entities they were not unrelated? Lai and Witt (1991) point out that under modern financial theory there can be no risk shifting in substance within the same corporate family, however under Moline Properties a technical legal shifting is supported.

**Risk Spreading**

In the case of AMERCO v. Commissioner, 96 Tax Ct 18 (1991, aff'd, 979 F2d 162 (9th Cir., 1992), the focus shifted from "risk transfer" to "risk spreading." The insurance written by Republic Western Insurance Co (a wholly owned subsidiary of AMERCO) for AMERCO and its subsidiaries was less than 46 percent. By focusing on "risk spreading" the corporation was able to obtain a holding for tax deductibility. The court compared "risk spreading" to the pooling aspect of insurance. In the case of Sears, Roebuck and Co v Commissioner, 96 TC 61 (1991), aff'd in part, rev'd in part, 972 F2d 858 (7th Cir., 1992), the court found that policies issued by Allstate, which was then a wholly owned subsidiary of Sears, accomplished technical risk shifting between Sears and Allstate which was viewed as a separate, viable entity, financially able to meet its obligations. Risk shifting existed between Sears and Allstate in that Allstate was not formed nor operated as a vehicle of self insurance to Sears but sold policies to Sears on the same general terms as other insureds. (Lai & Witt, 1995)

**Speculative Risk and Pure Risk**

Lai & Witt (1991) next considered which type of risk was appropriate for insurance purposes and noted that most scholars identify insurance risk as the relevant risk to consider to determine tax deductibility. Cummins (1990) observed that in the Sears case, the court noted that insurance risk is required and that investment risk is insufficient. The authors went on to identify that total risk combines insurance risk with speculative risk or business risk which is generally not insurable. Total financial uncertainty may not be appropriate in an insurance sense and was not accepted by the tax court in cases such as AMERCO or Sears, Roebuck
and Co. Finally, if relative risk is the appropriate measure, Lai and Witt (1991) cite a study by Hofflander & Nye (1990) in which several relative risk measures can be considered: relative risk per dollar of parent premium, relative risk per dollar of parent expected loss, and relative risk per number of parent policies. All of these increase as unrelated risk increases.

They conclude that Hofflander and Nye only considered the increase in relative risk but not the benefits associated with the additional premiums from unrelated risks. They cite further studies by Cummins (1990), Doherty (1990), and Stiglitz (1990) in which it was recognized that "total risk increases at a decreasing rate for a standard deviation measure of risk if exposures are less than perfectly and positively correlated; total premiums increase at a linear rate for homogenous exposure units. This joint phenomena explains why insurers in practice generally prefer to sell more, rather than less, policies." (Lai & Witt, 1995). In selecting a risk measure, the authors cited that the standard deviation is a stronger measure based on the law of large numbers and the central limit theorem. This approach instead of variance of losses was generally adopted by the experts in testimony to the tax courts as respects the applicable measure of risk to use when determining tax deductibility of captive expenses. Thus, where captive premiums were afforded tax deductibility, the captive transaction was consistent with accepted notions of insurance and not as a sham for tax purposes.

**Finite Insurance**

The tax savings related to this form of risk financing technique is due to the premiums paid by the ceding enterprise being treated as deductible as business expense and the losses incurred by the assuming enterprise as being deductible as ordinary expense or loss. The primary determinant is that the IRS views the transaction as "insurance." Monti and Barile note that there is an absence of case law dealing specifically with reinsurance which generally characterizes the finite insurance transaction. Under FASB 113, a sufficient amount of insurance risk, and not just financial risk, should be transferred to the assuming enterprise. The concepts of risk shifting and risk transfer previously discussed also apply in the case of finite insurance in determining if there are sufficient elements of insurance present to allow tax deductibility.

The Tax Reform Act of 1986, 100 Stat. 2085, 2399 (1986) Section 832 allows for an insurer to deduct from gross income an amount established as a reserve for losses at a discounted amount allowing for the time value of the reserve dollars. Additionally, IRC Section 846(e)(3) applies special discounting rules for reinsurance companies and international insurers and applies IRS published composite discount factors which are to be used for loss reserves. Under Section 845, the IRS has the authority to reallocate, recharacterize, or adjust any item reported as a reinsurance transaction if there is a significant tax avoidance effect. The tax avoidance effect would be significant if it was disproportionate to the risk transferred. However, a mere tax effect due to losses incurred under the reinsurance contract would not necessarily be cause for recharacterization. Monti and Barile cite seven factors that would apply:

1) Duration or age of the business reinsured;

2) Character of the business reinsured;

3) Structure for determining the potential of each of the parties and any experience rating;

4) Duration of the reinsurance agreement between the parties;
5) Rights of the parties to terminate the agreement and the consequences of a termination;

6) Relative tax positions of the parties; and

7) General financial situation of the parties.

Monti and Barile point out that these seven factors have been used by the IRS for life insurance rather than property and casualty insurance. Therefore, the seven factors are merely a guide to what the IRS would consider when analyzing the "economic substance of the transaction."

To summarize, when considering the tax deductibility of finite insurance arrangements, FASB 113 should be applied and the program should look and feel like insurance consistent with the determining factors cited in the court holdings reviewed above. The current lack of clear cut guidelines can be considered as analogous to the situation of captive tax deductibility during the 1980s.
References


