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# The Uses and Abuses of Finite Risk Reinsurance

by Christopher L. Culp, The University of Chicago, and J. B. Heaton, Bartlit Beck Herman Palenchar & Scott LLP\*

**F**inite risk has become what derivatives were ten years ago—a hot button for controversy and the likely subject of investigations, litigation, and (heaven forbid) new regulations. American International Group (AIG) has borne the brunt of the assault to date as the target of New York State Attorney General Eliot Spitzer’s scrutiny. AIG’s troubles began with an investigation by the SEC into a relatively small finite risk deal. Before long, the company’s longtime chairman was gone and the company’s accounts faced significant restatement. Brightpoint and the now-defunct HIH Insurance in Australia—as well as an increasing number of other firms—have also been associated with potential finite risk abuses. This article deliberately avoids discussion of any company-specific alleged abuses of finite risk. There is too little in the public domain to permit fair and complete analysis and our article should not be used out of context to address the facts of those particular examples.

Our objective instead is to provide a general introduction to finite risk (or just “finite,” as it is known in the trade). Finite is a type of reinsurance contract. Finite risk solutions limit the reinsurance company’s downside compared to traditional reinsurance, leaving more of that risk with the insured. The insured party also participates in its own positive claims experience, sharing some of the gains that insurance companies typically keep to themselves. In this sense, finite risk is a hybrid of risk finance and risk transfer. There is risk finance because the insured has access to capital to meet timing risk but bears the cost of its own risks. There is risk transfer because some risk is transferred to the reinsurer even if less obviously than in traditional reinsurance programs.

Finite risk solutions have two main sets of applications: (1) as blended risk finance and risk transfer for corporate end users, and (2) as a form of reinsurance or retrocession for insurance companies. For consistency, we shall use the terms *finite* and *finite risk* to refer to corporate uses of this product type, which are the main focus of this article. The

term *financial reinsurance* typically refers to applications within the reinsurance industry.<sup>1</sup> Importantly, most allegations of abuse of finite risk programs have involved financial reinsurance rather than deals done by corporations.

We begin with a brief overview of the structured insurance market. Finite risk solutions are a part of that market. We then describe the kind of risk management problems that lend themselves to finite risk solutions. Next, we provide a more precise definition of finite risk, first by distinguishing its main features from those of traditional insurance and then by discussing the kinds of risks that companies can manage with finite risk. We also describe a number of specific finite products and illustrate their applications with brief case studies. Finally we explore the potential for abuse of finite risk programs and suggest some guiding principles to help firms steer clear of such abuses.

## The Risk Management Landscape

All companies face risks doing business. Corporate risk management involves identifying and classifying such risks into two categories: core and non-core. A firm’s *core* risks are those in its primary business. *Non-core* risks are risks that the firm does not need to retain to engage in its primary business. Non-core risks include non-financial or “insurance” risks such as property damage, casualty, liability, and the like, but may also include financial risks (for example, airlines’ exposure to jet fuel price risk).<sup>2</sup>

The firm’s *retention decision* splits risks among three strategic alternatives: *retain*, *neutralize*, or *transfer* the risk in question. Exhibit 1 illustrates this decision.

The firm’s *retained risk* or *retention* is the collection of risks that the firm decides to bear rather than neutralize or transfer. Retained risks may be either *funded* or *unfunded*. In the case of all retained risks, however, the firm’s equity share capital must eventually absorb the loss. Whether or not a retention is funded—and if so, how—does not change that fact. For that reason, we generally refer to any kind of

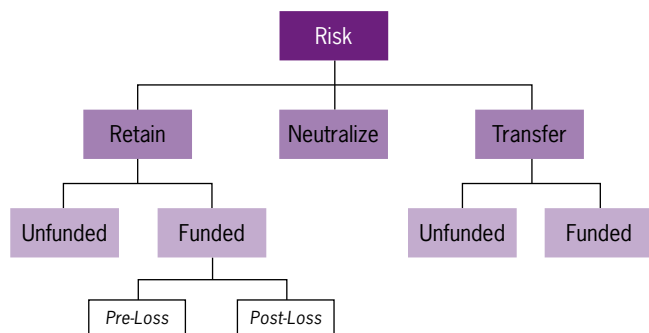
\* Much of this article is based on Chapter 24 (by Culp and Heaton) in C. Culp, *Structured Finance and Insurance: The ART of Managing Capital and Risk* (New York: Wiley, forthcoming in 2005).

1. Not everyone adheres to this terminological distinction. A recent highly critical assessment of financial reinsurance by Fitch Ratings was titled *Finite Risk Reinsurance*,

despite being focused entirely on reinsurance applications and not corporate uses of this product.

2. For an interesting exploration into the nuances of core vs. non-core risk, see P. Tufano, “Who Manages Risk? An Empirical Examination of Risk Management Practices in the Gold Mining Industry,” *Journal of Finance*, Vol. 51 (1996).

## Exhibit 1 Risk Management Alternatives



contract or structure that firms use to address their planned retentions as *risk finance*.<sup>3</sup>

A funded retention is a retained risk for which the firm sets aside specific funds or sources of funds before the risk event translates into realized losses. If a firm decides to retain a specific risk and pay for any losses as they occur without setting aside particular funds, then that risk is unfunded. When losses occur, the firm can either use its current free cash reserves, divert funds away from planned investment spending, or issue new securities, provided the loss is not so large that it deprives the firm of access to new capital. A company may choose instead to fund some or all of its retention of certain risks—perhaps to protect against the problem of having its cash unexpectedly depleted and, as a result, having to forgo promising investment opportunities (a situation known as “the underinvestment problem”). In this case, the risk is funded; the firm literally sets aside cash or a source of cash to pay for all or part of a loss in the event the loss occurs.

As Exhibit 1 also shows, the firm can fund a retained risk on a *pre-loss* or *post-loss* basis. This distinction relates to when the cash is actually raised to pay for losses that materialize. Pre-loss financing is cash raised before the loss event, and post-loss financing arrangements allow firms to pre-negotiate a means of raising cash—including the terms on which it will be provided—in the event the loss occurs. Setting aside cash in a dedicated reserve to cover a possible future loss is an example of pre-loss financing. Negotiating a line of credit on which the firm can draw following a loss is an example of post-loss finance.

If a firm does not wish to retain a source of risk to which its business naturally exposes it, one alternative is *risk neutralization*, which is the process by which a firm reduces either the

likelihood or the size of an unexpected loss without engaging in risk transfer. Examples of risk neutralization include prevention and loss control, which are actions designed to eliminate or lessen the particular risk.

Finally, *risk transfer* is the explicit process by which the adverse impacts of a risk are shifted from the firm to others. Transferred risks can be systematic or idiosyncratic, financial or non-financial, core or non-core. Virtually the only limitation on the risk or bundle of risks to be transferred is the ability to define the risk in an enforceable contract. Risk transfer can be accomplished using derivatives, insurance, or asset divestitures.

Consider, for example, traditional insurance, which involves the payment of a premium by the insured (the “cedant” in insurance terms) to an insurance company. Traditional insurance gives the cedant the right to reimbursement for actual economic injury on the occurrence of a specific triggering event. Reinsurance is the purchase of insurance by an insurance company. Retrocession or retro is the purchase of reinsurance by a reinsurer.<sup>4</sup> Insurance, reinsurance, retro, and retro on retro are all forms of risk transfer because the contract shifts (some or all of) the financial impact to another entity, be it the insurance company or the reinsurance company.

Structured insurance, also known as *alternative risk transfer* (ART), refers to non-traditional risk management products and solutions in which the provider is still usually an insurance or reinsurance company. Structured insurance solutions or ART forms include both risk transfer and risk finance and often provide a mixture of the two. Examples of structured insurance solutions include the following:

- Captive insurance companies, mutuals, and protected cell companies
- Risk securitizations and insurance-linked notes
- Integrated multi-line, multi-year insurance coverage
- Dual-trigger insurance
- Contingent or committed capital
- Contingent insurance (also called “contingent cover”).

Finite risk is a form of structured insurance.<sup>5</sup>

### A Simple Example of Finite

We begin by presenting an example of a finite risk structured insurance transaction that demonstrates the kinds of problems that finite risk addresses. Suppose we have a company whose primary business has given rise to an asbestos liability risk. The company is willing to take its lumps for this and

3. The practice of raising risk finance need not be motivated by accounting considerations. A firm’s motivation for pre-loss or post-loss funding of a retention may be completely driven by economics (i.e., non-accounting) concerns. When a firm engages in *legitimate* risk financing, we’re assuming it has some reason to do so that is related to its liquidity or cash flows, even where the accounting impacts of the transaction might be attractive.

4. For a detailed review of traditional (re-)insurance and the emerging structured insur-

ance markets, see C. Culp (forthcoming in 2005), cited earlier.

5. Finite was originally developed and offered by Centre Re (later to become Centre Solutions, a division of Zürich Financial Services). For a review of the historical evolution of finite, see B. Dyson, “Striking the Vital Balance,” *Reactions* (January 2001), and R. Monte and A. Barile, *A Practical Guide to Finite Risk Insurance and Reinsurance* (New York: John Wiley, 1995).

sets aside \$500 million to cover the present value of claims as they flow in over the next five years. This is a start, but the company faces three ongoing potential problems.

First, claims may not show up in the expected pattern over the five-year period. If claimants want their cash now, so that all the claims arrive tomorrow, then the \$500 million estimate of present value may be too low. Second, what happens if the actual loss comes in well above the \$500 million? Many corporate users of finite face exotic risks, such as asbestos liability, that are awfully hard to quantify and thus require additional insurance coverage on top of the \$500 million already set aside to finance the risk. The \$500 million estimate itself, after all, presumably came from some probabilistic estimation. If the \$500 million estimate reflected the expected loss, then there is a lot of room for the actual loss to be higher.

Finally, what does the firm *do* with the \$500 million it wants to set aside? If it merely takes a charge against earnings to set up a reserve, investors are likely to be suspicious. Nothing really keeps a firm from using those funds for other purposes, or from arbitrarily deciding to add them back to earnings in the future when revised estimates of the loss might help the company meet an earnings target. Reaching into a \$500 million cookie jar is awfully tempting, after all. And if the firm *does* reach into the cookie jar and reverse a reserve, it can send a very negative signal to the capital markets.

Finite could be a good solution—perhaps the *only* good solution—for a company in this situation. A typical finite structure would require the company to pay a \$500 million premium to a highly rated reinsurance company for, say, \$600 million in asbestos liability insurance over a three-year term.<sup>6</sup> The \$500 million would be expensed against earnings as the premium is paid—probably on a quarterly basis over the life of the program. This would reduce earnings in a way that accurately represents the loss for which the functional equivalent of a reserve is being taken.

If the claims materialize, the company is covered for up to \$600 million in losses, even if they occur more rapidly than anticipated. If claims are lower than expected, the company gets a low-claims bonus (a partial refund of its premium).

By means of such a finite transaction, then, the company has converted a potentially huge risk into a currently known expense, and has done so in a way that is *transparent* and *credible* to investors. As the case also shows, finite risk products can help finance liabilities whose outcomes are unknown while simultaneously transferring the risk that the firm has underestimated the true retention associated with those risks. In this sense, finite risk offers companies

an attractive combination of a credible pre-loss financing structure with a classical risk transfer component.

But what if the firm doesn't actually have \$500 million in cash sitting around to pay the insurer up front (or to fully fund the reserve)? In that case, the insurer may enter into a different kind of finite structure that essentially allows the company to obtain \$100 million in insurance and to borrow the \$500 million retention when and if the asbestos claims arrive. The company then repays the \$500 million at a more convenient time. This is a classic form of risk finance and, if properly disclosed, can be useful when there simply is no capacity for insurance below the \$500 million "attachment point."

Non-insurance corporations typically find finite risk products useful for managing exotic tail risks that are not core to their primary business activities. More specifically, such products can be used for "ring-fencing" (that is, isolating) assets or business risks in M&A transactions or in conjunction with project financing, for managing runoff solutions (for example, when exiting a business line), and for funding retentions when standard insurance is not available in the loss layers the firm would prefer to insure outright but cannot.

The bottom line, then, is that finite risk transactions, when properly motivated, implemented, and disclosed, can provide companies with protection against hard-to-predict catastrophic risks, enhance the quality of their earnings, and achieve a reputation with investors for having effective risk management *and* credible disclosure.

## Typical Finite Risk Structures

Now that we have introduced and motivated the concept of finite by way of an example, let's turn to the more practical and specific aspects of finite risk coverage. As noted, finite risk is more of a structuring methodology than a financial or reinsurance product. It is the process by which risk finance and risk transfer are integrated into a single hybrid risk management program that enables a customer to pre-fund a retention, manage the timing risks of that retention, and obtain excess-of-loss risk transfer for losses above the retention. There are many products and solutions that potentially fall under this umbrella.

To provide more detail to our characterization of finite risk solutions, we now consider the following:

- Features that typically distinguish finite risk structures from traditional (re-)insurance;
- The nature of the liabilities typically covered by finite risk programs; and
- The degree to which the program is fully, partially, or not funded.

6. We would say in that case that the firm has retained and pre-funded the first \$500 million in losses and has bought insurance for the "\$100 million XS \$500 million layer"—

that is, the firm has bought \$100 million in insurance to cover losses in excess of its \$500 million retention up to a policy limit of \$600 million.

### Characteristics of Finite Risk Structures

The features that distinguish finite risk solutions from traditional insurance are subtle but critically important in helping firms determine which risk solution is the right one. Not every finite contract will have all of these features, and the characteristics discussed cannot be considered a definitive list of necessary and sufficient conditions for a structure to be considered a finite risk deal. For the most part, however, this set of characteristics seems adequate for describing a typical finite transaction.

**Material Risk Transfer.** Insurance and reinsurance contracts generally involve at least four types of risk:

- *Underwriting risk:* the risk that premiums collected (generally set to cover *expected* claims payments plus transaction costs) are insufficient to cover *actual* claims payments;
- *Credit risk:* the risk that a (re-)insurer will not fully honor all of its contingent obligations to its cedants;
- *Investment risk:* the risk that the income generated by an insurer when premium is collected and invested in assets will be below the expected income reflected in the (re-)insurer's premium pricing; and
- *Timing risk:* the risk that actual loss claims occur faster than expected and that invested reserves (including investment income) are too low to fund those claims when they occur.

A true finite risk contract must involve material risk transfer of all four of the above risks. To be sure, some predecessors of today's finite risk products (and perhaps a few of the recent, more controversial ones as well) focused purely on the transfer of timing risk to the exclusion of underwriting risk. For example, an early Lloyd's of London structure known as a *time and distance* policy involved the payment of a large premium by the cedant to a reinsurer and then specified a fixed schedule by which premiums were returned to the cedant. This schedule, however, did not have anything to do with the actual timing of claims made by the ceding insurer and essentially represented more of a cash deposit than a risk transfer device. Accordingly, the only material risk transferred in a time and distance policy was timing risk, and the main purpose of these transactions seems to have been pure income stabilization—that is, cash flow or earnings smoothing. Such a policy would not be considered a legitimate finite risk transaction today.

Determining what constitutes material risk transfer depends, of course, on why the determination is being made. As suggested earlier, the optimal amount of risk transfer in a finite structure should in theory be a function primarily of the company's optimal capital structure. In practice, however, decisions to transfer risk will also be affected by tax, disclosure, accounting, and other regulations. Regula-

tions, of course, must be respected, but even regulatory definitions of "adequate risk transfer" have been ambiguous to date. Clearly, a traditional insurance contract represents "full risk transfer" in the sense that the cedant has paid a premium equal to its *expected* loss to avoid bearing *actual* losses, and the reinsurer in turn bears most if not all of the risk that actual losses exceed the expected loss reflected in the premium. At the other extreme, the time and distance policy described above involves no risk transfer since the only payment obligation of the reinsurer is to honor a fixed schedule of payments unrelated to actual loss development experience. Partial risk transfer is everything in between.

Until very recently, the rule of thumb practiced by most accountants was to deem a transaction as involving material risk transfer if there was at least a 10% probability that the reinsurer would incur an underwriting loss on an amount equal to at least 10% of the policy limit. A program with a \$1.05 million policy limit and a \$1 million premium would fail that so-called 10/10 test or 10/10 rule. The maximum loss to the insurer would be only \$50,000 under such a policy; and even if that loss were 95% likely to occur, \$50,000 is only 5% of the policy limit. Similarly, a \$1.1 million policy limit and a \$1 million premium (called a \$100,000 XS \$1,000,000 program) would also fail the test if the risk of a loss in excess of \$1 million were under 10%.

Unfortunately for companies seeking regulatory certainty, this rule of thumb was only ever just that—a rule of thumb, not a statutory or regulatory requirement. It was also subject to modeling interpretation when it came to assessing the probability of exceedance.

Following some of the recent widely publicized controversies about finite, many accountants now prefer a 15/15 rule or, in some cases, as much as 25/25—that is, at least a 25% chance of reaching the policy limit with losses above \$1 million in a \$250,000 XS \$1,000,000 program.

**Cedant Participates in Positive Claims Experience.** A long-standing marketing problem faced by (re-)insurers has always been the perception that (re-)insurance does not add value if claims are rarely made. The reality, of course, is that there can be substantial risk even in cases where losses are rare events. A loss is just an adverse outcome of a risk, but risk does not always lead to losses. The right time to determine whether or not (re-)insurance increases the value of the firm is *ex ante*, before the losses materialize.

Nevertheless, reinsurers also recognize that their rates reflect certain assumptions about adverse selection and moral hazard—assumptions that tend to raise prices when reinsurers have less information than purchasers of the reinsurance. Over time, if the claims experience of a customer helps the reinsurer realize that it has not insured a "lemon,"<sup>7</sup> then

7. G. A. Akerlof, "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*, Vol. 84 (August 1973).

it makes sense to allow the customer to participate in its positive claims and loss development experience through a partial rebate of the premium. A partial premium rebate can also make sense purely for marketing purposes, depending, of course, on the level of the initial premium.

Finite risk premiums often are quite high, but looking only at premiums on these ART contracts can be misleading for the aforementioned reason. Regardless of the quoted premium, the total cost to the cedant of a finite risk program is usually a function of the actual claims or loss experience. Investment income also may be included in the overall assessment of a cedant's experience with the policy.

The mechanics by which profit and loss sharing is accomplished in a finite risk transaction depend on the nature of the transaction and the particular counterparties involved. In general, this sharing is accomplished through the use of an *experience account* that tracks the paper profits and losses on the actual underlying deal. The premium paid by the cedant to the (re-)insurer is credited to the account, as is interest on invested premium reserves, while losses and various charges incurred by the (re-)insurer are debited to the account. At the end of the term of the finite risk structure, the (re-)insurer and cedant essentially split the balance in the experience account, whether a net gain or loss.

**Limited Liability for the Reinsurer.** Notwithstanding the requirement that a finite transaction involve material transfer of all risk types, a distinguishing feature of a finite risk contract is generally that it exposes the (re-)insurer to a limited or finite amount of underwriting risk. Limitation-of-liability provisions are by no means unique to finite risk. Indeed, virtually all traditional insurance and reinsurance contracts involve some kind of policy limit. What is special about finite risk contracts is usually the mechanisms by which the underwriting risk of the (re-)insurer is limited.

The policy limit, of course, is important, but perhaps more important in a typical finite structure is the level of the premium relative to the policy limit. The premium on traditional reinsurance is generally equal to the expected claims payment plus a mark-up to reflect the costs to the reinsurer of underwriting the policy (including retrocession costs). If a customer chooses voluntarily to cede more than that amount to the carrier as premium, the amount in excess of the actuarial premium plus load is essentially a form of pre-loss risk finance. As noted earlier, firms may wish to do this to avoid the cash flow risk of an unfunded retention leading to underinvestment or other liquidity problems.<sup>8</sup> We will return later to a discussion of the benefits of finite risk contracts, but the high premium relative to the policy limit is often a significant part of that benefit.

**Multi-Year.** For reasons of historical convention (owing in part to the role of brokers), almost all traditional insurance and reinsurance contracts have a life of one year. This puts the cedant at risk of price increases and capacity or coverage contractions every year. Like most ART and structured insurance products and unlike most traditional (re-)insurance, finite risk contracts generally have a tenor of more than a year—usually three to five years.

### Risk in the Risk Transfer Component

Finite risk structures can be either *prospective* or *retrospective* with regard to the risks the structures are intended to cover. Exhibit 2 depicts the distinction between retrospective and prospective cover (as well as a third possibility, retroactive risk, that is *not* a legitimate basis for insurance). In this exhibit, we can distinguish between prospective, retrospective, and retroactive risks by comparing four different dates in the life of a would-be insurance policy:

- *Policy Underwritten:* a policy is bound that allows the insurance purchaser to pay a premium in exchange for the right to make a claim of loss and to receive all or partial reimbursement of that loss upon the occurrence of a specific triggering event during a specified risk cover period;
- *Liability Incurred:* the event that exposes the insurance purchaser to a risk of loss occurs;
- *Policy Triggered:* the risk of loss actually becomes a known loss, thereby triggering the insurance contract; and
- *Claim Made:* the insurance purchaser files a claim for reimbursement of actual damage sustained.

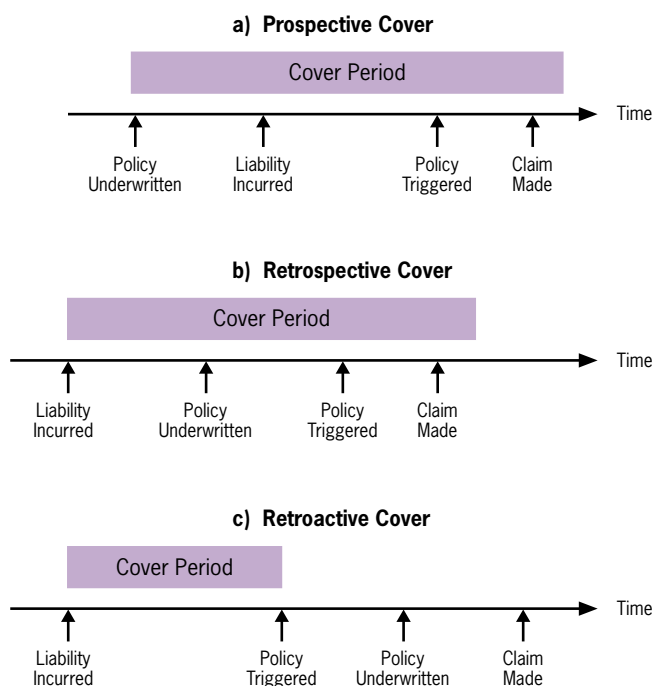
A lot of confusion arises about the distinction between the date on which a liability is incurred and the date a policy is triggered. The distinction is the same as that which distinguishes a risk from a loss. A liability is effectively incurred at the time the firm assumes a risk, whereas the policy trigger date is the date on which that risk no longer represents a *potential* loss but in fact has become an *actual* loss.

If the policy has not been triggered before the policy underwriting date and the risk coverage period have passed, the outcome of the policy is not known. The insurance purchaser is *at risk*, which means that the risk might still translate into a loss. But once the policy trigger has been pulled or the risk coverage period has ended without the trigger being pulled, the outcome is known with certainty. This situation is what we call a *retroactive* cover—a cover that is intended to pay off based on an event whose outcome is known at the time the policy is signed. This is *not* insurance, and does *not* represent risk transfer.

If the possibility for a loss exists when the policy is signed, however, the policy can in principle involve material risk transfer even if the liability or risk exposure was

8. K. A. Froot, D. S. Scharfstein, and J. C. Stein, "Risk Management: Coordinating Investment and Financing Policies," *Journal of Finance*, Vol. 48 (1993).

Exhibit 2 **Retrospective vs. Prospective vs. Retroactive Cover**



incurred before the policy was underwritten. We call that a retrospective policy. Consider some examples:

- A crime occurred but has not yet been detected;
- A product was released for which its producer faces product liability as a result of a defect, but the defect is not yet known;
- A chemical thought to be safe is dumped in a residential stream but is later found to cause cancer;
- A typhoon destabilizes the foundation underlying shoreline property, but the instability is undetected initially.

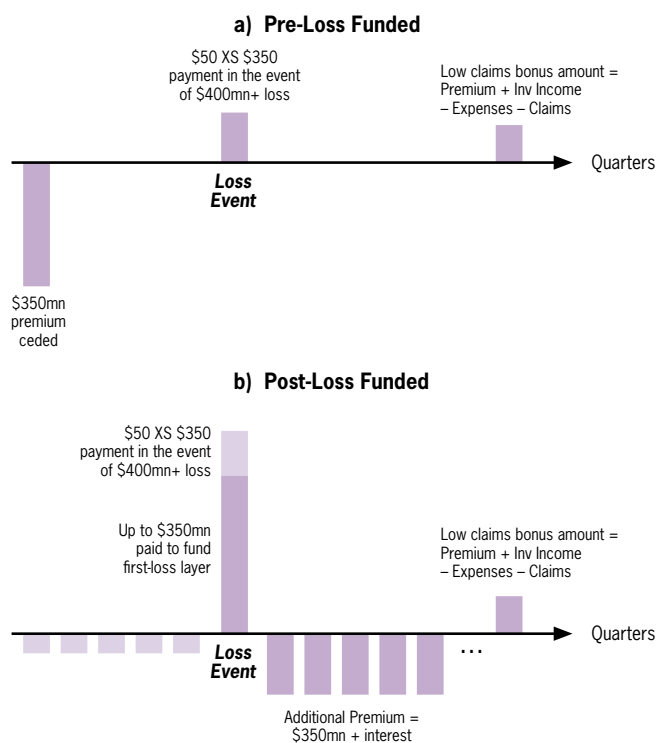
These examples of retrospective risk can be legitimate applications of insurance or finite risk deals provided the policies are bound before the uncertainty about the loss exposure is revealed. That the event leading to the loss exposure occurred in the past is not really relevant.

The third possibility is that the policy is underwritten before the liability is even incurred, which means by definition the policy trigger has not been pulled. On such prospective programs, there is little doubt that there is risk transfer.

### Pre-Loss versus Post-Loss Funded Finite

Yet another important distinction between different finite risk solutions is the degree to which the structure is pre-loss or post-loss funded. Let's again use a simple example to differentiate between the two.

Exhibit 3 **Pre-Loss vs. Post-Loss Funded Finite Structures**



Consider a corporation facing potential environmental clean-up cost liabilities of \$400 million over the next, say, three years. The first \$350 million has about a 50% chance of being realized, and the next \$50 million has about a 15% probability. Exhibit 3 compares pre-loss funded and post-loss funded finite risk solutions to help manage this risk. For simplicity, we ignore transaction costs, including arrangement fees.

In Panel A of Exhibit 3, we first consider a pre-loss funded program. The corporation essentially sets aside the first \$350 million in cash but is concerned that a balance sheet reserve will not be as credible to investors as a finite program. So, the company enters into a finite program for three years in which it cedes the initial \$350 million to a reinsurer at the inception of the program. If the liability turns into a realized loss over the life of the program, the reinsurer uses the premium to cover the first \$350 million in losses and provides an additional \$50 million XS \$350 million in cover. Losses above \$400 million are retained by the company. If losses are below what is expected, at the end of the program the company is eligible for a low-claims bonus, paid out of any program surplus, where the program surplus is equal to the premium collected plus investment income earned on that premium minus claims payments and expenses.

Now consider in Panel B a program that is substantially the same but post-loss funded. The corporation pays only a commitment fee or small premium to the reinsurer in advance of any loss. If no loss occurs, a low-claims bonus is again possible based on the surplus after three years. But now suppose a loss occurs. In this case and unlike the previous one, the firm has not pre-funded the first \$350 million layer, but has retained that layer. In effect, the reinsurer makes a \$350 million payment to the company to cover the first layer of losses. The reinsurer also provides excess cover of \$50 million XS \$350 million. But in this case, the company's subsequent premiums on the program now rise so that the present value of those future premiums is equal to \$350 million as of the date of the loss.

The additional premium required on the unfunded program is often called *retrospectively rated premium*, or *contingent premium*. In effect, the additional premium in the program is economically equivalent (at least in this example) to the principal and interest on a \$350 million loan made by the reinsurer to the corporation on the loss event date through the end of the life of the program.

### The Products

Although finite risk is more a structuring technique than a product, the market has identified a handful of specific products that are considered to be finite risk.

**Loss Portfolio Transfers.** A Loss Portfolio Transfer (LPT) occurs when a firm cedes all remaining unclaimed losses associated with a previously incurred liability. In addition to paying an arrangement fee, the cedant also typically pays a premium equal to the net present value of reserves it has set aside for the transferred liability *plus* a premium to compensate the (re-)insurer for the underwriting and other risks assumed. An LPT thus enables a firm to exchange an uncertain liability in the form of a stream of unrealized losses over time for a certain liability whose present value is equal to the expected NPV of the unrealized losses plus a risk premium and a fee. An LPT is generally a pre-loss funded finite risk structure intended to deal with retrospective liability.

The principal risk that the cedant transfers to the (re-)insurer through the LPT is the risk that losses or claims arrive at a much faster rate than expected. In that case, the investment income on the reserves—and perhaps the reserves themselves—may be inadequate to fund the losses. A time series of losses that occurs more slowly than expected, by contrast, will represent an opportunity for a net gain that the (re-)insurer would typically share with the cedant. LPTs thus are risk financing mechanisms through which firms can address the timing risk of a liability. But they also include a sufficient amount of pure risk transfer—in the form of excess-of-loss reinsurance on top of the premium and reserve—to qualify as insurance.

LPTs can be attractive for various reasons. For insurers, they provide a low-cost means of synthetically exiting or ring-fencing a business very quickly. LPTs can help corporations that have captives, for example, wind up certain self-insurance lines if the firm alters its retention decision for certain risks. LPTs are also useful to non-financial corporations in securing financing for runoff solutions, especially in the area of environmental claims and clean-up cost allocation.

The principal benefit of an LPT is that it enhances a firm's quality of earnings by enabling it to take a credible reserve. If the firm cannot cede its reserves to a reinsurer through a mechanism like an LPT, the firm is left with an escrow account. Even if the firm can account for the reserves in earnings, all the problems of reserves apply—they can appear to be cookie jars, they can cause underinvestment problems, and they can send negative signals to investors when they are reversed. An LPT suffers from none of these problems.

**Adverse Development Covers.** An Adverse Development Cover (ADC)—sometimes called a *retrospective excess of loss cover* (RXL)—is a finite risk ART form in which a (re-)insurer agrees to provide excess-of-loss (XOL) coverage for losses incurred on a retrospective liability that exceed the cedant's current reserves or planned retention. ADCs are commonly used by firms to manage liabilities that have been incurred but not reported (a class of liabilities known as "IBNR").

ADCs do not involve the cession either of a liability/loss portfolio or of reserves by the cedant to the (re-)insurer. As a result, ADCs do not really provide firms with the opportunity to combine any pre-loss financing with their excess-of-loss protection. Instead, the (re-)insurer simply agrees to compensate the cedant for any losses above an attachment point equal to a defined retention level. The retention may be funded by the purchaser of the ADC; but if so, the funds are left with the protection purchaser and *not* ceded to the reinsurer as they would be in an LPT. ADCs may also involve a policy limit, but a cedant is free to layer ADCs in the same way that traditional XOL reinsurance can be layered to address concerns over catastrophic loss development layers.

ADCs can be useful for firms in a variety of situations. They are commonly used to cap old liabilities that are of concern in a merger or acquisition. In addition, they are widely regarded as important devices for combating adverse selection problems associated with "black hole" risks that investors consider impossible to estimate reliably and reserve against. A firm that records a charge to earnings for a liability that has not been fully realized, for example, may be suspected of possessing superior information about the liability that leads to underreporting. Or a firm that first announces a tail-end risk event, such as environmental liability, will almost certainly be suspected of underestimating the total liability its first time around. A firm wishing



## Using an LPT to Ring-Fence an Environmental Liability

### The Case of Stauffer Management\*

The Iron Mountain Copper Mine is a Superfund site in Redding, California that is owned by the Stauffer Management Co. of Wilmington, Delaware. Stauffer Management is the sole Potentially Responsible Party (PRP) under Superfund, which generally holds any PRP to a Superfund site jointly and severally liable for the entire clean-up costs of that site. Stauffer Management became the PRP to Iron Mountain because it manages the assets and liabilities of the former Stauffer Chemical Co., which acquired Mountain Copper Ltd. in the 1960s. It was Mountain Copper's mining operations above and below ground that fractured Iron Mountain, creating the Superfund liability by exposing the mountain's mineral deposits to oxygen, water, and bacteria, which in turn generated substantial acidic runoff.

Mining operations ceased at Iron Mountain in 1963, at which time the federal government developed the Spring Creek Debris Dam to control the release of acidic water runoff from the mine. The Environmental Protection Agency (EPA) listed Iron Mountain as a Superfund site in 1983 with Stauffer as the sole PRP responsible for its clean-up. Eleven years later, the state of California and the EPA concluded the dam was not enough and ordered Stauffer to begin removing all the contaminants from the water.

Stauffer Management settled its Superfund claim in 2000 with the EPA and several other federal and California agencies for approximately \$160 million. Of that amount, \$7.1 million was a settlement with the EPA, \$10 million represented a mandatory contribution to other federal and California agencies for future regional environmental improvement projects, and \$139.4 million was the premium Stauffer paid for a finite risk LPT obtained from American International Specialty Lines Insurance Co., a subsidiary of AIG.

Under the LPT agreement, the parties have agreed to contract with IT Corp. for the actual clean-up of the Iron Mountain site. The parties estimated the cost of clean-up to be about \$4.1 million per annum over the next three decades, for an inflation-adjusted total of about \$201 million. Under the finite risk policy, Stauffer cedes all of its past, current, and future liabilities on the Iron Mountain site to AIG along with the finite risk premium. The premium payment of \$139.4 million was funded by Stauffer out of its current clean-up reserves for the site, plus some insurance coverage under prior policies.

The LPT agreement also obliges AIG to reimburse IT Corp. for 90% of the actual clean-up costs incurred each year on the Iron Mountain site, up to a maximum of \$4.1 million per year. IT Corp. bears the risk of higher annual clean-up costs subject to two other protections. First, if inflation causes an increase in costs by up to \$900,000 in a single year, IT Corp. can carry forward that additional cost into a subsequent year in which costs are below \$4.1 million. Second, AIG also provides IT Corp. with \$100 million in aggregate excess-of-loss coverage for cost overruns triggered specifically by catastrophic perils such as excessive rainfall or earthquakes, subject to a \$5 million limit per peril.

IT Corp. must finance the remaining 10% of its actual annual clean-up costs as a co-payment on the finite risk policy, although Stauffer agreed to pre-pay in a lump sum approximately \$2.5 million to IT Corp. that it can use toward its 10% residual co-pay requirement. IT Corp. bears all of the timing risk on how that additional 10% in costs is accrued, as well as the timing risks on the clean-up costs themselves. In return, the finite risk policy includes a type of experience account in which IT Corp. retains some of the surplus if aggregate clean-up costs fall below \$201 million over the next 30 years. The EPA receives another portion of whatever surplus exists.

\*Background for this example was obtained from D. Lenckus, "Finite Risk Superfund Deal Set," *Business Insurance* (November 6, 2000).

to assuage investor suspicion can take out an ADC to lock in its liability at the charge-off amount and thus signal its confidence that the charge-off was indeed correct.<sup>9</sup>

Finally, ADCs can improve the ability of cedants to find favorable pricing for catastrophic XOL layers with lower attachment points above the policy limit on the ADC itself.

Especially if there is limited or no capacity for insurance in primary or excess layers, an ADC may be the only way a firm can obtain coverage.

**Retrospective Aggregate Loss Covers (RALs).** A retrospective aggregate loss cover, or RAL, involves a cession of reserves to a reinsurer that represents only a *partial* pre-

9. See P. Shimpi, *Integrating Corporate Risk Management* (New York: Texere, 2001), and Swiss Re, *Sigma* 5 (1997).

## Three Cases Illustrating the Uses of ADCs\*

**Covering the Excess Layer for Asbestos Liability.** Turner & Newall, a U.K. manufacturer of motor components, used an ADC to reassure its investors and analysts that it had adequately reserved against a series of asbestos claims associated with some of its discontinued operations. The company self-insured its asbestos claims by establishing a captive and then reinsured some of that underwriting risk with an ADC for \$815,000 XS \$1,125,000. The ADC had a 15-year tenor and, like other finite risk products, contained an agreement for a partial premium rebate if actual loss developments were favorable relative to its reserve holdings after the 15 years.

**Ring-Fencing the Liabilities of a Discontinued Business.** In a more general case, the multinational firm Hanson PLC was concerned when it acquired building materials company Beazer PLC that Beazer's discontinued U.S. operations would create an impediment to growth for the new conglomerate. Hanson self-insured the liabilities of Beazer's U.S. operations through a captive, and the captive in turn acquired \$80 million XS \$100 million through a perpetual ADC—that is, the insurance coverage lasts forever. In so doing, Hanson effectively shifted all remaining liability for Beazer's discontinued U.S. operations to a reinsurer.

**Exiting a Business Line (Runoff Solution).** Frontier Insurance Company was a specialized property/casualty

insurer that ran into financial problems in 2000. It had \$70 million in debt and had suffered significant losses on its physicians' malpractice insurance line. Frontier's losses were due both to inadequate reserves to cover total losses and to the unexpectedly rapid development of losses on the portfolio. The company had to replenish reserves several times to cover the time path of claims.

In the second quarter of 2000, Frontier entered into an option on a bundled finite risk agreement with Berkshire Hathaway's National Indemnity. If exercised, the option delivered \$800 million in cover to Frontier, of which \$514 million was an ADC that created excess-of-loss reinsurance for any aggregate losses in excess of Frontier's then-current reserves. The remaining \$286 million in cover involved a cession of its current reserves to National Indemnity through an LPT that protected Frontier from further unexpected accelerations in the timing of its claims submissions. In providing such an option, National Indemnity effectively enabled Frontier to transfer the underwriting risks and finance the timing risks associated with its existing physicians' malpractice line. As things turned out, Frontier exercised its option to obtain the \$800 million in cover in late 2000. After ring-fencing its liabilities in this way, the company was able to cleanly exit this line of business and withdraw from the market in 2001.

\*Background for these examples was obtained from Gerling Global Financial Products, *Modern ART Practice* (London: Euromoney Institutional Investor, 2000), and "Frontier Gets a New Lifeline," *Reactions* (November 2000).

funding of expected losses. In a typical RAL, the cedant can finance existing and IBNR losses by paying a premium to a (re-)insurer equal to the current value of those reserves but less than the present value of *all* expected liabilities. In our earlier example of the firm that expected \$350 million in environmental claims, \$150 million of those claims might be IBNR or existing claims and might correspond to a funded reserve. Just as in an LPT, the RAL purchaser cedes both the \$150 million *and* the associated liability to the (re-)insurer. But unlike an LPT, an RAL also usually includes a provision that requires the cedant to pay (in the form of retrospectively rated premiums) for any losses over the ceded amount or above a defined loss ratio when those losses are actually incurred by the cedant.

In the LPT, the risk of a very large claim arriving unexpectedly early in the loss development cycle is borne solely by the (re-)insurer, perhaps subject to an aggregate or per-risk policy limit. But the RAL specifically forces the cedant to retain some of this timing risk. At the same time,

however, the RAL is less cash-intensive and tends to allow the firm to pre-finance losses in its working capital layer. Thus, for companies less concerned about pre-loss finance *outside* the working capital layer, an RAL can make sense.

Nevertheless, firms that use RALs must be particularly attentive to disclosure issues. At face value, an RAL can be used to increase the balance sheet equity of the cedant by replacing the technical reserves allocated to an unknown liability with a fixed premium payment whose value is less than the current technical reserves. But precisely because the value of the premium is below the expected loss, the retrospectively rated premiums in the program give rise to a contingent liability that can be significant.

**Others.** As we have emphasized, the universe of finite risk solutions is far more expansive than a short list of named products. The principles of finite risk can be applied to a range of risk management problems that is limited only by the willingness of counterparties to do the deals.

## Partially Funding a High Retention

A large energy firm found that its mandated retentions had escalated to \$5 million for property, boiler and machinery, mechanical breakdown, and transmission and distribution coverage, but the firm was comfortable pre-funding only \$2.5 million of that retention. Its reinsurer—Zürich Corporate Solutions—helped the client convert the \$2.5 million XS \$2.5 million layer of its retention into a more fungible layer of debt capital through an unfunded finite program that blended a \$2.5 million XS \$2.5 million post-loss risk finance layer with a \$5 million XS \$5 million layer of pure risk transfer (using an integrated multi-line program).

This example illustrates that post-loss funded programs need not be problematic just because they are funded after the loss occurs. As in the case of many users of post-loss funded programs, the post-loss funded risk finance layer is not pre-funded mainly because the firm cannot obtain risk transfer coverage at that layer. And rather than leave the risk unaddressed, the firm essentially enters into a contingent debt facility to fund the part of its retention between the lower attachment point that it can fund and the lower attachment point of the true risk transfer layer.

## Replacing A Non-Renewed Multi-Line, Multi-Year Integrated Program\*

A professional services firm had been relying on a multi-line, multi-year integrated program for its financial lines insurance coverage. When that program did not renew, the services firm also found that replacing certain of the coverage lines in the traditional single-year, single-line market was prohibitively expensive and that coverage was only available at extremely high attachment points. Not only was the company unable to secure the coverage it wanted on fiduciary liability and on a blanket bond, but the services firm had contracts with customers that required errors and omissions (E&O) coverage at specified limits the firm could no longer obtain. Apart from facing extraordinarily high rates at undesirably high attachment points, the firm literally found its core business at risk from its seeming inability to insure non-core E&O risks.

AIG Risk Finance proposed a blended E&O, fiduciary liability, and blanket bond finite program. The program involved a combination of retentions, co-insurance, high aggregate limits, premium installment

payments, retrospectively rated premiums, and more, but ultimately delivered a solution that secured the desired coverage.

This program again illustrates that post-loss funded finite solutions are not always problematic. This program also illustrates, however, the need to be careful in representing a program accurately. If the customers of this firm simply require E&O exposure indemnification, a post-loss funded finite program like the one described will work fine. But the company would want to be clear in its representations that some portion of this exposure has been financed. In the end, AIG has indeed covered the risk, but it has done so by financing a part of the risk. The customer in this or a similar case probably would not want to claim that the insurance program was 100% risk transfer or equivalent to classical indemnity insurance. But provided it is disclosed properly and conforms to the requirements set forth by the firm's customers, the program is quite sensible on its face.

\*This case is based on information presented in P. Raybin, "When One Door Closes...", *AIG Risk Finance Review*, Vol. 2, No. 2 (2003).

### Opportunities for Abuse

As we have shown, finite risk programs can provide companies with real economic benefits without raising questions of impropriety. Let's turn now to some of the features of finite programs that create opportunities for abuse. The common denominator of abuse usually concerns the degree to which the transaction is accounted for, disclosed, and represented to investors as achieving "significant risk trans-

fer" when there is in fact little or no such transfer. The fact that a finite program contains a risk financing component is not in and of itself a problem. The desire of a company to manage the timing, and hence the cash flow, risk of an as-yet-unknown liability is a legitimate economic motive. But a program that transfers only timing risk will not qualify as insurance. Such a transaction is a deposit or a loan, not an insurance contract, and must be accounted for as such. On

the other hand, a program with a component intended to address timing risk is not automatically suspect.

So where, then, are the problems? Let's explore some specific areas of potential abuse.

### Retroactive Cover

Finite risk structures, as we have seen, can be used to manage both prospective and retrospective liabilities. When dealing with retroactive liabilities, however, the contract is no longer insurance. If there is no risk, after all, there is no risk transfer.

To put it bluntly, trying to execute retroactive insurance is equivalent to insuring against a known outcome. As long as there is still risk and uncertainty about the outcome of a liability—will the risk damage the firm or not, and if so, by how much?—then finite or any other insurance contract can be underwritten. But the moment the damage is known with certainty, any contract predicated on that particular backward-looking trigger is no longer managing risk; it is just shifting funds—or financing the loss.

Firms can still *do* this, of course. They just cannot account for and disclose what they are doing as insurance. Under U.S. GAAP, a firm is allowed to net the benefit of an insurance program against the associated loss as long as the recovery is considered “probable.” At the same time, the premium paid can be expensed over the life of the policy. But if the recovery is “possible” but not “probable,” the insurance cannot be used to reduce the size of the loss. And if the recovery is “known with certainty,” then the recovery can be netted against the loss, but in that case the *entire premium* must be expensed in the same quarter in which the loss and recovery are recognized and netted.

For example, suppose a firm buys \$1.1 million of insurance at a cost of \$1 million to cover the risk of the failure of a machine over the next five years. If the machine is teetering on the brink so that a recovery is probable, the firm can charge off the loss on the machine *and* net the \$1.1 million recovery now against that expected loss. The \$1 million in premium is expensed gradually over five years. The \$1 million premium expense represents the retained portion of the loss that the firm wishes to pay but cannot credibly reserve against. So far, so good.

Suppose instead that the machine failed two months ago and a policy is now written to cover any failure of the machine from last year through the end of five years from now. What the firm *should* do is take the \$1.1 million charge-off now for the loss of the machine, net the \$1.1 million recoverable on the contract against it now, *and* expense the entire \$1 million in premium *now*. There is no risk, so there is no risk transfer and hence no justifi-

fication for amortizing the premium over the life of a redundant policy.

But let's suppose the firm has already told investors it had a great quarter and then discovers that the machine has gone kaput. If it wants to play accounting games, the firm could try and inappropriately treat this finite deal as insurance, using the \$1.1 million expected recovery to offset the \$1.1 million charge-off and avoiding any hit to current earnings. Instead, the firm would gradually take the hit to earnings over the next five years. This is *not* okay—it is earnings smoothing, plain and simple.

The problem here, however, is not with the contract structure itself. The problem is entirely a failure by the firm to account for a retroactive contract as a depository instrument. If there is no risk transfer, there can be no accounting for and disclosure of the structure as risk transfer.

### Undisclosed Debt in Post-Loss Funded Programs

Post-loss funded finite programs can be very useful. When insurance markets are “hard” and coverage is not available for firms in the primary or excess layers, post-loss funded finite may be literally the only way to obtain some kind of cover. And most would agree that risk finance for the forced retention is better than wandering into the risk event completely unprotected. In other words, risk transfer can help protect the firm's equity holders. But when risk *transfer* is not available, risk *financing* can be a way to secure new debt to be issued post-loss but on pre-loss terms, thus protecting debt holders from the costs of distress debt financing or the deepening insolvency problem,<sup>10</sup> while also protecting equity holders from strategy interruption and underinvestment. For a cash-strapped firm in particular, risk finance is better than nothing at all.

At the same time, insurance is insurance—and debt is debt. Many unfunded finite programs are essentially a blend of contingent debt and excess-of-loss insurance coverage. There is nothing inherently “wrong” with contingent debt.<sup>11</sup> The question that many have asked about post-loss funded programs is whether or not they have been properly accounted for and disclosed. If a firm has a \$50 million XS \$350 million post-loss funded finite program, a loss event of \$400 million will involve a pure insurance payment of \$50 million by the reinsurer and a loan to the cedant of \$350 million to cover the retained first layer. That \$350 million is then paid back through contingent or retrospectively rated premiums—premiums that are really principal and interest on the debt, but that investors might not perceive as such.

Debt and insurance are accounted for differently, and the difference can be significant. As Enron has taught us, the amount of term debt carried by a company can be a very important variable, affecting debt covenants, credit lines,

10. For a detailed discussion of “deepening insolvency,” see J. B. Heaton, “Deepening Insolvency,” *Journal of Corporation Law*, Vol. 30, No. 3 (2005), pp. 465-500.

11. See C. Culp, “Contingent Capital,” *Journal of Applied Corporate Finance*, Vol. 15, No. 1 (Spring 2002).

credit enhancements, collateral requirements, and the like. Concealing term debt inside an insurance program can thus be considered both misleading and fraudulent accounting.

The bigger problem is arguably with *disclosure*. If you have disclosed that you have \$400 million in “insurance” on the above program, investors and other firms are likely to believe that you have \$400 million in risk transfer. That’s quite a different story from telling investors you have borrowed \$350 million contingent on the loss event and then have \$50 million of insurance.

There is an easy solution to this problem. If a firm wants to do an unfunded program, the better way might be to combine a true contingent debt structure<sup>12</sup> with a \$50 million XS \$350 million insurance cover. If the excess insurance is multi-year and multi-line, a firm can probably still get the benefits of a low-claims bonus. The firm only really sacrifices the appearance that the first layer is insurance—which it isn’t. So, the answer is to go ahead and do the structure in which you borrow the \$350 million retention and insure the excess, but by using contingent debt and insurance rather than finite. This will result in the appropriate accounting and tax treatment, and, equally important, the proper disclosure.

We’re not saying that *all* post-loss funded finite programs are irresponsible, disclosed improperly, or debt in disguise. That’s plainly not true. And we’re not trying to indict the whole class of post-loss funded finite products. Our goal is simply to highlight opportunities for abuse—and easy ways to assure concerned investors that management is not availing itself of those opportunities.

### Other Potentially Troublesome Features

Finite structures may contain various other provisions designed to affect the degree of true risk transfer and the timing of cash flows under the program. These additional features can help users of the products achieve a significant degree of customization in their risk management programs. But they can also present opportunities for concealing the true nature of the finite program, especially with respect to the true amount of risk finance versus risk transfer in the structure. Consider some examples below of additional features often found in finite deals that can cause trouble when firms are anything other than transparent in their disclosure of these terms.

**Loss Corridors and “Blending.”** The term “blended” has several different meanings in a finite risk context. To some, it merely reinforces the fact that finite itself blends risk finance and risk transfer. To others, blended finite programs refer to finite programs combined or integrated with other ART forms. It is not uncommon, for example, to see a captive insurance company or a mutual seek protection that

includes a finite program integrated with a multi-line cover. Such a program might well be called “blended finite.”

Blending can also refer to the manner in which the risk transfer component of the structure is integrated into the deal at various attachment points. In the environmental clean-up example we used earlier, we had a \$400 million program that consisted of a \$350 million pre-loss financing layer and a \$50 million pure insurance component. The latter encompassed the \$50 million XS \$350 million layer. But suppose instead that the program was structured so that a \$1 million insurance layer attached after every \$7 million in retention up to \$400 million. In other words, insurance would cover \$1 XS \$7, \$1 XS \$15, \$1 XS \$23, and so on, up through \$1 XS \$391 and \$1 XS \$399. The total coverage would still be \$400 million, with a total retention of \$350 million and total insurance of \$50 million. The only difference is the layering.

It’s possible that the above kind of layering is intended to match a corporate retention need, but not likely. More likely is that the blending scheme is intended to distribute the insurance part of the program into lower loss layers so as to increase the probability that the risk transfer component will be used. This can make sense, as it may lead to greater risk transfer than if all \$50 million is in the layer that exceeds \$350 million. At the same time, this sort of program is awfully confusing and hard to describe, much less to rationalize. Beware.

**Mandatory Reinstatement Provisions.** A *reinstatement* in a (re-)insurance program occurs if a policy limit can be refreshed after a loss has reached its limit. Optional reinstatement provisions are common features of ART forms like multi-line programs. With an optional reinstatement provision, the insurer has the right to pay additional premium to reinstate a policy limit after it is exhausted. This is a type of *contingent cover* or *contingent insurance*.

*Mandatory reinstatement* means that the protection purchaser in a finite program is automatically assessed an additional premium to reinstate a limit following a loss. On the one hand, this would seem to increase the risk transfer component of the structure. On the other hand, the mandatory reinstatement creates a source of additional known premium payments for the insurer. On a probability-adjusted basis, the net impact can be *reduced* risk transfer. If the aggregate limit of cover is reached in the last six months of a three-year structure, for example, the probability that the entire aggregate limit would be exhausted *again* over the next six months is remote at best. A mandatory reinstatement of the full limit in that case would be largely redundant from a capacity perspective, but it could increase the total premium outlay by enough to significantly reduce the risk borne by the reinsurer.

12. Such as Swiss Re’s Committed Long-Term Capital or CLOCS. For a discussion of CLOCS and their uses, see Culp (2002), cited earlier.

**Abuse of the Low-Claims Bonus Feature.** One of the essential features of most finite deals is the low-claims bonus. If premium plus investment income less expenses and claims result in a surplus, at least some of that surplus is likely to revert to the insurance purchaser. This represents a contingent asset that may cause the insurance purchaser some tax and accounting headaches. Provided the policy runs its natural course, this feature of a program does not in any way reduce the *ex ante* risk transfer. It merely takes any favorable result *ex post* and divides the gain between the reinsurer and the cedant.

The real problem lies in programs that combine a low-claims bonus with *retroactive cover*. Recall that retroactive cover applies when there is no real risk or uncertainty about the outcome of the insurable event—it either happened or it didn't. Suppose that Company Scully enters into a finite structure with Reinsurer Mulder. The premium is \$50 million, the policy limit is \$75 million, and the cover is retroactive. If the event *did* occur and caused \$50 million in damage, Scully has essentially used the finite transaction to make a \$50 million *deposit* with Mulder. If the event did *not* occur, Scully is still assured of getting \$50 million back (plus interest and less expenses). Again, Scully has made a deposit.

**Early Termination and Tear-Up Agreements.** Some finite risk deals include early termination provisions. In and of itself, this does not necessarily reduce the risk transfer component of a structure. It depends entirely on how the program is structured. If a program allows for early termination in such a way that the premium reverts back to the cedant, a tear-up clause can function much like an abused low-claims bonus—as a means by which a premium deposit is returned to a cedant without any real risk transfer occurring in the process.

## Sound Principles for Finite

In today's environment, like it or not, some users of finite should be losing sleep—and will lose more as regulatory scrutiny increases and litigation builds. Properly used and disclosed, however, finite is a valuable risk management tool. Indeed, some firms *not* using finite may be avoiding it at the expense of their shareholders.

Like junk bonds in the '80s and derivatives in the '90s, finite risk invites scrutiny mainly because it is not well understood and has been associated with a few high-profile abuses. There is one thing we know about financial innovation: accounting, disclosure, and regulation have a hard time keeping up. What's a responsible firm to do?

With the recent attacks on finite, the best approach for current and potential users is to hunker down and determine whether finite is appropriate for them and, most important, whether it is being accounted for and disclosed properly.

After the derivatives losses of the mid-1990s, many firms undertook derivatives risk audits. Sound advice to firms thinking of what finite means to them is to implement a similar insurance risk and disclosure audit.

Those seeking a simple checklist of things to do to make finite acceptable won't find it. As with all structured finance and structured insurance, there are too many variations on deal terms and themes to draw sweeping generalizations—a fact that regulators may also have forgotten. There simply is no list of magic conditions that are both necessary and sufficient to make finite or any other structured program “okay.” We can, however, get halfway there and identify a few conditions that are *necessary* for responsible transacting, even if not always sufficient.<sup>13</sup>

**Economic Purpose.** A structured transaction should be undertaken because it is consistent with firm value maximization and because it fits into the integrated risk and capital management strategy of the firm. If an economically motivated deal can also be structured to achieve desirable accounting, tax, and regulatory treatment, great! But the underlying motivation for the deal should not be to “reverse engineer” a specifically desired tax or accounting target.

**Transparency.** Here's an easy litmus test: If the only way that a structured insurance deal makes sense is if no one ever finds out you did it, then don't do it. As obvious as this seems, a lot of the structuring business involves proprietary modeling and product design. There is a natural tension between the desire to disclose details of a deal to assuage any concerns or misunderstandings about their economic purpose and the desire to protect costly proprietary information. But in this environment, the scale is tipped toward the former. Without adequate transparency and disclosure, it is likely that the deal will be misunderstood or questioned. The real decision is whether or not to do the deal—and if it is worth doing, it is worth disclosing in detail. At a minimum, disclosure about the economic purpose and basic design of structured programs should be included in the Management Discussion & Analysis (MD&A) section of 10-Ks. Better still is to provide descriptive information about the deal publicly—on the firm's web site, through interviews with key financial reporters, and the like.

Worth noting is that limited disclosure is hardly unique to finite risk products. In fact, most corporations today engage routinely in very limited voluntary disclosures about their insurance activities, whether structured or traditional. This strikes us as a missed opportunity. Especially in today's environment, clear explanations of how a firm is using insurance for the benefit of its security holders is not only advisable but arguably essential if the firm expects to extract the full value of insurance. How can a firm realize

13. These principles were initially developed by the head of an ART practice at a major reinsurer and are adapted here with permission.

the full benefits of risk transfer, after all, if its investors do not really know what risks have been transferred and how?

**Adverse Selection and Credibility.** Beware of cookie jars. Structured insurance and finite can often be remedies to cookie jar problems, but of course they can also *create* cookie jars. For example, trying to classify a retroactive cover (which is essentially a deposit) as insurance is just shifting earnings around in time and is a classic cookie jar problem. Attention should be paid to making structures credible, and part of this means making them intelligible. Over-engineered deals in a post-Enron world immediately raise a red flag that there is a cookie jar lurking somewhere inside those hundreds of special-purpose entities and finite deals.

One way to avoid the cookie jar syndrome in the finite area is to use finite mainly for managing non-core business risks. When finite is used on a core risk that is directly under management's control, moral hazard comes into play and there is too much temptation to use the program specifically to achieve a desired earnings result. When finite is applied to non-core risks, however, management cannot affect the outcome of the risk—nor do the firm's earnings depend so critically on the result. There is thus less temptation to manipulate the resolution.

**Quality of Earnings.** Earnings are not always a reliable guide to a company's underlying profitability and value, and far too much attention tends to be paid to the reported numbers. Given that companies will likely continue to have an earnings fixation, however, one of the best ways to evaluate the effect of structured finance and insurance products on the investment community may be to assess how they affect the quality of information an earnings release conveys.

When a firm cannot take an accounting reserve for a loss that is hard to estimate (that is, the recovery is possible but not probable), traditional insurance is a good alternative. But when risk transfer is either not desired at lower retentions or not available, finite is a credible alternative to a loss reserve and makes the firm's earnings more informative than just setting aside cash that investors cannot see and that does not affect the firm's earnings.

This sword cuts both ways, however. Most finite programs increase shareholder equity or, for insurance companies, the surplus by replacing an unknown stream of liabilities with a known premium outlay. That can be an accurate representation of the economics of the deal if the finite structure contains adequate risk transfer. But if not, finite can be used to conceal leverage and overstate the value of equity, thus reducing the informativeness of financial statements and earnings.

Users of finite should regularly ask themselves the following question: Does this transaction help my financial

statements more closely represent the true economic income and risks of the business? If not, then consider not doing the deal—or disclose the purpose and impact of the deal in excruciating detail. Alternatively, consider asking: Does this deal make my firm look financially stronger than it really is? If so, then don't do it.

**Financial Flexibility.** Structured insurance is generally intended to help companies optimize their risk and capital and their debt/equity mix. Programs that lock firms into inflexible solutions are often at odds with the corporate finance drivers that led firms to consider those solutions in the first place.

As we have noted, too much flexibility in a finite deal can limit the true risk transfer that occurs, and users must be alert to this possibility. At the same time, a certain degree of flexibility is what makes these structures more desirable than more rigid alternatives like captives or traditional insurance.

### A Cautionary Policy Note

At the policy level, we urge reflection, restraint, and, where culpability is not clearly established, some degree of forbearance. Ambiguous accounting and disclosure rules—added to a post-Enron siege mentality—have led to a guilty-before-proven-innocent attitude toward finite risk tools and their users. Each finite application should be carefully evaluated on its own merits, with the awareness that finite can be used properly as well as abused. Rushing to judgment about finite is tempting, but dangerous. Consider how much insurance industry capital has already been burned up by the regulatory bulls in the china shop to date.

We agree that true abusers of finite must be held accountable for their actions. At the same time, a firm is innocent until proven guilty, even in highly complex insurance matters. Let's allow these firms to have their day in court before pronouncing sentence.

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