1999 Valuation Actuary Symposium September 23-24, 1999

Los Angeles, California

Session 45OF **Current Uses of Reinsurance***

Moderator: Franklin C. Clapper, Jr. **Panelist:** John C. Knauss

Reinsurance has become an important part of the financial planning process for an increasing number of insurance companies. Reinsurance can provide solutions to risk management and earnings management challenges.

This session provides an overview of the current uses of reinsurance, focusing on recent developments and issues. Panelists will discuss uses of reinsurance for specific products and lines of business and reinsurance as a financial tool. There will also be a discussion of due diligence issues in selecting reinsurers and maintaining reinsurance arrangements. Statutory and GAAP considerations for reinsurance contracts are presented.

Topics include the following uses of reinsurance:

- Term insurance
- Mortality stabilization
- Earnings volatility stabilization
- Variable life and annuities and other investment-oriented products
- Health insurance
- Nontraditional uses

MR. FRANKLIN C. CLAPPER, JR.: John and I have developed a tag team approach, and we hope it works. In between our going back and forth, we certainly invite the audience to ask

Copyright [©] 2000, Society of Actuaries * Charts referred to in the text appear at the end of the manuscript.

questions or make comments along the way. I'll point out that the level of this session is supposed to be for people with little or no experience, and we're taking that seriously. If you work for a reinsurance company, you probably don't belong here, but we may hit some things you'd be interested in.

Our objectives will be just as stated in the program. We're going to show how reinsurance has developed as an important financial planning tool. We will highlight the important considerations that promote effective use of reinsurance with a focus on current products and issues.

The first topic I'm going to talk about is the general purposes of reinsurance. The reason I'm doing that is to provide a framework and a structure for what follows. If you look at reinsurance as being done for different purposes, then all the special topics, all of the products and so forth, fit into one of these categories that I'm going to talk about. Then John and I will go back and forth on certain topics. I may give a few general comments on accounting, although we intend to cover that mainly under the special topics along the way. If there's time, we'll talk about due diligence and what that means.

First, we'd better introduce ourselves. I am appointed actuary at AXA Re Life in New York. I've done a number of other things in reinsurance and financial reporting, including being chief financial officer of an offshore company, during which I did absolutely no actuarial work. John is appointed actuary at London Life Reinsurance Company, and until recently, he was a pricing actuary as well. We have different points of view. Even though we're appointed actuaries, we're presenting this almost on a marketing basis to show ceding company appointed actuaries how they can use reinsurance effectively.

I invented categories describing the purposes of reinsurance. Of course the most traditional purpose is insurance risk transfer, and by that I mean mortality and morbidity.

Financial risk transfer. Under the heading of financial risk transfer, I would include persistency, although that's debatable. In other words, the persistency risk really is about recovering acquisition cost, which is a financial item. Of course, investment return under certain

arrangements sets a financial risk that gets transferred to the reinsurer. It would be done if you perceive that the reinsurer can do a better job in investing the assets, or he has more expertise or perhaps a tax advantage.

Another kind of financial risk would be market risk, and that would be hedging in options and transferring them to the reinsurer. Some people don't call that reinsurance, but certainly the reinsurer does get some of that risk on certain kinds of products. This is particularly true nowadays with guarantees associated with variable products, which is a hot topic that was discussed at other sessions at this meeting.

The third purpose of reinsurance is using reinsurers' expertise. That's a very old use of reinsurance. Often reinsurers are used for underwriting and sometimes pricing. I once priced a product for the client, and they just accepted my rate table without asking any questions. I'm sure John has done the same thing. Sometimes reinsurers design products for companies.

Transferring business risk. That's sort of a general category where I've included such things as turnkey products where you really pass the entire business to the reinsurer, or assumption reinsurance, where they take over a block. The ultimate is an acquisition by a reinsurer, which some reinsurers are actively doing.

Another purpose is to achieve an accounting effect. This is what most people refer to as financial reinsurance. In other words the main purpose of the treaty is to change your accounting and not much else. That would include surplus relief, earnings stabilization, and things of that nature.

We have some newer forms of reinsurance. There is securitization and certain kinds of nonproportional coverage. Nonproportional is not new, but the way it's being used now is new in certain cases. In fact most treaties have multiple purposes. They have a primary purpose, but they usually include one of the other elements of reinsurance as well. Traditional reinsurance covers risk transfer, but it also has some financial risk transfer. As I said, we'll go back and forth on these topics, and John will start with stabilization reinsurance.

MR. JOHN C. KNAUSS: Anticipated fluctuations in claim experience or profitability on a block of business is a problem. This applies not only to earnings but maybe anything that drives earnings, like mortality and morbidity experience. As we all know, volatility is a particular concern to stockholders, regulators, and rating agencies. Fluctuations of experience may occur in some blocks like long-term care and disability income, where you may see a seasonal or cyclical claim pattern. It also might occur in blocks of business that lack size to be completely credible.

What do you do about this fluctuation? One solution is to enter into a reinsurance arrangement wherein the volatility is borne by the reinsurer. This benefits the ceding company in that it enjoys the smooth results it desires while retaining the profits on the business. Stabilization reinsurance can be implemented in a variety of ways. It is typically a transfer of risk to the reinsurer who returns excess profits over time through an experience refund mechanism.

Before we get into some examples, there are a few considerations I want to discuss regarding reinsurance. They are, on a statutory basis, the NAIC Credit for Reinsurance Model Regulation, and, on a GAAP basis, *Financial Accounting Standard (FAS 113)*. It is important that you know and understand the laws and regulations regarding reinsurance before you enter into any transaction. We like to think that the reinsurers are trustworthy and know what they're doing (I know that Frank and I are both). Regardless, it is important that you know the laws and how to apply them without blindly relying on the reinsurer. The loss of credit for ceded reserves is a very serious problem, and when the SEC or your state regulator wants to take away your credit for reserves, ignorance is really no defense.

The NAIC Credit for Reinsurance Model Regulation is a lengthy document. The Model Regulation lays out some basic rules for accredited reinsurers and reinsurers domiciled in other states, and it describes requirements for the use of trust funds in reinsurance. Some of these requirements are that the ceding company is the beneficiary, that it exists during the lifetime of their business, and also that there be guidelines with respect to the types of investments and the quality of investments that must be in the trust fund. It also talks about the use of unauthorized reinsurers, requiring that the assets on a transaction with an unauthorized reinsurer are either on a funds-withheld basis. That is, they remain with the ceding company, or they're placed in a trust, or the reinsurer provides a clean, irrevocable, unconditional, and evergreen letter of credit. The

Model Regulation requires certain contract provisions, too, such as a solvency clause and arbitration clause. This model has been enacted into legislation in most states.

FAS 113 states — and I'm probably paraphrasing here — that a GAAP reserve credit is allowed only if there exists a reasonable possibility of significant loss by the reinsurer. This precludes accounting tricks used to move income or losses from company to company in order to manage earnings on a GAAP basis. One auditor rule of thumb is that there should be at least a 10% chance of losing 10%. Generally, if you comply with the statutory regulations, you're going to be okay on a GAAP basis.

Let's go back to stabilization insurance. As I mentioned before, you could use this type of a transaction to stabilize mortality, morbidity, or earnings experience. For the sake of our discussion today I'll focus on mortality.

Let's discuss Alternative One. In this structure, during periods of favorable experience, the reinsurer gives the profits back to the ceding company. However, in unfavorable periods the reinsurer pays the losses, as you'd expect, but the ceding company owes them back to the reinsurer, perhaps through increased premium rates. This is not allowed under the Model Regulation and *FAS 113*. If you think about it, it's really clear why this is so. Because the ceding company owes the losses back to the reinsurer, there's really no transfer of risk, and this turns the reinsurance transaction into an exercise in accounting. As we'll stress throughout the presentation, transfer of risk is a necessary condition for reinsurance.

Here's an alternative that does work: we'll call it a multi-year stop-loss or excess-of-loss transaction. The reinsurer pays losses in excess of what we call the attachment point. The attachment point may be a loss ratio, say 110% of earned premium. On a mortality basis, you could specify it as a percentage of expected or pricing mortality. This essentially creates a ceiling on the mortality or loss ratio of the ceding company. Since the reinsurance transaction is a multi-year transaction, the reinsurer can carry forward current losses against future profits on the block. In the current accounting period, if there are losses, the reinsurer shows the losses. However, the ultimate profitability of the block of business reinsured determines whether the reinsurer makes money or loses money. There is transfer of risk, so that if the block goes sour, the risk still lies

with the reinsurer. Another thing to point out is, because it caps losses in the current period, it places a floor on income. Hence, some people have come to call this an executive bonus protection plan.

An extreme use of a mortality stabilization transaction is to reinsure 100% of your mortality risk. Thus, the ceding company now has claim costs that are completely predictable — simply the sum of the yearly renewable term (YRT) premiums they're paying for the reinsurance. In addition, they may receive expense allowances from the reinsurer. On the downside, the ceding company forfeits the mortality gains in the block. Some very large companies have done this on in-force blocks of business.

One thing we learned at the general session is that the SEC is apparently taking a closer look at attempts to manage earnings. I think I can point to one of these alternatives as a viable option to create the same effect without resorting to any kind of internal accounting changes. Now I'll turn it back to Frank who will discuss variable products.

MR. CLAPPER: Before I get into variable products, I will comment on what John said. There is a difference between managing claims and managing earnings. Sometimes it's hard to tell the difference, but that is the key feature. If your treaty is managing claims or benefits, it's okay. If it's managing earnings (accounting) it's not okay. Peter Duran, at Session 1, discussed what's going on with the SEC. They've decided that certain issues are material by definition regardless of their size. One of them is earnings management.

Of course, statutory accounting is always concerned more with the balance sheet than with the earnings. The reader of the financial statements might be less upset if you were managing statutory earnings as long as your liabilities are adequate. However, you do have to take care with the model (reinsurance) regulation to make sure your treaty qualifies as reinsurance in the first place. GAAP is more concerned with income, and that's where managing earnings becomes a bigger issue. To cite some other references, *FAS 60*, Paragraph 10 states "liabilities for unpaid claims shall be accrued when insured events occur." Paragraph 17 says, "the liability for unpaid claim costs, including estimates of costs relating to incurred-but-not-reported claims, shall be

accrued when insured events occur." They keep using this phrase over and over again. I think it's pretty important.

Another reference you can look at to discuss this issue is Bob Posnak's book (*Ernst & Ernst*, *GAAP*, *Stock Life Companies*), which is the definitive pre-*FAS* 97 book on GAAP accounting. It goes into this issue. The appendix tells of a debate that took place, when the audit guide came out, between Transamerica-Occidental and Lincoln. One was for it, and one was against it, and I'll let you look at that to see which one was which. It had to do with mortality fluctuation reserves and whether they were appropriate or not. The issue is the extent to which management can control earnings. Mortality experience should be reflected as it emerges, according to GAAP.

Now we will talk about variable products. First, I'll define some terms. Some of you may know a lot about variable products, and some of you may know nothing at all, although it has been discussed in some of the sessions. Where reinsurers get involved is in the guarantees on the variable annuities or variable life products. GMDB is a guaranteed minimum death benefit that can take many forms. GMIB is a guaranteed minimum income benefit, and that means it is defined in terms of the income you get upon annuitization. Of course, the duration there is not so well defined. GMAB is a guaranteed minimum accumulation benefit, and it is essentially an option where you have a guaranteed minimum account value at a maturity date. There's a waiting period. At the maturity date, you can roll it over to a new maturity. Finally, there is the variable immediate payout annuity (VIPA). This is not too popular, but it does exist. It means that, after you annuitize, the company guarantees a minimum benefit, even though it's a variable account.

What kinds of reinsurance does this involve? You could do this on a strict YRT basis, meaning that you would calculate a premium rate according to your current in-the-money exposure on the death benefit — the difference between the guarantee and the current account value if it's positive. That would transfer a mortality risk, but it wouldn't transfer any of the financial risk where the benefit exposure can go up and down. It's really not very effective for most ceding companies. They're not really concerned with the mortality. They're concerned with the financial risk more than the mortality. Other forms of reinsurance would transfer the financial

risk, and usually they want to do that. We have something we call asset-based reinsurance where the premium rates are expressed in basis points on the account value, and that ties more directly to the ceding company's income, so they like it better. They may or may not be age adjusted, and there are also floors and caps to help fine-tune the rate structure to get it to come out the way you want.

Chart 1 shows how this works. It has three items on it. The first is the ceding company's death claims for a five-year reset GMDB. The reset, by the way, means that every five years the death benefit minimum becomes whatever the account value is at that point, and then it's frozen for five years, after which it may go up or down with a reset. A ratchet can only go up, but a reset can go either way. It's not really that liberal a benefit, but it's a little bit different from return of premium. So, the light colored line represents the claims, and then, as you can see, they are pretty much zero until there's a huge increase. Then they go to zero for a while, and there is another blip, and then they go back to zero.

The income before reinsurance is shown by the square box line. This includes asset-based charges that the ceding company would charge the policyholder for the death benefit. That's the premium, and then the income equals the premium less the claims. It's pretty simple. It doesn't matter whether you're talking about statutory, GAAP or cash accounting. Then the income drops because of claims, and goes along for a while. It drops again, and then it goes back up, and most companies don't like to see that. They do a reinsurance arrangement, and after reinsurance, you get the diamond line, which is a steady line just above zero all the way through. Reinsurance has achieved its purpose, which is earnings stabilization, but it's also risk transfer, so it works.

In contrast, Chart 2 is a graph for another kind of benefit, which is a one-year ratchet, and it is a little more liberal. The diamond line represents the claims. They go up a lot to the left of middle. The income before reinsurance is the square line, and finally the triangle line goes across steadily. It's hard to build these examples because the products are so complex that it has a lot of moving parts. If you want realistic examples, you've got to keep track of all those moving parts.

We promised to cover accounting. For death benefits, there is a statutory guideline, XXXIV, but if you're interested in reinsurance reserve credit, you must be careful. This is a nonproportional

coverage and a financial coverage. You're dealing with the Commissioners Annuity Reserve Valuation Method (CARVM). You get all kinds of weird effects when you try to calculate the impact of reinsurance. You're supposed to add the reinsurance premiums to your liability and subtract the reinsurance benefits and look at the net effect. Sometimes the reserve can go up instead of down. It just depends on what your reinsurance arrangement is. Don't assume that there's a particular credit involved. I don't know if this effect was intended or not, but that's the way it comes out when you do the reserve method according to Guideline 34.

Along with living benefits, the Variable Annuities with Guaranteed Living Benefits (VAGLB) is developing something called a "Keel" method, which is conceptually the same thing. It's a single-scenario approach where you project your benefits according to an interest scenario that is deemed to be appropriate for the fund involved. You project premiums and so forth the same way, and then, according to that scenario, you do a CARVM calculation, and that gives you your reserve. The only difference is in how the interest rates are projected because with different types of benefits you have a different risk pattern involved. Living benefits really have a long-term risk, whereas, for the death benefit, the risk is more a short-term volatility. They have a drop and recovery scenario. They assume your rate goes down before it goes up. For the living benefits, they haven't finalized the scenarios yet, but they're working on it. Steve Preston and Tom Campbell are both on the committee, and they spoke on it. I won't say any more about it.

There's a question about federal income tax reserves for these products, but I heard Bud Friedstadt say, in the first session, that when it comes to methodology, you can use something that's consistent with statutory principles. I would expect that Guideline 34 would certainly apply. Regarding the living benefits, if you did something similar to what the committee is working on, presumably that would be a valid tax reserve. We'll have to wait and see. As far as I know, not a lot has happened on GAAP. They're talking about it. The problem you run into on GAAP is that the benefits are highly volatile. It's what they call a low frequency/high impact claim pattern. For reinsurance or even on the direct side, if you isolate this benefit, the revenue and the benefits are not closely correlated.

Obviously, when you price it, you hope your revenue covers your benefits, but in any given year, the relationship could be a very high or very low ratio, positive or negative. This makes it more

difficult to calculate an appropriate GAAP reserve. You do have to recognize certain principles of GAAP, mainly *FAS 133*. My understanding is that the account value guarantee is strictly a derivative. That would have to follow GAAP accounting for derivatives. The death benefit is not a derivative, but what it is, is not so clear. With the income benefits, who knows? I'm trying to develop an accumulation method with a cap and a floor on it so that it's high enough and low enough, so to speak, but who knows what "enough" is? We'll see how that develops. One issue is, how closely should the reserves reflect the current in-the-money status? In other words, with this product, when you're out-of-the-money, you expect the reserve to be low, and when you're in-the-money, you expect it to be higher. How do you interpret that?

If there are no questions, then John will go on to nontraditional.

MR. KNAUSS: As its name implies, the primary goal of nontraditional reinsurance is not risk transfer, although it is necessary. There are two types of nontraditional reinsurance: proportional, which utilizes your standard risk-sharing structures and wherein the ceding company generally receives a reserve credit. The other type is nonproportional where there's generally no reserve credit. Of course Frank just contradicted me with his discussion of a nonproportional cover, the GMDB coverage, where there is a reserve credit.

MR. CLAPPER: It's unpredictable.

MR. KNAUSS: First, I have a couple of quick words about some nonproportional reinsurance coverages. One is a stop-loss. This is a short-term coverage wherein the reinsurer guarantees to pay benefits incurred in excess of the attachment point, which we talked about a little earlier. Spread-loss, or a multi-year stop-loss, is very similar to your stabilization type of coverage. The third kind of nonproportional reinsurance is that of a catastrophe, or cat cover. This is often used on life insurance benefits where the reinsurer will pay benefits on death claims incurred through a simultaneous event.

What I really want to talk about are the proportional types. The first of these is surplus relief, and I make the distinction between cash and noncash surplus relief. As its name suggests, surplus relief means the ceding company gets an allowance from the reinsurer that increases surplus. If it is a cash allowance, the ceding company realizes an increase in surplus through increased assets, whereas on a noncash basis, the ceding company gets relief through a decrease in the reserve liability. Most products work well with the reserve credit or on a noncash basis. However, some products require a cash type of allowance. These would include variable annuities, where the reserve is not held in the blue book. A company selling a lot of variable annuities may want to enter into a modified co-insurance (modco) arrangement, wherein they receive an upfront cash allowance to cover underwriting costs, policy issue expenses and commissions. The outstanding allowance is paid back to the reinsurer through the mortality and expense (M&E) charges on the policy.

Other nontraditional uses of reinsurance include risk-based capital relief and contingent surplus relief. I'll also discuss how proportional reinsurance can be used for credit enhancement. Keep in mind that reinsurance is very flexible: nearly any problem or issue that your company faces can be resolved or managed through the use of reinsurance. I should point out that this doesn't apply to blocks that lose money; a reinsurer can't take a losing block and turn it into a profitable block. However, if you're really desperate to unload it, and you're willing to pay, you may get a reinsurer to take it. Just be sure to contact your local reinsurer and ask.

Surplus relief is still being done, although changes to the NAIC Model Regulation have altered the market quite a bit. I'll come back to the Model Regulation shortly. A myriad of structures is available for surplus relief. It can be applied equally well to in-force business, new business, or a combination thereof. I should point out it works best for products with very conservative statutory reserves. That is, reserves with significant embedded statutory margins tend to work best for a surplus relief transaction. I should also point out that large amounts of surplus strain can be moved offshore.

One of the new issues facing companies today is Regulation XXX. As many of you know, the new XXX sets forth new reserve calculations for level premium term policies. Regulation XXX calculations result in the buildup of a large humpback reserve over the guarantee period, which generates potentially significant amounts of surplus strain. One possible solution for the ceding company is to reduce the term insurance guarantee period. If you don't want to take that route, your company needs to assess the anticipated surplus strain from new sales. If your company

enjoys a large amount of surplus, or if you don't sell a lot of level term, perhaps you can handle the strain yourself. However, if you want a large presence in the market, you may need to find a way to move the strain off your books.

One possible solution is a 100% co-insurance of the block to a reinsurer. In a separate agreement, the reinsurer could retrocede the risk back to you on a YRT basis. This essentially recharacterizes the term insurance from a level term to a YRT basis. In theory, this approach could be applied to both the basic reserves and the deficiency reserves. As we all know, deficiency reserves are an issue because they are not tax deductible. The new XXX provides some relief to the ceding company through the actuary's ability to choose his or her own mortality assumption for the deficiency reserves. Nevertheless, deficiency reserves may still result. I should point out that the reinsurers receive an implicit tax benefit by taking your strain because then they can enjoy the large deductions on their tax returns.

Due to the limited capacity of domestic reinsurers, you may need to move this offshore. That's not to say that there aren't a lot of large domestic reinsurers who may want to take your block. It also doesn't suggest that the offshore reinsurers have unlimited capacity. However, there are quite a few well-capitalized, large and well-run offshore companies in Barbados, Bermuda, and other countries. One problem with going offshore is, as we discussed before, the need for a letter of credit from the reinsurer. Regulation XXX reserves present an additional problem. On a plain vanilla offshore surplus relief transaction, you start off with a ceding allowance, your initial surplus relief, and over time, it goes down. The risk of the ceding company being impaired in terms of its letter of credit capacity diminishes over time. Because of the shape of this XXX humpback reserve, the letter of credit capacity required for this transaction can increase significantly over time. If you are with a ceding company looking at this as a possible alternative, you need to ensure that your reinsurer has a long-term business relationship with a bank or has the necessary LOC capacity down the road that you're going to require.

Another nontraditional use of reinsurance is risk-based capital relief. A company can improve its risk-based capital ratio simply by reducing RBC-sensitive items on its balance sheet. Some examples are disability income (DI), long-term disability (LTD), or medical premiums, which I'll

talk about a little later. Another alternative might be to move low-grade assets off your books through a co-insurance transaction.

What we call contingent surplus relief is a surplus relief transaction that's negotiated ahead of time, only to be executed in the event of certain predefined events. If your company is fortunate enough to be enjoying large sales of profitable business, or you're selling a lot of products with a lot of strain, you may become concerned during the year about your year-end surplus. Or, if you're company is smaller or you're having a bad year and you're concerned about your year-end RBC ratio, a solution is to enter into a contingent surplus relief transaction. One advantage to entering into a contingent surplus relief transaction earlier in the year is that the ceding company is in a much better position to negotiate the fee with the reinsurer than if they wait to the end of the year. At the end of the year, a reinsurer may not be very interested in doing a small surplus relief transaction, and it may cost you in terms of a higher fee. As a matter of fact, we've actually gotten calls on December 31 from companies looking for surplus relief. Honestly, we just want to go home.

Frank brought to my attention another use of contingent surplus relief. That is, the pre-funding of mutual company market conduct liabilities. There has been a lot of talk in the press about vanishing premium contracts; due to a prolonged low-interest-rate environment, the premium ceases to vanish or reappears. Because of that, some companies have faced lawsuits and, hence, have paid settlements to policyholders. A company may be concerned that it is going to be the target of a lawsuit, and thus is concerned about the effect of a potential settlement on its surplus. By entering into such an agreement you have a means to fund the settlement liability upfront through a surplus relief transaction in the event that a settlement actually occurs.

In terms of credit enhancement, reinsurance can be used to improve the overall credit profile of your company. One way you can do this is to improve the balance of risks within the organization and, as Frank mentioned, alter your balance sheet or income statement presentation. Or, you may be concerned with the capital adequacy formulas of many of the rating agencies, like A.M. Best and Standard & Poor's. Another way to improve your credit is through a sleep-tight cover, which I'll discuss in a moment. Reinsurance also allows a lower rated company to gain access to alternative markets.

A sleep-tight cover comes in handy when a ceding company wants to reinsure business to a lower-rated company. Maybe you obtained a great rate, or a great deal. Regardless, you're still subject to the credit risk of that company. One way around it is to execute an additional standby agreement with a strong, well-capitalized, and highly rated reinsurer who will guarantee the credit risk of that lower rated company. There are companies that specialize in providing guarantees such as these. We all know the story of Marvin Frankel and how he was able to steal assets from some companies for whom he was functioning as investment manager. A sleep-tight cover purchased by any of the ceding companies would have prevented this. Alternatively, if the assets were in a trust where assets could be removed only by authority of the ceding company, maybe this story could have been prevented.

In addition to the other considerations we discussed before, there are a couple of others I want to point out. We touched on the NAIC Credit for Reinsurance Model Regulation and *FAS 113*. The two others are the NAIC Life and Health Reinsurance Agreements Model Regulation and Internal Revenue Code Section 845. The NAIC model provides rules and guidelines for reinsurance treaties regarding such areas as levels of expense allowances, termination provisions, transfer of risk, responsibilities of the parties during the duration of the contract, and also the frequency of settlements. Settlements must occur at least quarterly, while the old law allowed for annual settlements. It's a minor point, but it's important to point out that if you enter into a surplus relief transaction early in the year, you're going to have one, two, or even three settlements on the transaction before year-end. This means that the relief is being paid down each quarter by the profits on the business. You need to be particularly aware of what you want your year-end surplus relief to be. We had an experience where at year-end, the ceding company argued that the ceding allowance should still be the original amount of \$850,000. The relief had been paid down to \$450,000. You can save yourself a lot of aggravation by keeping that in mind. Of course, you don't want to wait until December 31 either.

Internal Revenue Code Section 845 allows the IRS to unwind reinsurance transactions they feel were done primarily for tax effect. Basically all reinsurance transactions have some tax effect. The Internal Revenue Service is concerned about a reinsurance transaction used to move or eliminate federal income taxes. As we know, the Internal Revenue Code has nothing to do with

being fair — it has everything to do with the Treasury getting its money. This section of the code allows the IRS to unwind only one side of the transaction. Let's assume the ceding company gets a tax benefit from the transaction, and as a result, the reinsurer ends up paying slightly more tax. If the IRS deems that this was done primarily for the tax effect, it can choose to unwind only the ceding company's side, making them pay more tax without providing any relief for the reinsurer. To date, there have been few supporting regulations on this; however, the IRS attempts to apply Section 845 have been generally unsuccessful so far.

MR. CLAPPER: Again, to add to what John said, it's actually hard to prove that a deal has no valid business purpose, and I think that's why companies have won on this issue. The IRS really has to prove that there was no significant purpose other than tax, but it's debatable.

Also, the sleep-tight cover that John mentioned can be used to enhance a highly rated company's rating or image in certain situations where it's important for them to sell a product such as group annuities and that kind of thing. So, it's not just used with lower rated companies.

I'm going to say just a little bit about turnkey products. What we're calling a turnkey product is just putting everything together in one deal and really putting the reinsurer in the same position as the direct company for the most part, except that the direct company sold the business and that's all. The business would be reinsured on a quota-share basis, a large quota-share, so the reinsurer has most of the business on its books. The reinsurer does the product design so that he knows what he is reinsuring. He does the pricing and sets the rates. Often the reinsurer does underwriting for a ceding company, at least on policies of any size.

The key thing, though, is the administration because reinsurers generally aren't geared up to do that, but they could do that if they had facilities in place. Under those conditions the reinsurer would hold proportional reserves that would effectively provide surplus relief for acquisition expense or reserve strain. Still, this isn't done too often because reinsurers generally want to be reinsurers and not direct companies, and it involves a whole different level of overhead expense, which is not the way reinsurers generally work. If they do that, it's a big investment.

MR. KNAUSS: My last topic is the reinsurance of health insurance. This includes medical, individual disability income, group long-term disability, and long-term-care business. As with the other products we discussed briefly, this can be used for risk transfer, stabilization of the morbidity risk, RBC relief, surplus relief, underwriting and claim assistance (which is of particular importance if you're entering a market), and for divestiture and strategic uses.

Let's discuss some examples of the risk-based capital requirements for 1998. I learned that these changed for 1999, so I suggest you go look it up and see what the changes are. The risk-based capital requirement for certain types of health insurance is substantial: 35% of the first \$50 million of premium for individual DI plus 15% of the excess. A company writing a large amount of any of these types of business might want to move the premiums off its books to lower its risk-based capital. This can be simply done by reinsuring a large portion of the block through a co-insurance arrangement with an experience refund mechanism. You have moved premiums from your books to the reinsurer's, but you still enjoy your profits on the block.

Strain on new sales may be another reason to reinsure your health insurance. There is a tax reserve mismatch on long-term-care business. Statutory reserves employ a one-year preliminary term reserving method, but on a tax base, it's a two-year preliminary term. This results in a large discount between the statutory reserve and the tax reserve. Consequently, if you're looking at federal income tax as a percentage of statutory income over the life of the product, you're paying a lot more taxes proportionately upfront than you are on the back end. Through a co-insurance type of transaction you may get some tax relief on that as well. Just make sure you're transferring risk.

Another use of reinsurance may be the divestiture of a DI block. Many writers I know have been looking to exit or have exited the market for many reasons, including that DI may no longer be a strategic fit. They're tired of poor results or a shrinking market share resulting in higher unit costs. To divest your company of a DI block, there are a couple of options you could take. One is an indemnity arrangement where the business is still on your books, but you're reinsuring it off to the reinsurer. Until the end of time, the reinsurer's fortunes follow the fortunes of the block, but you're still on the hook as the direct writer. Note that this creates a long-term credit risk for the ceding company.

Another option is an assumption reinsurance transaction where the reinsurer buys the block and physically moves it off your books. However, as with all assumption reinsurance transactions this could be quite messy. If you're looking to divest the DI block off your books, but your field force wants and expects a DI product, make sure your reinsurer will accept new business. I should add that this strategy could be used with any line of business that no longer fits your company's strategic focus.

MR. CLAPPER: I'm going to give some general comments on accounting and due diligence. You've heard some of this before, but certain points bear repeating. Whenever you do a reinsurance deal, unless it's very simple, make sure you check out each form of accounting statutory, GAAP and tax — separately, because you often get some surprises about how they relate to each other. Do not take anything for granted. Check it out internally with your accounting authorities. Check it out with the regulators, etc. Try to figure out what the tax impact would be.

For statutory resources (I assume most of you know this), you look at model laws and regulations. You look at the annual statement instructions. You look at accounting practices and procedures. You look at the Examiner's Handbook. All of these sources say different things about statutory accounting, and some of them are a single source for certain things. There are things in the Examiner's Handbook that you can't find anywhere else. I've been using the Booke & Company handbook for years, which has a lot of references in it that go far beyond the normal NAIC material to explain how the statement works.

For GAAP, the primary reference is *FAS 113*, but also look at *FAS 60*, *FAS 97*, *FAS 120* for the mutual companies, and *FAS 133* for derivatives if it involves financial transfer. There is other GAAP guidance, Emerging Issues Task Force papers, and so forth. There's a whole hierarchy of GAAP guidance. Check with your auditor to get the details. Finally, I can't emphasize enough that you should make sure the tax impact is neutral or better. It's quite easy to get a negative tax impact from a deal where you didn't intend it. So make sure it goes the way you expect it to.

1999 Valuation Actuary Symposium Proceedings

As John said, reinsurers normally are very conscientious about giving good advice. They're not just trying to sell products. They're trying to explain to you how the product works. But they don't know everything, and you can't rely on them. When push comes to shove at the year-end audit, you can't say "My reinsurer told me this or that." You have to know it for yourself. Start talking with your auditor to make sure things work out the way you expect them to. I do that all the time. Check with company management if they're not closely involved in doing the deal. You don't want a surprise because of some accounting decision that they made, say, on GAAPing a deal if it doesn't work the way you wanted it to. They also may have some larger strategic moves which conflict with the reinsurance deal. You've got to find out about that.

We need to talk about due diligence in a general way, and this is not the usual form of due diligence. It's not going in and doing an audit, but there are certain procedures that you should go through in working with any business partner and evaluating them, and, of course, that includes reinsurers. For one thing, check out their expertise. Do they know their products? Do they know your products? Do they understand risk management and how it works and how it can help you in that area? Do they know anything about accounting or tax that will help you? Do they understand the regulatory environment both in their state and in yours and wherever else it matters? It's not unusual for a reinsurer to get caught off-guard when they're taking a deal, and it doesn't work out the way they want, and they try to renegotiate. You have to watch out for that. Make sure everybody has checked out everything.

Take a close look at administration. Is it feasible? A deal can be very economically useful, and yet you can't administer it because you can't get the data. You can't organize the data. You can't do reports. That can quickly make a deal fall apart.

You both need to understand the competition, both yours and theirs. The reinsurer needs to understand your competition so that he can more effectively design a reinsurance product. You need to understand his competition so that you can buy the right product from him. Reinsurers should know something about your pricing. Some reinsurers are experts in financial reinsurance.

Service is a big part of any deal. Service can take many forms. Does the reinsurer help you with your administration, trying to figure out how you're going to do it? How efficient is he in

administering your deal? In other words, when you ask him questions about what's showing up on his books can he answer them effectively? Do you communicate frequently and clearly? Do you know whom to call? Does he know whom to call? Sometimes when you want to get a report, like John said, everything happens on December 31, and you're supposed to get reserves, and you don't know who's going to provide them. That's kind of shocking at that point. Underwriting service is important on regular risk transfer deals.

Check out the financial strength of the reinsurer. This doesn't just mean ratings. You look at financial reports. You do look at the ratings, but there are different kinds of ratings. There are different rating services. If you're working with a company other than a stand-alone company, you've got to look at both the parent rating and the local company's rating. There may be some kind of combined rating involved. Does that really involve the reinsurer or not? You have to look at the global picture if it's an international company. There are such things as parental guarantees. Even though the reinsurer is not directly rated, they get a full benefit from the parents' rating.

Risk tolerance. Does the reinsurer understand the risk it is taking? Have you explained it to them? Do you understand it? If not, then a deal can fall apart when you get surprised. If the reinsurer understands the risk, then it's less likely that he'll react strongly when claims occur. When he is taking on a risk, you might want to know whether it is really consistent with his overall business strategy? I know that's kind of reaching a little bit, but if it's not consistent, then what can happen is, in the long run, they won't be as supportive of that deal because they'll be focusing their attention elsewhere.

Finally, your regulatory environment, as well as the reinsurer's, is critical. Are they a foreign company? If so, how does that affect its strategy and its operations? Is it an offshore company? What kind of regulations or accounting are they subject to? What's the relationship with the U.S. of the offshore company? Of course, there are interstate considerations — your state, the reinsurer's state, and other states you do business in. These are things that should be looked at just so you understand the situation and can make sure that you've got a good solid deal. Any questions?

MR. VINCENT Y.Y. TSANG: In your opinion, which of the due diligence procedures, if any, would have helped in the Unicover Re situation?

MR. CLAPPER: I have no special knowledge of Unicover. Just from reading about it in the papers, I would say that this can happen with brokered business. Unfortunately, in my opinion, when you do business through a broker, you should be able to rely on the broker to evaluate the risk and see that it's priced properly. You must also avoid duplication of covers on the same business where you get multiple layers, which is what happened. Somebody got a multiple layer when they didn't even know about it because it was coming from two different places. They lost track of the entire risk transfer, and now they're trying to figure out who really should have been covering it. That's my understanding of the situation. Of course, that comes about because the reliance that they had on each other didn't work the way they expected it to. Now, whether they should expect it to or not, I can't say, but certainly I know that both reinsurers and ceding companies depend on brokers for certain functions. If the broker doesn't do that, then you have an issue. I think basically there was a disagreement about expectations as to who was supposed to do what. The broker says it's the reinsurer's responsibility to know what risks they're getting into, and the reinsurer counted on the broker to work this all out so it wouldn't get hurt. Is that where the argument was?

MR. TSANG: I have one other. Back to your statement on Section 845. Are you aware of any other cases, besides the TransCity Life case, that address business purpose?

MR. KNAUSS: At a Society meeting within the last year or two, there was a session actually called "Section 845" that addressed some cases. I would suggest going to the Society web site and trying to find the record of the session.

MR. CLAPPER: I guess I'm sort of putting myself at risk here, but I think it's kind of dangerous to use any cases for precedent because the IRS is starting over again, and each case is new. Again, I emphasize that you make sure you have a valid business purpose for the deal that's not tax. It becomes debatable as to whether you get the tax benefit or not.

MR. KNAUSS: Yes. Don't be the first company to lose.

FROM THE FLOOR: Nowadays, many of the insurance companies are worrying about a topline growth as well as the bottom line growth. It's tough enough to make the top-line growth, and by sharing the profit with the reinsurer that would make the bottom line growth really bad. If you do reinsurance, it is supposed to be an expense or a cost to the ceding company, and if you do a lot of reinsurance, it actually may hurt your bottom line very much. Do you see many insurance companies using more reinsurance or less reinsurance?

MR. CLAPPER: I have an answer for that. If reinsurance is truly hurting your bottom line, then it means you're not getting economic benefit out of your reinsurance, in which case you shouldn't be doing reinsurance. Either you need it or you don't. If you need it, then by definition, it improves your bottom line because that's the whole purpose of reinsurance. It can be just income, but it could also be volatility, as John talked about. In other words, volatility indirectly hurts your bottom line because it's perceived badly by the analysts and maybe some others. Therefore, you lose your support and your capitalization, but more often it's just a matter of net profits. If it's hurting your bottom line, then you shouldn't do it.

FROM THE FLOOR: That's an interesting thought, but I don't think reinsurance companies exist just to give us the money.

MR. CLAPPER: They're not going to give you the money or else they'd go out of business. It's like any other business deal. It's a matter of mutually benefiting from the arrangement. You get a benefit in terms of reaching a goal—all the goals we talked about. One of those goals has to be satisfied or there's no need to do a deal. The reinsurer makes a profit either through a service fee, a risk fee or an administrative fee, depending on what kind of arrangement you have. I'm not sure what you mean by hurting your bottom line.

FROM THE FLOOR: You're going to lose some money because of reinsurance.

MR. CLAPPER: Yes, you should. The reinsurers are in business to make a profit.

FROM THE FLOOR: I'm sure of that. That's why I ask. In recent years, companies have been struggling for the bottom line growth. Do you see them using more reinsurance or less reinsurance because reinsurance really is a cost?

MR. CLAPPER: We should both talk about that because it also depends on what kind of reinsurance you're talking about. What I understand is that people are using more strict traditional reinsurance. What I mean by that is larger quota shares of term insurance are being shipped over to the reinsurers because we know that reinsurers' sales figures on that are going up, even though the direct market is going down. I think that's a matter of managing the product pricing, and the ceding companies are not willing to manage the product at their own level because they view it as very risky. It has low margins in it from their side, and they can't develop a big enough experience base to manage the product, but they're still trying to compete. They want the product, so they reinsure it. It's a similar thing with these asset-based reinsurance products that I was talking about. The motivation's very simple. They don't want to bother with managing that risk at all. They reinsure it, and of course it's going to cost them because then we have to manage it, and it's a big risk. What else would you add, John?

MR. KNAUSS: I agree with everything Frank said. Do companies use reinsurance more or less? I think much of the use is driven by the markets. As companies come out with new products or new innovations on products, maybe they're not comfortable with the pricing, and they may ask us to take a look at it, or they may be uncomfortable with the risk. They may try to move that off to the reinsurer as well. I agree with Frank that companies should only use reinsurance if they can get a benefit from it. However, there is always a transfer of risk, and the reinsurer does need to be compensated for the transfer of risk.

MR. CLAPPER: It's either a risk or at least a service provided. Hopefully there's a risk. I just had another thought. I do have a general impression that reinsurers are getting a larger share of the risk because a lot of direct companies are taking a strategy of being service providers rather than insurance companies. There are some big companies that have transferred all their risk to the reinsurers, and, in one case, I was shocked to find out that not only have they transferred the liability risk, but they have also transferred all the asset risk to somebody else. All they're doing is keeping the books. There's a big company that's doing that, and I don't know who else is doing

it, but it seems to be a bit of a trend. As John said, the large companies are reinsuring a lot of their term insurance. That started some time ago, and it has grown tremendously.

MR. KNAUSS: All in all, reinsurance shouldn't be viewed on a small basis. How does it fit in with the overall corporate strategy of your company? Where are you going? What direction are you moving? What risks are you writing? How comfortable is your company with these risks? What is your company's risk tolerance? How can reinsurance be used to manage that?

MR. CLAPPER: I can even give you a counterexample where a client wrote us a letter telling us five reasons why he didn't want to do a reinsurance deal. They had been talking with us for almost a year about a potential deal, and they did a lot of analysis. We did a lot of negotiation, and right now they say "It's not going to serve our purposes. We just want to keep the business internally." I don't think they're reinsuring it somewhere else. I think they made a strategic decision not to reinsure it. They looked closely at the business and concluded that reinsurance would not be effective, and I couldn't argue with them.

MR. BENJAMIN PETERS: I have a question. I'm trying to find information for GAAP reporting of a modeo agreement on universal life. Other than reading *FAS 113* and making my own interpretations and checking with my auditors, do you know of any publication dealing with GAAP accounting for modeo?

MR. CLAPPER: When it comes to applying GAAP to reinsurance, there's not a lot of hard and fast rules. It's more a matter of judgment. When I've "GAAPed" deals from the reinsurance side, I didn't even look at the book. I just did my own work on it and invented a new method. That's really what happens. In fact I have sort of a weird approach to GAAP because most of the GAAP work that I've done has been from that angle. I haven't done any vanilla products. You look around through all the GAAP literature and find bits and pieces that apply, but nothing applies in its entirety. As I mentioned, on the variable products, obviously you have some guidance from *FAS 133*, which is an indicator of the philosophy of GAAP towards the product. Obviously, if it involves insurance, then you've also got to look at *FAS 60*. In my mind, there are some aspects of this business that are really like *FAS 60* because the rates are fixed. Even though the exposure changes, the reinsurance premiums and death benefits are defined in advance. You can't change

crediting rates or something. You can't change spreads. You can't change expense loads. It's all fixed. It varies, but it's fixed at issue. That applies as well.

MR. KNAUSS: If you haven't already, I'd recommend talking to your external auditors because at year-end, they're going to have the same questions you have. If you give them a heads-up ahead of time, they can probably help you out.

MR. HOWARD L. ROSEN: I'll respond to that. Unless the GAAP literature has changed in the last couple of years, there had been two accepted approaches to "GAAPing" a modco treaty. One was essentially to treat the modco as a loan, and the other was on a GAAP basis, which essentially ignored the fact that it's modco and treated as if it's a co-insurance treaty. Those two had both been used. As far as I know, they're both acceptable. The treating as a loan looks at the underlying economics. Ignoring the modco and treating it as a co-insurance treaty essentially does just that. It ignores the fact that the ceding company is retaining the assets, and it treats it as if the liabilities had transferred. As far as I know, both are acceptable.

MR. CLAPPER: Yes. I didn't pick up on that because he didn't ask me *how* to do it. He asked me *where it is* in the GAAP literature. I do agree with you. I've done that kind of accounting myself. The basic consideration was whether it was cash relief or noncash relief. If it's noncash, then it pretty much disappears, assuming it's surplus relief. If it's not surplus relief, but it's modco, as Howard said, I understand that you treat it just like co-insurance, but that's debatable. I've talked about it with different people. I don't think that's in the books anywhere.

MR. KNAUSS: Thank you for your insight on that.



GMDB with Five-year Reset



CHART 2 GMDB with One-Year Ratchet

