

# RECORD, Volume 24, No. 2\*

---

Maui II Spring Meeting  
June 22-24, 1998

## Session 34IF

### Nontraditional Individual Disability Reinsurance: What is It and Has its Time Arrived?

**Track:** Reinsurance/Health Disability Income

**Key Words:** Disability Insurance, Reinsurance

**Moderator:** ROBERT W. BEAL

**Panelists:** ARTHUR LYLE GARRISON

**Recorder:** ROBERT W. BEAL

*Traditional excess retention reinsurance has played a valuable role with individual disability income reinsurers over the years. However, a number of companies have sought out reinsurance in recent years to achieve financial objectives that are unattainable through traditional reinsurance. Such reinsurance transactions have included finite reinsurance, stop-loss reinsurance, and pooling. This session looks at a variety of ways in which nontraditional reinsurance has been used lately by individual disability income carriers.*

**Mr. Robert W. Beal:** I'm a consulting actuary with Milliman & Robertson. Art Garrison is assistant vice president at Cologne Life Reinsurance. He specializes in financial reinsurance. Traditional reinsurance is usually represented, at least in my opinion, by things such as excess retention reinsurance or quarter share reinsurance, whereby the ceding company essentially transfers the portion of that risk to the reinsurer. The primary objective is simply to share the risk between the two companies. The secondary objective is just to share expertise.

For the purpose of this session I've invented my own tradition of nontraditional reinsurance essentially being any other form of reinsurance that's not traditional as I have defined it. Among the many different forms, and there's probably no limit, nontraditional reinsurance includes finite reinsurance and surplus relief. Although there has to be risk relief in there, the objectives of these two forms transcend risk relief in themselves. Our objective is to present two true-to-life applications of nontraditional reinsurance, specifically finite reinsurance and surplus relief reinsurance, with a level of detail that I hope enables you to get a clear

\*Copyright © 1999, Society of Actuaries

**Note:** The charts referred to in the text can be found at the end of the manuscript.

understanding of how these things can work, the advantages and disadvantages they bring, and how they may be applied to your own business.

This session is labeled as an interactive forum. We'd like to have a lively interaction involving everyone here, and my job here is to present some ideas. To present our ideas Arthur and I have created a hypothetical insurance company called Maui Life that has been a middle-of-the-road player in the individual disability income (IDI) market for many years but is now poised to become one of the leaders in that market due, in part, to their conservative risk management, business savvy, and, last but not least, by default since most insurers have gotten out of this market to begin with.

Let's begin. We join the head of Maui Life's IDI line, Otto Optimist, who's played by me, as he presents his annual product line review to Maui Life's senior management led by the CEO, Calvin V. Concerned, that's V for very, played by Arthur.

**Mr. Arthur Lyle Garrison:** I'm very concerned.

**Mr. Beal:** You, the audience, represent the rest of the senior management team. I'm Otto Optimist. I appreciate the opportunity to present to you a very unusual phenomenon—a profitable line of IDI business. As you know, the IDI marketplace has undergone considerable upheaval with skyrocketing losses and companies exiting this business. I can think of almost 40 companies who have stopped manufacturing this business since 1988. However, here at Maui Life we have been the exception. Because of conservative risk management and an awful lot of good business sense, if I have to say so myself, our statutory profits have remained in the black over the last five years while sales have been steady. We have good reason to be proud. More importantly, our future looks bright. My marketing department has signed in blood that sales will double this year, hitting \$15 million of new premium. And this business is properly priced to achieve an internal rate of return of 12%. I've engaged that very reputable actuarial consulting firm, Mailman & Richardson, to prepare a long-term financial projection of our business and to ensure that our continued path to success is well laid out. I provided you with a paper copy of these projections and our illustrious corporate actuary, Sam Snide. However, let me show you some highlights of these projections.

As you can see in Chart 1, the statutory profits from our in-force business are more than adequate to cover the surplus strain from the business we expect to write this year and in the future. In fact, even by year 2006 this block of new business that we'll start writing tomorrow will be generating its own surplus. Well, Calvin, I

know you must have more pressing matters to deal with, so I'll stop now and see if you have any questions or comments.

**Mr. Garrison:** Just a few. Sam already had a chance to review these projections. Although on the surface things look pretty solid, Sam suggests that we look at the overall surplus picture of this business. Chart 2 shows the projection of the projected total surplus, the risk-based capital (RBC), and what Sam calls free surplus, the total surplus less the RBC. What's wrong with this picture? Well, at the end of last year we made sure your line surplus was equal to its RBC, just like every other line of business here at Maui Life. Because your business is so capital-intensive, it manages to contribute no free surplus to the company until the year 2008, which is way off the chart. In the meantime, it essentially borrows free capital from the rest of the company to the tune of \$20–30 million for most of the next 10 years. We could invest the surplus in more profitable business than the IDI business. In spite of your best efforts to have a profitable book of business, the new business is only expected to achieve a 12% return. Our other businesses expect to achieve a 15–20% return and are far less capital-intensive, let alone risky. Frankly, contributing almost \$30 million of free surplus to the individual disability business doesn't seem like good business sense. Do you agree?

**Mr. Beal:** Well, uhh, hmmm. . . .

**Mr. Garrison:** I thought so. Sam has been teaching me all about stochastic analysis. It's really fascinating. Just so we can get an idea of how risky this business is, Sam did some Monte Carlo testing with a projection model that Mailman & Richardson prepared. Chart 3 shows the probability distribution of the average loss ratios for your business over the next ten years, as well as the minimum annual loss ratio in any one year and a maximum annual loss ratio in any one year. As Sam has said, this shows the natural random volatility in this business, which is considerable.

Chart 4 shows this random volatility in free surplus over the next ten years. The lower line shows the possible lowest level of free surplus in any one year, and the top line shows the possible highest level of free surplus in any one year. For example, I look at the lower line because I'm very concerned that there is a 35% chance that free surplus in any 1 of the next 10 years will be lower than a negative \$45 million. Even a maximum free surplus is less than zero quite a bit of the time. The risk of supporting your growth plans for the IDI business is just too high. We could endanger our ratings, let alone the funding of our more profitable lines. Are you with me, Otto?

**Mr. Beal:** Huh?

**Mr. Garrison:** Good. I think it's time we consider some alternative strategies for the IDI business.

**Mr. Beal:** Did you say alternative strategies?

**Mr. Garrison:** That's right. For Alternative Strategy #1 I think we should consider cutting sales back to under \$3 million per year. Sam says that will produce a much healthier level of free surplus.

**Mr. Beal:** Three million dollars! I'd rather sell the business than do that.

**Mr. Garrison:** Thanks. We now have Alternative Strategy #2.

**Mr. Beal:** You mean my choices are (1) to dramatically cut back sales to almost nothing or (2) sell the business?

**Mr. Garrison:** That's it in a nutshell, unless you can find some magical way to sell \$15 million or more in new business each year and produce positive free surplus. I'm going to delegate Alternative Strategy #1 to you; that is, to stay in the business with significantly reduced sales or find another way to produce positive free surplus. Sam has signed up for Alternative Strategy #2; that is, divesting Maui Life of IDI business. In fact, he begged me for the opportunity.

**Mr. Beal:** Let's stop a moment. As you look at that material, how could we possibly have a profitable IDI business?

**From the Floor:** I'm a little confused on how minimum and maximum surplus work?

**Mr. Beal:** We looked at a Monte Carlo testing, and this is a real-life model, adjusted somewhat, but a real-life model with real-life probability distributions, and we looked at in any one year what was the maximum free surplus that would be generated, and then we also looked at, at the same time, what would be the minimum free surplus that would be generated through a Monte Carlo testing of 1,000 cases, cumulative.

Now we turn to a meeting between Sam Snide, played by me, and Henry Helpful, played by Art, an actuary for Finite Reinsurance, an offshore reinsurance company that has had success in providing finite reinsurance to a number of IDI carriers. Sam brought along his staff of high-powered actuaries, that's you, to question Henry about finite reinsurance. Thanks for coming. I have a real quagmire here. I finally have the opportunity to sell off the IDI line this year, but when we calculated the

after-tax actuarial appraisal value we were disappointed to learn that Maui Life may have to pay a company to take this business. I don't think this is going to fly well with Calvin. We projected the future statutory results of the in-force business, discounted the future annual statutory after-tax profits, less increases in capital, at 15%, which I think is an expected internal rate of return that potential buyers would be looking for. Lo and behold, the actual appraisal value was a negative \$11.5 million. Now, granted, we get \$10 million of after-tax capital gains on the sale but, still not much considering that our gross premium valuation calculation suggests that we have \$77 million of expected margins in our statutory reserves of \$357 million. However, the cost of holding RBC and trying to get a 15% return really erodes that value. So, Henry, I heard that Finite Reinsurance has been successful in helping companies take their IDI business off their statutory balance sheets. Can Finite Reinsurance give us more value for this business than these actuarial appraisals might suggest?

**Mr. Garrison:** I think we can help. With the financial projections and probability distributions that you provided me, my associates are able to put together a proposal for finite reinsurance for Maui Life's IDI line. I have some charts which will show how the reinsurance accounting would work and its effect on your in-force business over 30 years. Finite Reinsurance would coinsure 100% of your in-force business. Maui Life will transfer its statutory reserves, less an initial allowance, to Finite Reinsurance to be held in a trust, which we will call the experience account. We estimate the initial allowance could be \$10 million. The initial statutory reserves, less this initial allowance of \$10 million, form the initial experience account. All premiums, investment income, and gains and losses on assets in the trust are paid into the trust. The trust then pays out benefits and expense allowances to cover Maui Life's commissions and operating expenses and Finite Reinsurance's retention, which covers our expenses and profits.

Because Finite Reinsurance is offshore we obtain a letter of credit for the difference between the statutory reserves and the funds in the trust. This is because we're offshore, and we're not licensed to do business in Maui Life's state of domicile. This helps Finite Reinsurance to keep its capital costs down. Finite Reinsurance's risk is limited to \$10 million. This is on a present value basis as of January 1, 1998. It's equal to the initial allowance. This is accomplished through a notional account called the limit account. Initially, the limit account is equal to the statutory reserves. Future premiums are credited to the limited account, and all benefits and expense allowances to Maui Life are debited. We assume the limit account earns investment income at rates somewhat less than we expect over the long term. If the statutory reserves in the future exceed the limit account, then Maui Life will have to set up the excess liability, which may go away if later experience improves. In this

way Finite Reinsurance is able to limit its liability to \$10 million on a present value basis.

Based on these projections and probability distributions, we believe that the probability that the experience account will be adequate over 30 years is approximately 85%, while the probability that the limit account will exceed the statutory reserves over 30 years is approximately 95%. In other words, Finite Reinsurance has only a 10% probability of incurring a loss on this reinsurance agreement, and Maui Life has a 5% probability of ever being required to set up any additional liability. With this low probability our client companies have been successful in convincing many state insurance departments that they should be able to take full credit on the ceded statutory reserves. Some states may be more difficult than others.

Chart 5 shows the relationship of the experience account, the limit account, and the statutory reserves over 30 years. In this expected scenario both the experience account and the limit account exceed the statutory reserves after a few years, and considerable surplus emerges in this experience account. To allow Maui Life to share in this emerging surplus, we will develop an experience refund that will return a portion of the emerging surplus to Maui Life at predetermined points in time when it appears that an experience refund will not materially increase Finite Reinsurance's risk. In addition, we include a recapture provision in year 2005 and later. At that time Maui Life is able to recapture the business if it feels the good morbidity has made the business more profitable than it originally expected. As an alternative to recapture, if the experience supports it, Finite Reinsurance will be willing to renegotiate the terms of the agreement and pay an additional allowance if the experience justifies it.

By the way, you should be aware of the downside risk for Maui Life. However, it is small. Chart 6 shows a random scenario whereby Maui Life would have to set up some excess liability because the statutory reserves exceeded the limit account. However, in this example improved morbidity in later years allows the excess liability to be eliminated. We estimate from our own stochastic analysis that the present value of the excess liability at the end of 30 years is approximately \$200,000, although there is one chance in 1,000 that Maui Life might incur an excess liability of \$80 million, or \$12 million in today's dollars.

**Mr. Beal:** Does this satisfy the NAIC model regulation regarding risk transfer on reinsurance?

**Mr. Garrison:** It does, and I have to say that qualifyingly. Auditors and accountants have looked at this and have been successful in getting approval or satisfaction that

this does meet the model regulation, but beware. As we all know, each insurance department operates independently from all the other insurance departments, and there may be one in one of your states that will disagree.

**Mr. Beal:** Well, this is very interesting. What happens if either Calvin is uncomfortable with the potential excess liability or the state of domicile refuses to allow us to take a reserve credit because of the excess liability risk?

**Mr. Garrison:** In those cases we may be able to assume the full risk and retrocede the tail to another reinsurer. Of course, the cost of retrocession will eat up part of that \$10 million allowance.

**Mr. Beal:** Well, I've never been so excited. Regardless, Finite Reinsurance looks like a viable option to Maui Life. Take the \$10 million allowance that you're going to give us and add the \$13 million of tax credits and you get something much more attractive than paying some company \$11.5 million to assume this business. The capital gains on the asset transfer will be gravy.

Central Reinsurance has been successful with this approach. I've had an opportunity to work on it in various forms, and it does seem to provide quite a few opportunities for companies.

**From the Floor:** What about the new business that they're talking about writing after that point?

**Mr. Beal:** I know of a company that has continued to do this on their in-force block before they began to write new business. It's possible. It doesn't get included in this, but it was a way of closing off the old block, if you will, but obviously other than the potential statutory profits from this arrangement, there are no other profits being thrown on the in-force to cover the new business. In this particular scenario we're kind of using it as a way to close off a block of business, to sell it, or get it off the books, and I've seen that happen too with finite reinsurance. So, either way it can be used.

**Mr. Vincent A. DeMarco:** What happens if the block is not profitable?

**Mr. Beal:** I think in this situation the company would solve for allowance. It might be a negative allowance. I suspect that if the reinsurer is comfortable that the risk can be managed. Regardless of that, it would offer up that allowance, and it would probably be less negative than if it had tried to sell the company and had paid someone a lot more to take it.

**Mr. Garrison:** If the business is not profitable, it makes it more difficult for the reinsurer to structure a deal that will help Maui Life. One of the requirements usually in a financial reinsurance transaction is that the business does have some value, and it is manageable to obtain some value. If you have a block of IDI business that's doing poorly, financial reinsurance might not help.

**From the Floor:** To what degree is the reinsurer involved in the administration?

**Mr. Beal:** That can vary as well. If you take the scenario where the ceding company continued to stay in the business, and they still had a viable claims department, they might still manage the claims and do the policy administration. If they were getting out of the business, then the ceding company may look for a third-party administrator from both claims or the policy administration to take over. Since the reinsurer has a risk on the claims, they may want to be involved by even picking the third-party administrator or they may want to do the claims themselves, depending upon what they have for abilities.

**Mr. Garrison:** Just about every reinsurance agreement allows the reinsurer audit privileges and the ability to go in and review exactly how claims are being processed to see if they're following the established rules and procedures.

**Mr. David M. Holland:** You mentioned the trust fund and what wonderful experiences you've had. Is there any indication that you might want to put some downgraded bonds in there? How can you structure the assets that will go into the trust fund so they will have the desired effect?

**Mr. Beal:** I think as long as both the ceding company and the reinsurer are willing to work that out, I suppose there's any limit that they could have. Oftentimes I think the reinsurer is concerned about the quality of that investment, so they'll have the best quality that they can in that, and they would prefer to have quality and low risk even if it meant low returns. So, they're going to be fighting in that direction.

**Mr. Garrison:** The state insurance department may also get involved because they may look at the quality of the assets in the trust and make a decision whether the reserve credit taken is appropriate, so there are a number of counterbalances to protect the trust so that you don't invest in swampland somewhere.

**Mr. Beal:** Keep in mind the reinsurer, even though in a limited risk overall, still wants—in this example, \$10 million—to keep the probability of seeing any kind of loss on that as small as possible. If there were a lot of low-grade bonds and higher risk, then they may feel as though they'd increased their own risk too much.

Now we move to a meeting between Otto Optimist and Ralph Relief. Ralph is an actuary from White Knight Re, which specializes in surplus relief.

Thanks for meeting with me, Ralph. I'm afraid my tenacious corporate actuary, Sam Snide, wants to sell Maui Life's IDI business. With Sam where there is a will, he will find the way. I think that's a shame. With our history of profitable results we could become one of the industry's leaders in this market. I showed Calvin and Sam some of our 30-year projections prepared by Mailman & Richardson, and they ignored all the good news and went directly to the projected negative free surplus that will result over the next 10 years if I proceed along our objective of producing \$15 million with 10% annual growth over that period. So, Ralph, can White Knight help us?

**Mr. Garrison:** I see your problem, Otto, and I think surplus relief may be a possible solution. State insurance departments have been concerned about many of the surplus relief reinsurance agreements in the past because they involved minimal risk transfer to the reinsurer. With the introduction of the NAIC model regulation and its adoption by many states, new rules are applied to surplus relief reinsurance that ensures a reasonable transfer of risk. Significant obligations are transferred to the reinsurer. Surplus relief is still alive and well. Charts 7–9 illustrate a possible surplus relief reinsurance agreement between Maui Life and White Knight Re. You can follow along with these 30-year projections. Keep in mind this is only one example. We can tailor the reinsurance to your specific needs. Financial reinsurance can be uniquely designed to meet your specific objectives. Under this illustration, 75% of Maui Life's IDI risk is transferred to White Knight Re using a combination of modified coinsurance (modco).

Initially, Maui Life will pay a premium to White Knight Re equal to the quota share statutory reserve of \$267.9 million. White Knight will then deposit \$267.9 million with Maui Life equal to \$259.9 million of modco reserve and an initial allowance of \$8 million. This filters down to a statutory bottom line of \$8 million of initial surplus relief. White Knight will also provide additional allowances of \$8 million at the beginning of each year, 1999 through 2003. White Knight Re sets up a coinsurance reserve equal to the initial allowance, the \$8 million. The rest of its statutory reserves are held by Maui Life in the form of modco reserves. The coinsurance reserve is decreased by profits on this business. The modco reserve is equal to the statutory reserve less the coinsurance reserve. As profits emerge, the coinsurance reserve will go down, and the modco reserve would go up. Profits are defined as premiums plus investment income on the modco reserves based on the interest rate earned by Maui Life, less paid benefits, less expense allowances, less risk charge, and less the increase in statutory reserves and the refund. The risk charge in this example will equal 2% of the coinsurance reserve at the beginning of the year. The expense allowance covers the quota share of Maui Life's commissions

and direct operating expenses. The refund is paid only in the year that the coinsurance reserve is paid off. The refund effectively returns any profits not needed to extinguish the coinsurance reserve.

**Mr. Beal:** I don't follow one thing. On those projections I had to assume annual accounting. The NAIC model regulation requires that it has to be no less frequently than quarterly.

**Mr. Garrison:** Yes, the treaties generally have quarterly accounting of settlements, although there can be opportunities within a calendar year. If there's a loss in one quarter, it can be made up in the following quarter, but generally quarterly settlements are required.

My staff expects that the coinsurance reserve will be paid off in 11 years. At that point the reinsurance agreement is no longer needed and terminates through a recapture provision by Maui Life. We normally prefer these agreements to have an expected lifetime of five to ten years, but because we have confidence in your abilities to manage this business and the long-term continued viability of Maui Life, we feel comfortable in extending this agreement. Any loss incurred by White Knight Re before the coinsurance reserve is paid off is paid by White Knight Re to Maui Life. However, White Knight Re accumulates any such losses with interest and offsets them with positive profits before those profits are applied to reducing the coinsurance reserve.

One of the benefits of this approach to surplus relief is that the only cash actually transferred between Maui Life and White Knight Re is the risk charge, unless there are real losses. In these cases the losses are paid to Maui Life by White Knight Re, and future positive profits used to offset these losses are paid by Maui Life to White Knight Re. I have included a random projection, in addition to the expected projection, to show how incurred losses by White Knight Re would affect the reinsurance accounting.

Let me just say that that does happen in real life.

**Mr. Beal:** The losses as they emerge are incurred by the reinsurer and they postpone the time in which the coinsurance reserve gets paid off, so that actually is a risk to the reinsurer.

**Mr. Garrison:** Oh, definitely, that's a risk to the reinsurer, and reinsurance company management doesn't like to see those things.

**Mr. Beal:** There were quite a few out of 1,000 runs of my Monte Carlo testing, I think 10% of the time it went out beyond 30 years.

**Mr. Garrison:** You can see that the coinsurance reserve stays level until the loss carryforward is paid off. This extends the term of the reinsurance agreement. Let's see what the effect is on Maui Life's statutory income and balance sheet. Assuming this agreement goes into effect on January 1, 1998, Chart 7 compares the after-tax statutory income of Maui Life, December 31, 1997, IDI in-force business before and after the surplus relief agreement. Chart 8 compares the free surplus before and after the surplus relief agreement. As you can see, your projected free surplus over the next 12 years looks a lot stronger. The reasons are twofold: (1) the higher after-tax gains over the next six years, and (2) the reduced RBC because Maui's retained premium and reserves are lower.

Chart 9 compares your RBC before and after surplus relief reinsurance. A word of caution may be appropriate here. Even though surplus relief may reduce the formula RBC considerably, Maui Life should assess the future risk to be sure that the reduction in RBC will not be needed over the term of the reinsurance agreement. Your own stochastic analysis indicates a 95% confidence level interval that statutory reserves are adequate. The combination of the RBC and statutory reserves makes insolvency virtually impossible, so I suspect Maui Life could reduce the RBC without increasing the risk of insolvency in any measurable way. That's how it works in general. As you can see, surplus relief reinsurance may allow you to grow this business as you plan without endangering the surplus position of the company.

**Mr. Beal:** This is what the model regulation was all about.

**Mr. Garrison:** The model regulation has been in place for about six years now, and the reinsurance companies have learned to live with it. It works. Reserve credit taken by companies following the model regulation is appropriate. The risk has been passed to the reinsurer, and the reinsurers get nervous when they enter into these agreements. I know that.

**Mr. Beal:** It's even more important in this type of business that you do have a profitable block of business, because you need those profits to pay off that allowance. With the finite reinsurance, if it's not unprofitable, theoretically the reinsurer can come up with a negative allowance and expect that as a payment for taking that. On top of that, the reinsurer may not have confidence enough in the ceding company to enter into this agreement, but theoretically they could. Here you really do need to have profits because under the NAIC model regulation the reinsurer not only has to have the risk transfer, but it has to cover its share of the expenses of the ceding company, etc.

**Mr. Garrison:** That's right.

**Mr. Beal:** So you must have the margins there to do that.

**Mr. Garrison:** If the reinsurer's satisfied with those models, and the viability of Maui Life or whatever company is ceding the business, a partnership can be arranged. Both companies can come out ahead, and they can both win.

**Mr. Beal:** Both the finite reinsurance model and the surplus relief model reinsurance allow a company to use more efficiently the margins that are in those statutory reserves versus just selling the block outright and taking maybe a major loss on selling the business.

**Mr. Garrison:** That's right. This is a statutory approach to help insurance companies stay in their lines of business.

**Mr. Holland:** My impression was that Finite Reinsurance was offshore, and White Knight Re, I presume, was not offshore.

**Mr. Garrison:** White Knight Re is probably onshore but may have an offshore affiliate that Maui Life wouldn't want to deal directly with, but Maui Life would be happy dealing with White Knight Re because they're an A+ rated reinsurer with a huge parent.

**Mr. Beal:** Does anyone have experience dealing with other forms of financial reinsurance, whether they're dealing with problems like this or some things that I toyed with in putting this together? Was there a potential for stop-loss reinsurance on this or possibly some reinsurance that helps a company smooth out its financial results from year to year or quarter to quarter? Has anyone had any experience on that that they could share? What are you designing your attachment points around for the stop-loss ratios? And can you give a rough idea how that works?

**Ms. Monica Hainer:** The loss ratio would obviously depend on the block, but it would be some sort of attachment point above the actual experience so that there's a bit of a margin there, assuming that the deal is being done for finite purposes as opposed to someone trying to unload the losses on the business.

**Mr. Beal:** Right. That works significantly different than what we had put up here for finite reinsurance.

**Ms. Hainer:** Yes. Well, not significantly different. It just allows you to go directly offshore, which can be an advantage.

**Mr. Beal:** OK. You said you've done reinsurance that smooths the results.

**Ms. Hainer:** Right. I think you can smooth the results again within the regulations by taking a number of years, looking at the pattern of loss, which may be fairly volatile, and setting an attachment at a certain point. Basically the reinsurer then will pay the claims over that point and, as you said, accumulate that loss forward to be paid back in better years. That can be a significant advantage for a company if what they're worried about is rating agencies. Their results are more evenly spread as opposed to having the volatility hit their bottom line.

**Mr. Beal:** How do the rating agencies react to this type of reinsurance?

**Ms. Hainer:** I think again, as Art was saying, all the deals are done with risk now. It's not that the reinsurer is sitting there just pocketing profit. The rating agencies are, in my experience, capable of looking at the deal and the structure and saying, "Yeah, OK, the volatility to a certain degree has been sent to a reinsurer, so now the ceding company can benefit from that."

**Mr. Garrison:** Monica, on these transactions to smooth out the earnings, are there any balance sheet implications or is that merely just the income statement?

**Ms. Hainer:** No, it's the income statement.

**Mr. Garrison:** So there are no significant reserve credits?

**Ms. Hainer:** No, not that I've seen anyway.

**From the Floor:** Monica, is this for a temporary period of time? And, if so, how do you handle the reserves?

**Ms. Hainer:** Well, obviously, as the reinsurer, I can't structure the deal. For instance, I can't say I'm walking away from the deal in 3–5 years time, but, generally speaking, these deals would be structured for a fairly long period of time, that's what the ceding company would want.

**Mr. Beal:** How would it automatically terminate?

**Ms. Hainer:** That's what I'm saying. It wouldn't automatically terminate.

**Mr. Beal:** Now, in fact, on the surplus relief example, that can't automatically terminate either.

**Mr. Garrison:** No, it can't.

**Mr. Beal:** Even when the coinsurance reserve is paid up.

**Mr. Garrison:** Yes, when the relief is paid off, theoretically the treaty could continue, but usually there's an incentive in the treaty that the ceding company recaptures.

**Ms. Hainer:** Typically the fee that the ceding company pays will be based on, as you said, the surplus relief, but you might also have a minimum fee that they'll continue to pay which is a dollar amount. If they're not getting any benefit from the transaction any longer, chances are they're not going to want to continue paying. That kind of thing is a motivator to ask the ceding company to recapture the deal. Under the regulations we can't mandate that the ceding company recaptures.

**Mr. Garrison:** One of the common incentives besides the minimum fee is maybe the experience refund. The reinsurer starts to retain part of that, a significant amount, and that gives an incentive to the ceding company to go ahead and recapture. That's a common feature.

**Mr. Beal:** In this example there is very little asset transfer other than the risk charge. Incurred losses go back and forth, and payoff of those losses go back and forth, but, in general, it's minimal. There is a type of surplus relief where there's actually a transfer of assets. In that example it might be that an \$8 million initial allowance would be transferred. Does that happen very often? Is there a need for that type of arrangement?

**Mr. Garrison:** Not very often. There's usually not a need for cash to be transferred. Most companies don't have a cash problem. They have plenty of cash coming in. It's the balance sheet that they're concerned with, although it could happen. I don't think we have any at our company.

**Mr. Beal:** Any other possible problems, say, in running an IDI line for which there might be a reinsurance solution that is not addressed here?

**Mr. Garrison:** Financial reinsurance cannot turn an unprofitable product into a profitable one. It can change some of the incidence of the profits and it can influence some of the profit measures, but it can't perform miracles. If a reinsurer says otherwise, that might not be the reinsurer to deal with. The ceding company does have to be concerned with whom they're doing business with, just as the reinsurer is concerned with whom they're doing business with.

CHART 1  
STATUTORY AFTER-TAX GAINS

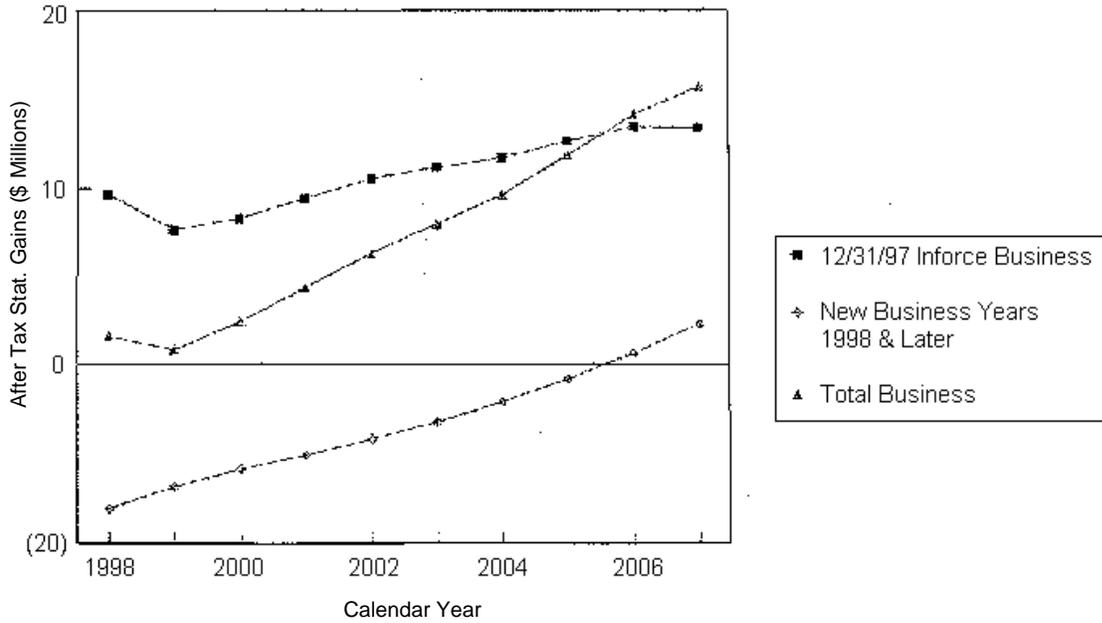


CHART 2  
STATUTORY SURPLUS

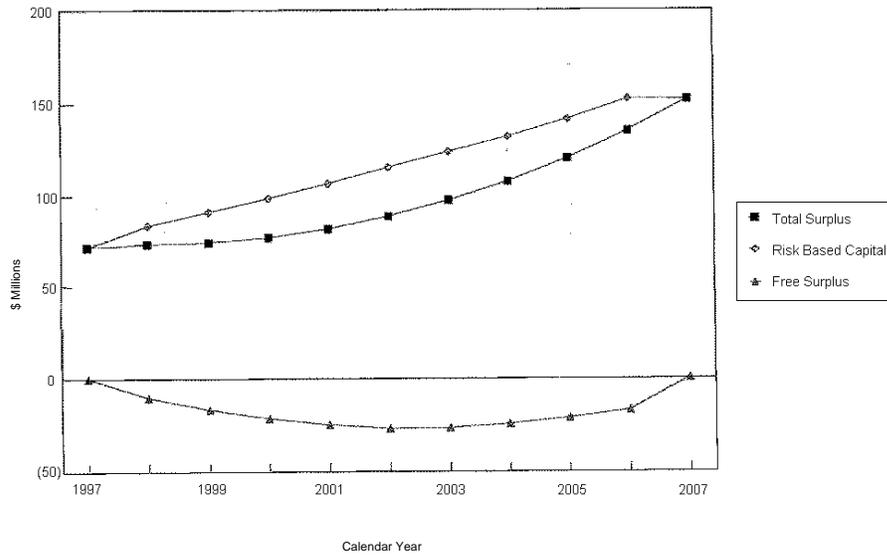


CHART 3  
MONTE CARLO TESTING-LOSS RATIOS

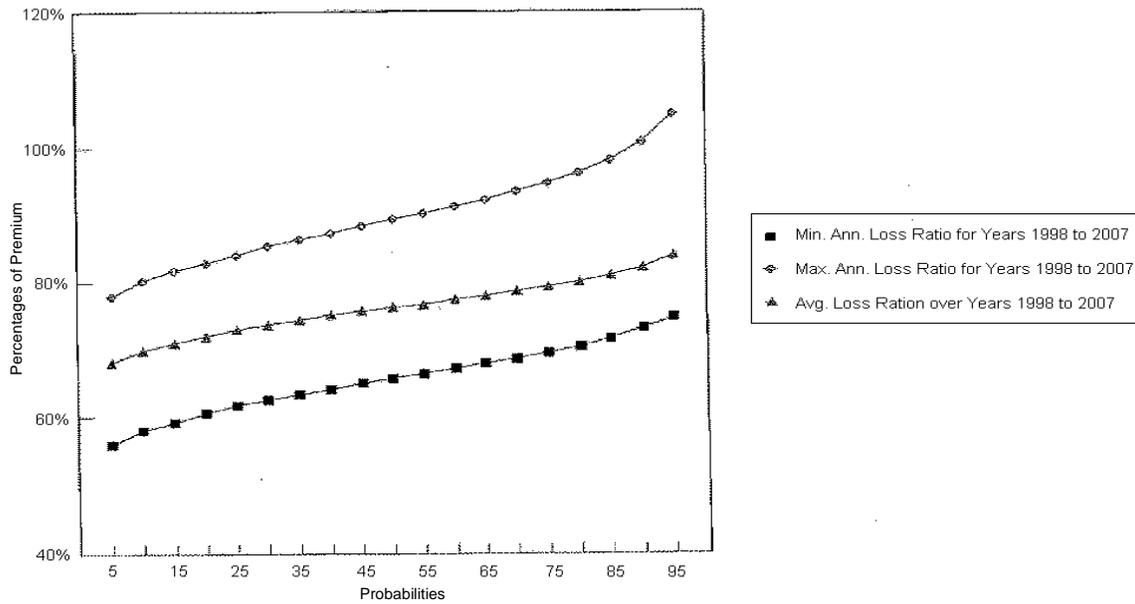


CHART 4  
MONTE CARLO TESTING-FREE SURPLUS

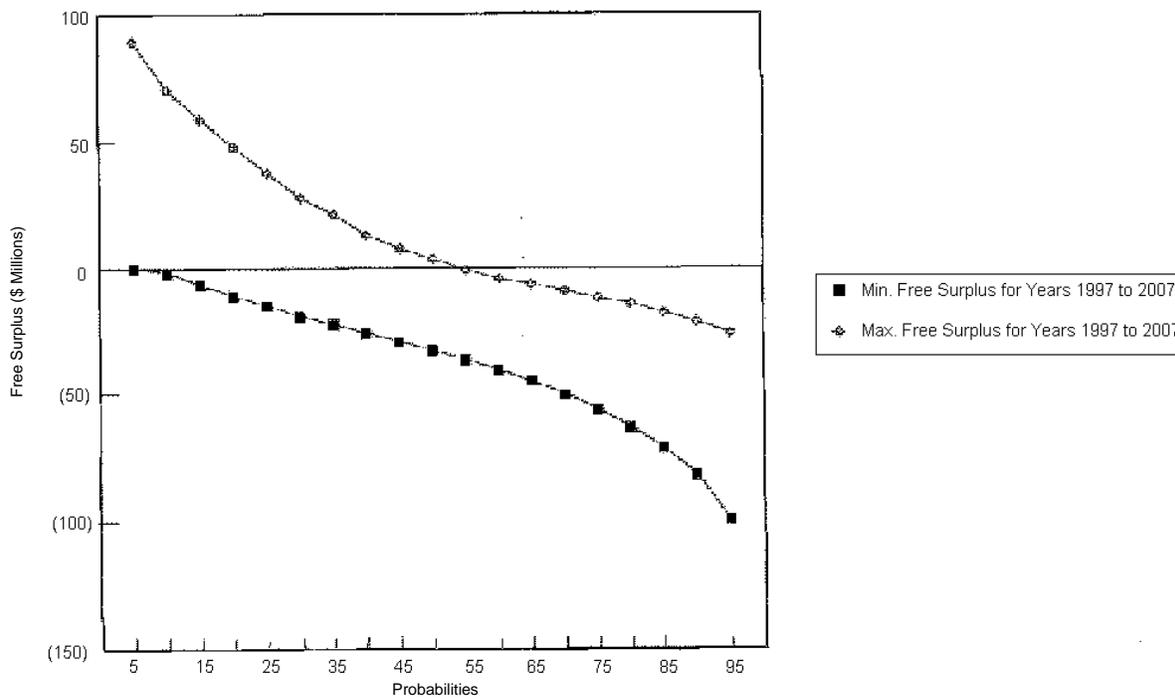


CHART 5  
FINITE REINSURANCE ACCOUNTS-EXPECTED SCENARIO

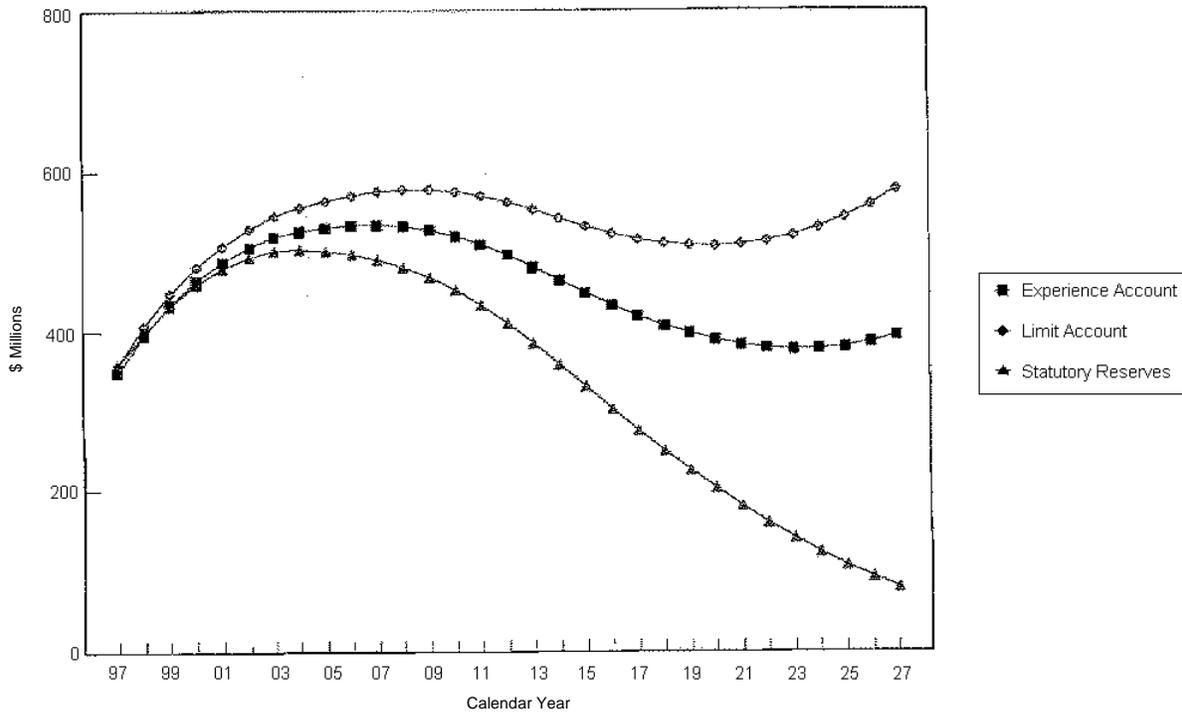


CHART 6  
FINITE REINSURANCE ACCOUNTS-BAD RANDOM SCENARIO

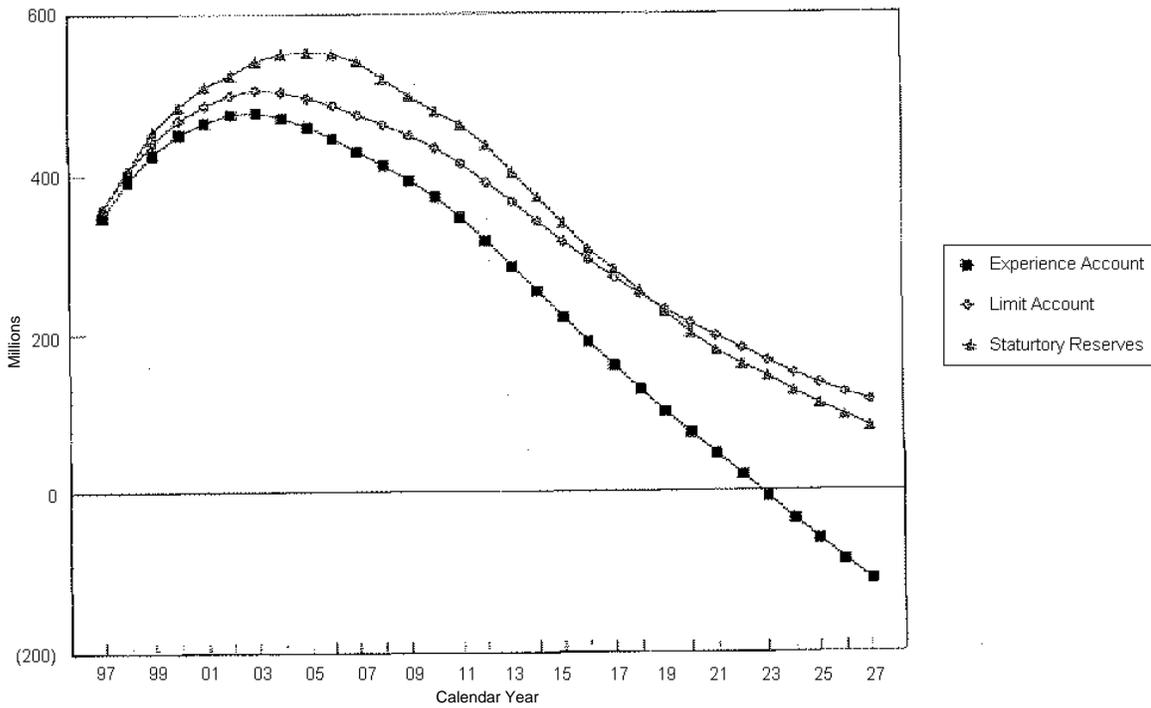


CHART 7  
STATUTORY AFTER-TAX GAINS

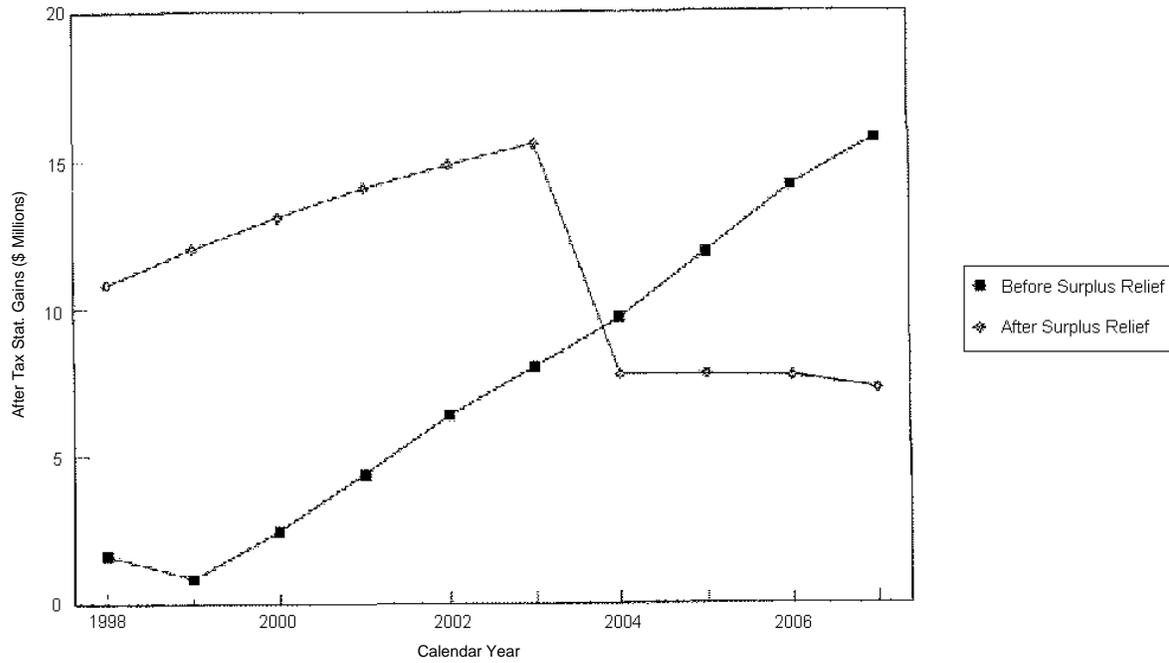


CHART 8  
FREE SURPLUS

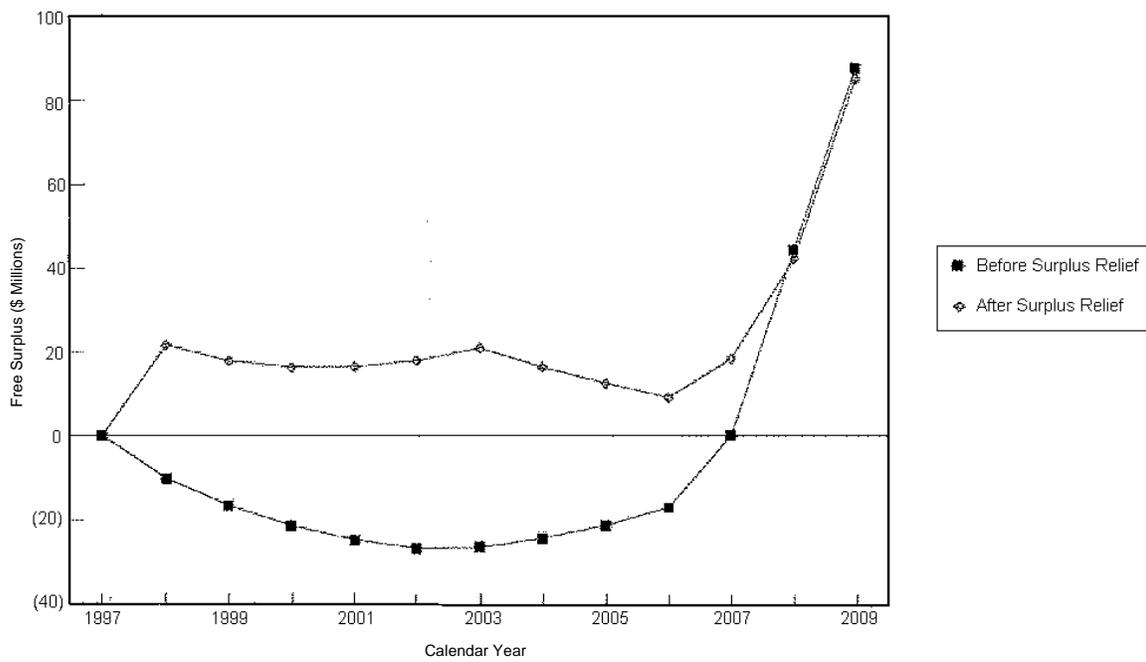


CHART 9  
RISK BASED CAPITAL

