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#### **Session 107I**

#### The Future of Life Reinsurance: Views from the Top

Track: Reinsurance

Moderator: MELVILLE J. YOUNG Interviewees: DAVID M. HOLLAND

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JOHN E. TILLER JR.
A. GREIG WOODRING

Summary: CEOs of four of the world's leading life reinsurance companies discuss their views on the directions in which the life reinsurance industry is heading. Topics include an explanation of how changes in the world are impacting reinsurers and what actions are being taken by reinsurers to deal with these changes. At the close of this session, attendees have a better understanding of how life reinsurers are preparing themselves for the future and how these anticipated developments might impact their own companies.

MR. MELVILLE J. YOUNG: John Tiller's career has spanned portions of five decades, beginning at TransAmerica Re. After working as a consultant, most recently as the managing partner of the insurance consulting practice at KPMG, John returned to reinsurance as president and CEO of GE ERC Global Life and Health. John has also co-authored the "Life Health and Annuity Reinsurance" text with his wife, Denise, the family author.

MR. JOHN E. TILLER JR.: We're obviously in a very changing world today and a variety of changes are taking place: restructuring, complex regulations, regulatory requirements, international expansion in a somewhat uneven and sometimes not very well thought through manner, and better, new products. Business issues that I want to touch on today in that changing world include concentration of risk,

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consolidation of reinsurers and direct writers, digitization, globalization, regulation and capitalization—a bunch of buy-and-win stuff.

Concentration of risk. I don't think that the life and health insurance industry, in general, has paid enough attention to this issue, either geographically, or by type of risk, or by product. A lot of us narrowly avoided major loss on September 11. But what if the plane had come in 20 stories lower? What if the building had collapsed sooner? What if we had insurance coverage on this group instead of that group? And yet I haven't seen a lot of change. I sat through a luncheon yesterday. There were about 40 or 50 people from the group industry, and there's still not much work being done on concentration. There's still a belief by some people that, hey, we got through this one okay, we can get through the future okay. My belief is that as an industry we're not charging enough for those concentration risks.

Consolidation. It's happening all the time. It slows down a little bit, and when the economy's like this, it picks up. Opportunities change, but the overall thrust is more consolidation.

Dual universe. We're going to have larger players, I believe, and we're going to have niche players. There are going to be fewer companies in the middle ground. I think there will be less diversity of products and distribution systems, especially products, because there's not going to be as much drive to innovate. There'll be more drive on quantity of business. There will be more focus by the primary companies on asset management, expense management and distribution channel profits. And more and more mortality risks are being passed to reinsurers with a corollary issue around what recapture really means. What are the benefits, what are the costs and what are the risks to both ceding companies and reinsurers of current recapture prices?

Consolidation effect of reinsurers. Basically, you're going to have probably fewer, but definitely larger companies. You know, on this stage, there are about 10 or 11 acquisitions that have been done of other reinsurers in the past 10 years or so. We've done five reinsurance acquisitions, starting in 1994, at ERC itself. New entrants, by and large, have tended to provide fewer services. They may not have long-term staying power. There are less diverse products and distribution systems, also. Again, there is more of a focus on large carriers, on large quantity, large volume reinsurers. But, also, I think there will be more nontraditional and niche opportunities for reinsurers and that will lead to partnerships.

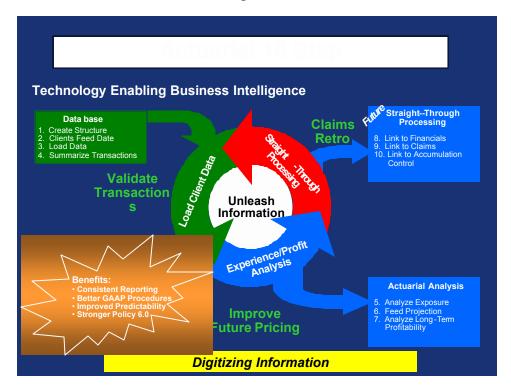
More concentration of exposure. When I last looked at this, approximately 75 percent of the life and health reinsurance in the world was in the hands of about five reinsurers. Regarding the capital and creditworthiness of the federations, I wouldn't want to talk too much about rating agencies changing criteria or the effect on our companies. But the truth is nobody has the same credit rating they had two or three years ago. And who knows where that's going to go.

IT development or the digitization world. Over the past decade or so, the insurance industry in general has been spending roughly three times average. But until the last year or so, we really haven't seen much benefit from that. We haven't seen a lot of cost taken out besides those other things that we've been doing. I think we're starting to see costs being taken out. I think we're starting to see the ability to move work processes to different parts of the world and the country. All of this is being brought about by digitization. We'll have a cost effect on the long run, and it will spur on consolidation to a large degree. Your benefits of scale will be larger than they were in the past.

Digitization also makes straight-through processing and analytics possible. The agent can put the business on the books straight through the primary rider into the reinsurer, or into the retrocessionaire with basically no human intervention. We're starting to see some of that, especially in the P&C world. We're going to see more and more of it in the life world. And that's going to change the way that we're able to deal with concentration of risk, for example. It's going to enable us to fully globalize certain business practices, as well as be an intelligent driver of change for the future.

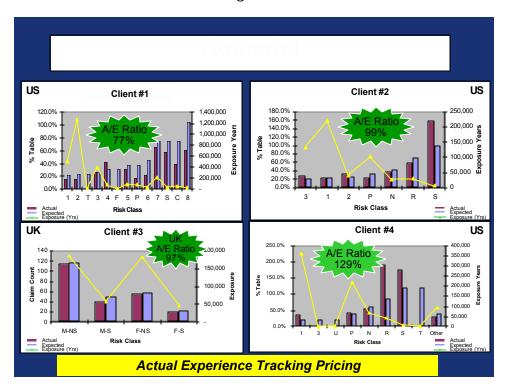
Here's one example (Figure 1). In Kansas, Bob Buckner is inventing a new dance step. It's called the Actuarial 10 Step. You go around in a circle doing 10 different steps and then you start over. But to break this down, you get the data straight from the clients, you write it into the systems, do the analysis on it, and then do straight-through processing back to the retrocessionaire who's linked the financials, all automatically, all almost instantaneously. The benefits are timeliness, accuracy, less human intervention and better GAAP results in particular. On the whole, in digitizing information you can unleash information from the data that you get.

Figure 1



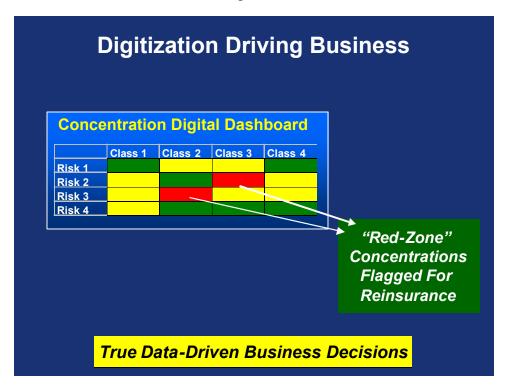
Here's an example of a mortality analysis (Figure 2) Within 24 to 72 hours of getting information from the client on a disk, a tape or however a client wants to send it electronically, we could load it into our business. We have about 50 percent of our business mapped now. So we can load in and do data analysis. You can see here clients #1, #2 and #4 are examples of companies in the United States where we have our actual-to- expected ratios by underwriting class and by exposure. So we could look at these and say this plan is performing better than expected for pricing, or this one's right on. Overall, we're finding that we're just about right on target. These are benefits that each of you should be able to feel at some point, too. You can do this same analysis yourself. If not, a reinsurer can work with you. And we're able to do this on a global basis right now, as we're introducing it to the U.K.

Figure 2



I talked earlier about digitizing driving business. Here is the concentration example (Figure 3). Set up a number of risks that you're interested in, types of products, where are you going to categorize your risks, classes, and then what business you want. The green here is an example of business you want a lot of. The yellow is business where you'll proceed cautiously. And the red is business that you either don't want or you proceed with very cautiously.

Figure 3



Now, the example here where I've marked a Risk-3, Class –2 as a red zone might be large U.S. cities with lots of tall buildings and high work concentration. That may be something in which we want to limit our exposure. Not redline or reject the business there, but there's a certain amount of capacity we want to establish there. P&C insurers have done this for some time with their casualty business, their property business. How much do they want to put in one area? How much do they want to expose to one hurricane? The life business is going to get a lot smarter. It's going to drive less volatile returns when they start learning how to do this sort of thing. But it's going to require in the case of group life, for example, knowing both the home address and work address of all the employees. This seems like simple stuff, but the systems in the industry aren't set up to capture this.

Globalization. For us globalization means two things: moving into new geographies that are totally virgin to us, or new geographies where we're introducing new products that we've been successful with elsewhere. Generally, there's high risk/reward in being a first mover or an early mover in a new geography. You have to analyze buy versus build options. But, in our view, it requires efficient, organized processes and systems. We're trying to get to the point where we have the same process around the world. Even though we may have different administrative platforms systems-wise and different legal entities, we want the same claim processing and billing collections everywhere in the world. And that's actually the key to doing globalization. We're able to build centers of excellence for processing

in low-cost areas such as India, Mexico or Hungary. And you have to deal with the local versus global balance.

Right now, we have business in approximately 82 countries and about 20 offices around the world. How do you bring all that together? One of the things you have to do is unite divisions with core values. I think it's terribly important if you're going to globalize and go across boundaries that you have a set of core values that you're able to judge everything by. For GE, that includes things like passion for customers, embracing speed and excellence, digitizing worker information, meritocracy not bureaucracy, growth driven, globally oriented businesses. Every person, every idea counts. It's a totally different mind-set than the way I came up and the way most of us have come up.

Operational efficiencies. We're putting a lot of our backroom operations, no matter where our front offices are, into India and later into Mexico. And we're looking into Hungary because of European privacy information. We have local adjudication and local contact with the customer, with a common core backroom process. When you process the claim, you take the information known about the claim, determine your own risk from the claim, you decide whether or not the claim ought to be paid and how much, and you write a check. Three of those processes, the first, second and fourth, are common to every claim. The information you process may be the same, but for a client claim for a health care benefit or death benefit you have to go through those steps. The real added value of an insurer or reinsurer is contained in that adjudication process. And that's the part that we're working to get local, while at the same time we're trying to globalize and standardize all of our backroom, not so value-added operation.

Regulation. I think you all know about regulation affecting capital. Everybody's worried about the effects of XXX here in the United States. In Canada and the United Kingdom, it's no better. In fact, it may be worse. Trying to operate with guaranteed rates in the U.K. is a tremendous capital disadvantage. In trying to introduce preferred products into Canada, there's a tremendous disadvantage right now on capital, so we need to work as a group to get reasonable capital and reserving requirements in place. Because, right now, I believe that the unreasonable capital requirements are driving business decisions as to where we as an industry make products available to our customers.

Capital planning. The Enron effect. There will be less off balance sheet and much cleaner, transparent access to information than has ever been the case in the past. I think that's going to make some of the things that have been done in the past to raise capital or use marginal capital less available as opportunities.

So, in summary. Change is reality, rapid change. Concentration is not just a P&C issue. Consolidations will drive companies in many different directions. Digitization can solve problems and create advantages, but you've got to think it through very

carefully. Ceding companies really ought to be paying close attention to their reinsurer creditworthiness. And global expansion requires a new mind-set.

**MR. YOUNG:** Greig Woodring has been an FSA since 1979, in life reinsurance since 1980. He took over the leadership of General American Re in 1986. And he has been CEO of RGA since its IPO in 1993. He is a Fellow of the Society of Actuaries and a member of the Academy.

MR. A. GREIG WOODRING: I think it's a very good time to be in the life reinsurance business. It's a time of growth, it's a time of change and it's a very dynamic, interesting time to be involved. If you look at our industry from the outside, the first thing you see is growth, because the life reinsurance industry has grown significantly more than the life insurance industry as a whole. I think there's a lot more of that to come.

The life reinsurance industry now outsources the mortality risk for the insurance industry. We've gone to a first dollar quarter share business. That's a very fundamental change, and it's not likely to go backwards. It's change that, once it goes in one direction, it's hard to pull back in the other direction for a number of reasons. There is, in addition, a lot of consolidation in the industry. You're getting down to fewer players, more serious players, stronger players, who are drawing talent into these companies. And I think you see a change in the way reinsurers conduct themselves. We suspect there's going to be substantially more consolidation in the industry to come.

Finally, reinsurers have not only grown in terms of the depth of their business, but also the breadth. You see them beginning to do things like annuity reinsurance in greater quantity. You see administrative reinsurance. This is symptomatic of an industry that's growing and is rather healthy. It's not symptomatic of an industry looking for new businesses to get into because their old business has dried up or are not performing. It's the other way around. The existing businesses are providing the fuel and the incentive to continue to expand and grow.

I think John did very well in talking about the internationalization of the business. A lot this has to do with the digitization he mentioned. But it's also true that all the markets are different and the products are different. There are a lot more similarities than there are differences in how reinsurance is conducted in these marketplaces. The skills, the talents and the ideas that you bring from one market to another are increasingly useful. And I think you're going to see a lot more of that, as reinsurance will become a truly international global industry over time.

I think everybody is aware of the changes that have been made in the ability to secure catastrophe reinsurance (CAT). I think we all worry about this; I don't think we're quite ready for another event like September 11. We haven't made the fundamental changes. You see even direct companies now talking about the fact that they've off-loaded their CAT exposure to the reinsurers. The reinsurers are not

offloading their CAT exposure effectively anywhere, or they're paying a substantial amount to do what limited CAT layoff that they are doing.

In the area of change in the reinsurance industry, there are a lot of changes underway on the side of regulations and accounting. This provides both a lot of opportunities and a lot of threats for reinsurers. Much of what we do arbitrages the regulations or the accounting standards of one jurisdiction or another. So, in effect, we have to be very careful about how we receive these changes. They can be good; they can be bad. Whether you believe regulation is inherently good or bad, it's clear that bad regulation is bad. And if we get that kind of regulation, it will be a real problem for us.

Other things that we have to worry about, in addition to adverse regulation and terrorism, are problems with data that have come to light recently. I think most of us have known for a long time that data is an Achilles heel of the reinsurance industry. We depend on our clients to provide us the raw data that we use to make management decisions and business decisions. And yet the people at the direct companies who provide this data are not at the highest level, not with the most resources, and not with the highest priorities in those companies, though they're trying to do their jobs as best they can. But, in fact, the data that we get from clients is more often suspect than we'd like to admit.

Also, with reinsurers taking an increasingly disproportionate amount of the risk, that changes the dynamics and the relationship between direct writers and reinsurers. Whenever an industry takes a disproportionate share of the risk, there's always a major problem. And while I haven't noticed any problems happening yet, you begin to worry about who makes the decisions on claims and underwriting, when the third parties are taking most of that risk and paying most of those claims and benefits.

Having said that, as far as the relationship between reinsurers and direct writers go, some things will last. First of all, it is primarily a relationship of trust. I think that's going to continue forever. Since I've been in this business, people have talked about the increasing legalization of the relationship, the old gentlemen's agreement disappearing and the need to protect yourself in what are legal contracts and relationships. All of that is true. But at heart when you're dealing with these long-term liabilities, these can't be anything other than relationships of trust. If clients stop trusting reinsurers or vice versa, they simply won't do business. Because you are making the decision today to negotiate a treaty, and you have to believe that long after you're gone those claims will be paid. You have to have a relationship of trust, and I think that will stay around.

Secondly, reinsurers have, for a long time, been a repository of expertise on the actuarial side, on the capital management side and on the underwriting side. This trend has increased in the last several years. And I think that it is going to continue to increase, because direct writers have learned that they can use the reinsurers'

expertise for little or no cost. And the reinsurers, by the same token, are developing an increasingly strong body of expertise within their groups, because they are making most of the risk decisions.

In addition, reinsurers have provided capital solutions. Even in times when direct writers seemed to be flush with capital, they still come to reinsurers for capital solutions. I know that in our shop we have been providing capital or structuring capital solutions over the last 10 years in increasing numbers, in spite of the ups and downs in capital and surplus within the primary industry. That's become a way of doing business. That's where companies turn, because it's a cheap way to address problems; it's a cheap way to maximize your efficiency as a direct writing company to lean on the reinsurers' expertise in solving those problems.

And, lastly, reinsurers don't have the size staff that direct writing companies have. They don't have the administrative burden and the need to manage masses of people. Therefore, reinsurers tend to move more quickly. They tend to be more innovative. They tend to be the ones with ideas on the cutting edge of the industry. And I think that reinsurers will continue, if they do their jobs right, to be sources of innovation, ideas and creativity within the industry. They will be sources for those ideas that direct writers can turn to and freely tap into. So the outlook for reinsurers has never been better in many ways, in spite of what we hear from pricing actuaries who complain about how competitive the marketplace is. When you take a step back and compare it to other industries, it's really a pretty good time to be a life reinsurer.

**MR. YOUNG:** Our third speaker, Dave Holland, is president and CEO of Munich American Re. He's been with Munich 33 years. He's a past president of the SOA and has served on several industry boards, including the Academy, LOMA, MIB and ACLI.

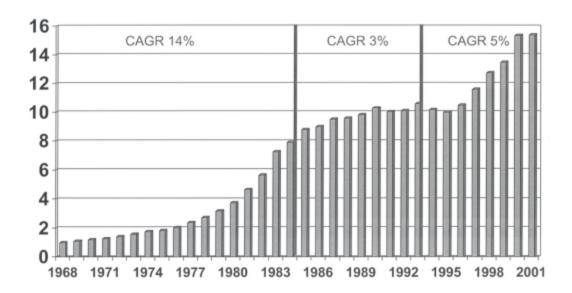
MR. DAVID M. HOLLAND: There are three things that I want to talk about:

- Where we've come from doesn't always tell us where we're going!
- Is there real risk?
- What's the environment going to be like?

Before going back to the future, let's look at the past. From our annual reinsurance survey, we have data going back to 1968. Let's look at what happened over the period from 1968 to 2001, which was a period of tremendous growth on both the direct side and the reinsurance side. Figure 4 shows the increase in direct purchases, with 1968 being valued at one and subsequent years as multiples of that value. I've identified three eras. One goes up to 1984, where the compound annual growth rate was 14 percent for the period. It slowed after that. From 1985 to 1993, the compound annual growth was three percent. And then it increased a little bit up to five percent, but still it is not growing the way it did in the early days.

Figure 4

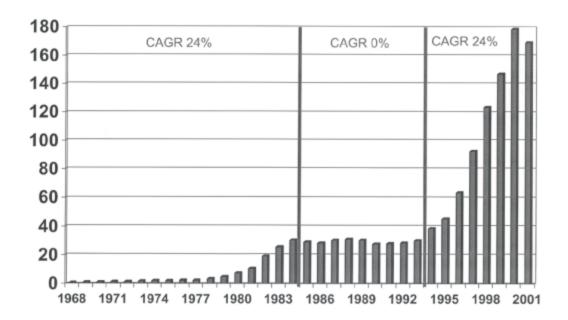
# Direct Life Insurance Purchases as Multiple of 1968



In Figure 5, reinsurance shows similar growth. The amount of direct life insurance that was written by the industry in 1968 was only \$100 million of face amount and new business was only \$5 million of face amount. It's just incredible that today we have individual policies bigger than some of these amounts for the whole reinsurance market. Here, as well, we see tremendous growth, especially in the later years.

Figure 5

# Reinsurance New Business as Multiple of 1968

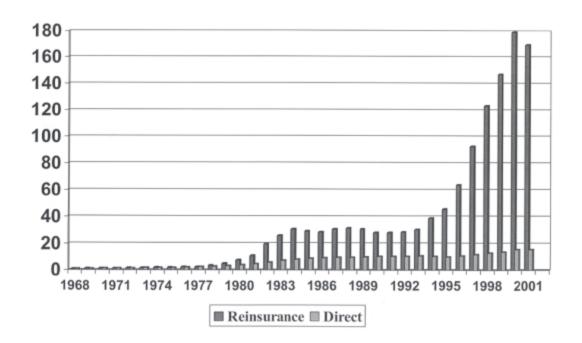


If we look at the same eras, again there are three periods. Two of them are very similar. If we go up through 1984, the compound annual growth rate was 24 percent. If we go to the next period, through 1993, the compound annual growth rate was zero. The market appeared to be stagnant. And then we have a significant increase in growth back to 24 percent per annum. If we're talking about what is the future, well, is the past a prologue? Is the past a predictor of the future?

There's the question whether or not this level of growth can continue. Figure 6 shows both direct and reinsurance as multiples of 1968. The green lines at the bottom indicate the growth for the direct industry. The blue lines indicate the growth for the reinsurance industry. The reinsurance growth is really incredible. The direct market has grown a little more than 15 times, and the reinsurance market has grown about 180 times.

Figure 6

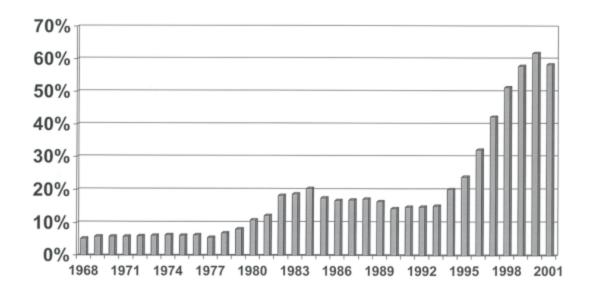
## New Business as Multiple of 1968



The question that's continually asked is what would be a reasonable ultimate percentage of the total direct business that is reinsured? Figure 7 shows that in 1968, \$5 million or 5 percent of the direct production of \$100 million was reinsured. This grew to about 20 percent in the mid-1980s and stayed there until about 1995. After 1995, reinsurance started its climb to roughly a 60 percent level of new direct business being written. If we extrapolate this trend to 2005, reinsurance production will be greater than new direct insurance written.

Figure 7

### Reinsurance as % Direct Purchases 1968-2001



There's more to reinsurance than ordinary life. In terms of premiums, ordinary life only amounts to 58 percent of the life reinsurance premium written. To give you some idea of the scope of the market, the following table shows premium income from Schedule S for 16 reinsurers:

Figure 8

## 2001 Schedule S Premium\* for 16 Reinsurers

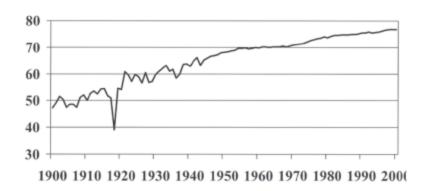
Ord. Life	\$11,116	58%
Annuity	\$3,010	15%
Credit	\$371	2%
Group-Life	\$364	2%
A&H-Group	\$2,625	14%
A&H-Other	\$1,793	9%
Total	\$19,279	100%

<sup>\*</sup> In Millions

Moving on to my second topic: Is there a real risk in the business that we write (Figure 8)? As reinsurers, we look at mortality over the last 100 years and see a strong improvement in mortality over time. Peter Bernstein in his keynote address at this meeting, challenged us to see that dealing with "outliers" is the real art of risk management. As an example of an outlier, consider the expectation of life over the last century. There's an unusual dip on Figure 9. That indicates the Spanish flu epidemic of 1918. It may be one of the most dramatic things that we can see in looking at mortality over the past 100 years. More than 20 million people died throughout the world. In the United States, there were 500,000 deaths from the flu. It's an incredible number. If this were scaled to the population for 2002, the number would be tremendous.

Figure 9

### Estimated Life Expectancy at Birth in Years for the US



Department of HHS, CDC, NCHS

The horrific attack on America on September 11 last year was a great tragedy, but, it was a miracle that the number of deaths was no more than about 3,000 lives; it could have been much larger. To give an example of outliers in terms of natural catastrophes, Figure 10 shows deaths as a result of natural catastrophes in the last century. Admittedly, there have been changes in circumstances, such as improved standards of construction and communications. However, earthquakes, floods and cyclones have resulted in tremendous loss of life.

Figure 10
Selected Natural Catastrophes in the 20<sup>th</sup> Century

Year	Country	Event	Fatalities
1920	China	Earthquake	235,000
1923	Japan	Earthquake	142,800
1931	China	Flood	140,000
1970	Bangladesh	Cyclone	300,000
1976	China	Earthquake	290,000
1991	Bangladesh	Cyclone	139,000
1993	India	Earthquake	9,475
1995	Japan	Earthquake	6,348
1998	China	Flood	3,650
1999	Honduras, Nicaragua	Hurricane	9,2000
1999	Turkey	Earthquake	>17,000
1999	Taiwan	Earthquake	2,400

In 1995 the Kobe earthquake produced 6,000 deaths, twice as many as the number of people killed in the World Trade Center.

In addition to natural catastrophes, there is exposure to biological events including germ warfare. In the October 14 issue of *Newsweek*, the cover story is "Operation: Smallpox," a program that includes an emergency plan to inoculate every American. We have been concentrating on the people in buildings, but there are other risks such as bioterrorism.

In an exercise called "Dark Winter", Johns Hopkins hypothesized what would happen if there were an outbreak of smallpox. The simulation involved a number of government agencies, hospitals and medical preparedness teams, looking at how the whole system would react to a smallpox epidemic. If one started on December 1, with the first outbreak and first patient in Oklahoma City, by two months and a week, it was projected that there would be three million cases of smallpox, with a million deaths. It's no wonder that the government is trying to prepare to inoculate every American in the event of an outbreak.

We face risks in the economic area, depending on when you're investing and how you're investing. Over the past 50 years interest rates for 10-year U.S. Treasuries ranged from around 2 percent to over 15 percent. Insurance companies are facing challenges meeting guaranteed interest rates in today's low interest environment, which is further strained by default risk. To the extent that you have investment risk built into your products, you're taking risks not only on the liability side, but also on the asset side.

Finally, what is the environment going to be like? One of the key issues will be the evolution of regulation—state, federal, dual and international. There are questions of reserve credit, collateralization and risk-based capital (RBC).

And then, our business will be challenged by the basic economic issue of availability of scarce resources. I think the top of the list for me is capital. The ease of capital and access to capital is going to be a real driving factor, both for the insurance industry and the reinsurance industry. Are we getting adequate return on equity for the capital that we've put out? What's going to happen to the availability of letters of credit? Will regulatory arbitrage be possible, and what are the changes that will take place there? We touched on the role of securitizations in capital markets and catastrophe cover. And, finally, there are many, many requests for large capacity per life. So these are some of the issues that I think we'll have to deal with not just in the future, but today.

**MR. YOUNG:** Our last speaker is Chris Stroup. He's the CEO of Swiss Re's life and health reinsurance business in North America. Chris joined Swiss Re in 1998 upon the acquisition of Life Re, where he was CFO. Prior to joining the reinsurance industry in 1996, Chris had a long career at Ernst & Young.

MR. CHRIS C. STROUP: Unlike my peers at this table, I'm not an actuary by training. I'm an accountant by training.

But I share many of the views that have been summarized here this afternoon. I'm particularly encouraged to hear Mr. Woodring sound so upbeat about the future of life reinsurance. I found 2002 to be a bit challenging, so maybe that means that things are going to be a little bit easier in 2003.

I've broken my presentation into three parts. I don't think we can discuss the future of the life reinsurance business without talking a bit about the life insurance industry, since I believe that our future depends heavily on the success of our clients. Then I will talk about the life reinsurance market. Like Mr. Holland, I'll look backward first, although I used different periods of time in my analysis. Finally, I have a couple of prognostications about the future of our industry.

First, let's discuss the U.S. life insurance marketplace. I think there should be an optimistic view of the life insurance marketplace. Obviously, demographics run in favor of the industry. Individuals increasingly are looking for places to invest their savings. There's a recognition that the public sector will not be the sole source for retirement income. And we have seen an emphasis from consumers on quality of life protection such as disability income insurance. I think that, notwithstanding some of the problems in the disability income market of the past, we'll see good growth in that market and maybe on a reasonable basis. The same applies to the long-term-care market.

I also think we'll see constrained economic growth, and I think this is a reasonably optimistic view. In our industry, wild swings in interest rates that come from changes in economics or the underlying economic growth in the marketplace are generally not good for us. There's been a significant uptick in the investments in technology in the insurance industry. The good news is that, notwithstanding the investments in technology, they have not necessarily led to a reduction in some of the fundamental costs to the consumer. I think that for the long-term, if the industry is going to succeed, it is going to have to be far more efficient than it has been. That's why the noninsurance financial institutions that are competing with many of our clients in the primary industry have made real investments in technology and have taken all the fat out of the processing and the delivery of business.

The U.S. life insurance sector still benefits because there is a repository of mortality knowledge that can't be matched outside of the industry, though most of that institutional knowledge does not necessarily reside in the primary market, but in the reinsurance market. I do think the life industry's product development skills of the industry are still formidable. And there is still a significant distribution potential that's largely untapped. All of those are certainly, positive signs.

We've discussed and now have written about the convergence of the financial institution industries in the United States. Certainly, most of the noninsurance financial institutions have substantially greater capital resources than the insurance industry does. There are a couple of major investment banks that together have a market capitalization in excess of the entire U.S. insurance industry. Frankly, the noninsurance companies have done a better job at understanding customers' needs. They've done a better job of responding to those customers. I also think that we have to consider that there's a real possibility for federal tax law changes. It's at least possible that some of the tax advantages that benefit our products and our industry will be reduced or even eliminated. And it's not necessarily clear to me why a consumer would necessarily invest in an insurance product in the absence of that significant tax subsidy.

Over Regulation and inefficient regulation continues to be a problem. It's expensive. It hinders economic growth. I'm not a fan of the current regulatory system. Capital costs are an issue and the cost are significant. They're significant in the U.S.; they're significant in the U.K., and in Canada and the rest of the world. I don't think that is going to change any time soon. And then, finally, over the last18 years of bull markets, we see consumers are increasingly interested in equity-based products. I still believe that noninsurance banks and institutions are doing a better job responding to that demand than the insurance industry has been.

I see a scarcity of intellectual capital as a major problem. The insurance industry has concentrated in five, six or seven companies. That's a risk that's fundamentally not good for the marketplace. I also see a shortage of management professionals

moving into the industry. And we're getting older. These are all causes for some concern.

With the investments in technology, while they ought to reduce costs, it's not clear that it's necessarily going to benefit\_the life insurance industry. Investments in technology create transparency in the process and pricing, which is bad news for industry. The good news is the industry does have some natural defenses. Risk taking still is complicated. And, frankly, collectively we're plagued by unexciting returns on capital. So there are few banks and debit banks that are rushing to dedicate lots of their capital to the insurance or reinsurance industry for that matter.

Let's stay with technology for a moment. Technology permits a process that we call value chain deconstruction. Imagine a situation where you could completely unbundle the elements of an insurance product. Of course, when you outsource all the mortality risks to the reinsurance marketplace, to some degree that's exactly what's happening. But that doesn't mean you don't have to keep all the asset management, the distribution and the administration. So I can imagine a situation where most of the asset management, contrary to what our clients or the primary insurance market would prefer, is outsourced and ends up in the hands of noninsurance company asset managers. Product manufacturing still will be the responsibility of the primary insurance industry. It's not clear to me that the insurance industry will be the leader in distributing products; there are other industries that might be just as effective. It is clear that the risk takers in the marketplace with respect to mortality risks will be the reinsurers, at least for today and probably for the foreseeable future. Once the industry moved to quota share and started a trend for substantial amounts of capital and risk in the reinsurance marketplace, it became somewhat difficult to reverse that trend in a short period of time. And, of course, the administrative business, which I don't think the insurance industry does particularly well and, certainly, the reinsurers don't do well, could easily be provided by professional third-party administrators (TPAs) that make an investment in systems and processes.

Figure 11 shows the distribution of assets under management in U.S. financial services. If you go back over a decade, life insurers and the mutual funds and broker/dealers had about the same amount of assets under management. Going forward a decade, you can see that the noninsurance company financial institutions grew at more than twice the rate. Asset managers and, truly, noninsurance company financial institutions have been far more successful in aggregating funds under management.

Figure 11

		Assets Under Management		10-Year
	1989	1999	Growth Rate	Growth Rate
Life insurers	1.4	3.1	2.3%	8.8%
Mutual funds, broker/dealers, market funds	1.4	7.7	4.2%	18.2%

So in the reinsurance marketplace, the cession rates actively grew from 1993 forward. I will note that the market peaked in 1998, but the reinsurance market grew at a compound rate of 24 percent during a time period when the underlying market only grew at 5 percent. And, obviously, that's all due to the change in the cession rates. Why did the reinsurance market grow so quickly? The reinsurance marketplace was more aggressive at pricing mortality risk than the primary market was, so supply and demand worked reasonably well here. There's truly elasticity of pricing in the marketplace.

There's also been a need for capital. If you recall in 1994, the NAIC published its new rules on risk-based capital and, of course, we had XXX after that. The increasing amount of capital that's required to support a life insurance business drives the purchases of reinsurance and forces more and more people to think about these financial solutions. And then, many of the primary insurance companies decided that it would be much more interesting to be viewed, especially by Wall Street, as asset managers.

If you go back just a couple years—the last two years are not good examples—insurance companies might have traded at 14 times, 13 times earnings and asset

managers traded at 25 times earnings. So if you were a chief executive officer of a life insurance company, you were probably going to enhance your own personal wealth if you were able to change your business model and generate most of your revenues based on assets under management, as opposed to allocating capital to assume mortality risks. Many of those companies today would like to have a more balanced portfolio. They'd like to have some capital allocated to the insurance business. But as a result of the changing model, the reinsurance marketplace benefited tremendously.

A couple of comments on reinsurance prices. They have declined over the past five years in absolute terms, but I think that has more to do with the underwriting and the expansion of preferred classes than an actual weakening of prices. It's not significant, but there's been some decline in the relative terms of reinsurance pricing. To some degree we may have actually had an improvement in risk-adjusted returns.

As I look at it, a larger and larger share of the reinsurance premium we collect is allocated to capital. And that capital has the tendency to release in a reasonably predictable pattern. So, notwithstanding the changes in mortality and changes in persistency, the risk-adjusted returns in our business have probably actually improved over the last five years.

In our marketplace we'll continue to see some success, although I don't think that we'll continue to see double-digit growth. I don't think that over the next five years the reinsurance marketplace can grow any faster than the primary marketplace. That's probably in the range of six to eight percent. But I do think that reinsurers will continue to demonstrate their comparative advantage over the primary companies. Diversification of mortality risks really does reduce costs. It's one of the few areas in the broader insurance industry, whether that's property and casualty or life, where the basic principle of insurance actually works. The only place I'm aware of is in the personal lines, homeowner business, where you can actually aggregate like risks and reduce the overall cost of risk. We do have most of the mortality knowledge in the industry right now, and the reinsurers' shareholders are much more willing to accept the volatility that comes from the mortality risk business than the insurance business can.

So now this brings us to my crystal ball. I think the cession rate is near its the highest level. At one point in time, I thought it would plateau at 75 percent. Now I'm not so sure that will exceed 65 percent. I'm curious to see what happens in 2002, whether the slight decline we saw in 2001 indicated a peak or just a pause before future growth. But we've seen some clients decide to move away from quota share reinsurance back to excess retention. If that's the start of a trend, then we shouldn't expect significant increases in the cession rate.

There will be new entrants in the insurance arena, noninsurance companies entering the insurance business. That has already happened and will continue to happen. (To

some degree, reinsurers are actually facilitating that market expansion.) I think that mortality risk taking will continue to be ceded to the reinsurance marketplace. The investments in technology will bring transparency. The cost of risk will be driven downward to basic commodity pricing, if that hasn't already happened. And I do believe that, even under those circumstances, the reinsurance marketplace will still prosper because of our unique position vis-à-vis the life insurers and the other financial institutions.

So what do I think it's going to take to not only survive, but also to thrive? We have two words: capital and commitment. A lot has been made of the supply of capital in the life reinsurance marketplace. I don't think it is unlimited, there are increasing demands by clients on it, but the successful life reinsurers will be able to access capital for the benefit of their clients. If LOC capacity starts to be reduced substantially, we're going to see a fundamental shift in how reinsurance is structured in the U.S. marketplace. If that's the case, life insurance companies may need to rethink product design for their clients.

Ceding companies are looking for long-term relationships. It's going to be increasingly difficult for the second-tier life reinsurance companies to compete, because the RGAs, the Munichs and the ERCs of the world will be the survivors and will prosper and some with the companies with the lesser credit ratings will struggle. Concentration of credit risk is not actually the issue. Ceding companies are interested in securing long-term relationships. Recognizing that capital is limited, companies increasingly will reach out to reinsurers and look to secure long-term commitments from reinsurers.

Many primary companies view reinsurance very strategically. It's an integral part not only of their risk management, but also of their capital management. As they look forward, many risk managers are going to realize that they can't count on the reinsurance marketplace to provide ever-increasing amounts of capital. So securing long-term capital commitments from reinsurers will be increasingly important in the marketplace.

Finally, the successful reinsurer will deliver a broad range of products. Nontraditional options have to be part of the product offering of the reinsurer. And notwithstanding what's happened recently in the rating agency market, I think all of the reinsurers have to add to their capital base to maintain the highest ratings possible.

MR YOUNG: Thank you, Chris.

What I thought we'd do is start the first question with Chris and work our way around, so everybody will have a chance to address each one. Chris, I'll start with you. How much capacity exists in the reinsurance market for single cases of individual lives? How much capital is available for mortality risks? How much capital

is available to support XXX reserves? Will the reinsurers continue to support XXX reserves at current return levels? And do you think we're providing a service to our customers by providing relatively short-term solutions to long-term problems as it relates to XXX?

MR. STROUP: Starting with single case capacity, my guess is \$150 million per life is available in the marketplace. Swiss Re today has 25 to 28 percent of the marketplace and we have allocated several billion dollars to the marketplace; I'll call it two. Therefore, there might be \$8 billion of investment in the industry. Regarding the amount of capital to support new business, the way we look at it is as follows: There is \$1.6 or \$1.7 trillion of new primary insurance written each year. The reinsurance cession rate is about two-thirds, or a trillion dollars. I think that requires somewhere in the neighborhood of a billion or more of new capital. And I think a lot of that's being generated from the profits of the existing insurance in force.

Now, is there more capital available? I think that all of the major global reinsurance companies would reallocate capital to the U.S. market if the returns improved. So if Munich, Swiss Re, ERC and the others took a look at the overall marketplace and believed that returns on capital were starting to improve by 500 basis points, I think you'd see a greater shift. So that's what would be allocated today.

Regarding XXX reserves., I will be very surprised if the reinsurance industry will continue to take on those commitments at the same rate that we are at today. I think that's a risk that's been underpriced by the reinsurance marketplace, so I would not expect that pricing to continue. It's not exactly the same as the pricing for guaranteed minimum death benefits (GMDB) reinsurance. But if people understand over time the options that are embedded in either the primary products or the reinsurance products, there will be a different appreciation for how they ought to be priced.

As far as the solutions, today Swiss Re isn't providing short-term solutions to the XXX problem. We're providing a long-term solution. We're effectively taking the risk forever, and there's a significant shift from the primary market to the reinsurance market for that capital risk.

MR. HOLLAND: I agree with many of the things that Chris said. In terms of capacity for the market on a single life case, one answer is that there is never enough capacity. Our underwriters say that they get applications with face amounts of \$100 million, \$200, even \$300 million weekly. Now, those are requests, not necessarily amounts placed. When we talk about capacity, there's a clean, logical capacity, but there are also questions about jumbo limits and capacity. Also, is the capacity the same for foreign risk as it is for a U.S. risk? When you get into sports, entertainers, aviation, all sorts of other things, you find that capacity, suddenly, becomes more of a fluid topic.

If you look at capital, I think that it is the fundamental fuel that drives the business. It is an extremely valuable and scarce commodity. If you look at the change that has taken place in the market today in terms of consolidation, a lot of it has been driven by the amount of capital that's required in reinsurance and whether companies view reinsurance as being strategic and core to their operations.

I'm concerned about XXX in terms of how it is being funded. We talk about the humpback reserves. It's not the reserve for today that you have to worry about, it's the reserve for seven or eight years into the future. You really need the capacity set aside for that. Companies ought to look at the plans that reinsurers have to come up with the resources needed to fund the long-term commitment that the reinsurers are making on this business.

I don't know if anybody is taking a bet that there's going to be a new mortality table and the reserves will go down and the business will be rewritten. That's not the kind of bet I would feel comfortable with. And even with the talk of the new mortality table, I don't see many changes that make me think that the XXX problem is going to go away.

Similarly, with letters of credit, I think that's like an asset-liability mismatch. You've got a long-term liability being supported by a short-term letter of credit. Now, LOCs are supposed to be evergreen, but at what cost? What's the availability? Will the bank ask you to secure your LOC? Can you really rely on it?

**MR. YOUNG:** I think that Chris mentioned the guaranteed minimum death benefit reinsurance and said that there are differences, but I think there are also similarities. John?

MR. TILLER: I think that has covered the capacity issues pretty well. I agree on the XXX issues. I see less capacity and less capital commitment in the XXX marketplace going forward. I know from conversations that some carriers did not have plans to go forward to figure out how to handle their capacity in the future. We've committed very little to it. We've committed more capacity, more capital access to buying blocks of business, because, frankly, we get a better return on those blocks of business. And we get our capital back quicker, so we can reinvest in some higher return products that we see coming down the road. And if it's high capacity on the primary company or as a reinsurer in XXX, long-term is not a wise move for my investors.

**MR. YOUNG:** The next question we'll address to David. Is the reinsurance market system adequately pricing the following risks: mortality, level term persistency, post-level term persistency, long-term fixed priced LOCs? And are reinsurers betting the bank on mortality improvement?

**MR. HOLLAND:** Is our pricing accurate? It's hard to say. We certainly hope so. We've all made a very big commitment. As I mentioned before, there have been

significant mortality improvements over the past 100 years, but what does the future hold? Discussing philosophies regarding mortality improvement can be tricky. One person will say I'm using mortality improvements, and another person will say I'm not using mortality improvements. But in fact, the second person may be starting at a much lower level so that on average the net mortality is going to come out the same. There are not a lot of provisions for adverse deviations in the way that these mortality risks are being priced today.

In terms of the lapse risks on term products, the issue is difficult because people may feel that the new table will result in a lot of business being rewritten. Are we betting the farm on mortality? Well, yes, this gets into questions about actuarial theory and business acumen. Like the issue of these really jumbo cases, how long will it take to get enough premium to repay an early claim? It's something that I've always wondered about, whether it's last to die, or large cases, or whatever. So we have some very high amounts that are subject to fluctuation, and we'll just have to see whether we're making the right decision or not. You can say we're betting on improvements in genetic engineering, the cure for cancer, that sort of thing. There are a lot of good things that can happen. I'm not sure that I want to stake the future on that though, or when it's going to happen.

MR. YOUNG: Thank you. John?

MR. TILLER: I think across the board reinsurers and insurers are pricing at the aggressive edge. You could say that you're aggressive in it, or that you're suspicious of an assumption. I've been trying to get our people in London, for example, to be more suspicious of their assumptions. What can go wrong? I don't think as an industry we pay enough attention to that.

Are we betting the bank on mortality improvement? I don't know, but I suspect that as an industry we're betting our future profits. From what I've seen, if we don't get the mortality improvement, we'll probably get our money back, but it's going to be more like a bond rate rather than a risk rate. So I think we are betting a lot of shareholder value on mortality improvement. And if you do that in an analytical way and look at each case separately, I think that's pretty good. If you believe it's across the board and everything is going to prove a certain way, I don't see the justification to that.

**PANELIST:** I want to say that outside of an industry it would almost be impossible not to be undertaking something. I imagine that's coming along. We've always benefited by mortality improvements. I'm pretty bullish on mortality future improvement. It almost makes you doubt that\_rates will be in trouble. Someday we'll go too far with future mortality improvements and get into trouble. It is a risk industry. Nobody is fully providing for the outliers that might happen. There's no money set aside for anything like that, catastrophe problems or epidemic problems,

or any number of things that could go wrong that's filtered in pricing, so there's no room for it.

MR. STROUP: We took a look at some data that's contained in the ACLI Fact Book on mortality improvements or changes in mortality rates from 1970 to 2000, and the compound annual growth rate in mortality improvement was 1.6 percent. And then we estimated what happens from 2000 through 2030 if mortality improves by 1 percent. And it's interesting that the expected life span increased from 77 to 81. When you think of it in those terms, you don't end up with a reincarnation hypothesis, which, frankly, until I saw the data I was concerned about. And that number—three or four years in life expectancy—sounds like it's reasonable., . Most of the sensitivity work we have done suggests that our returns on capital are less affected by our mortality improvement assumption.

And I said earlier today LOC cost has been underpriced. I think that particular feature has been underpriced. I hope that what we've seen over the last 12 months in the market, the lack of liquidity for LOCs and the increase in cost of LOCs, is temporary. History suggests it will be. But we live in a world where volatility in the financial markets is more severe than it has ever been, so that could have a very, very dramatic impact very quickly on returns on capital.

**PANELIST:** I'd like to touch on the question of investment returns. Where are we going with this? If it were years ago, I'd think we're going to test our current premiums at X. But we're not going to get X. I don't know that we're trading enough of that either. Yes, that will happen to some degree by mortality assumption.

**MR. YOUNG:** For the next question, John will start out. You made mention earlier in your presentation about ratings. Do primary insurance companies really care about financial ratings or do primary companies presume marginal reinsurers will be acquired by stronger competitors? Is there an actual price differential for higher quality ratings for reinsurers?

MR. TILLER: A couple of years ago, I formed the conclusion that there were two ratings, and it varied from company to company, what they deemed acceptable and unacceptable. Or, if you had more capital put aside, then the moment you are acceptable, you're overcapitalized and then you're inefficient. Again, I would say two years ago there was no difference. We have seen instances though in the last three to six months where a higher rating has gotten us some extra price. And now that extra price varies from company to company, situation to situation, and sometimes it still isn't enough to justify the extra capital.

**MR. HOLLAND:** Seeing the ease of entrance of some of the new players, I would have to say that ratings aren't everything. People come into the marketplace with no history and achieve significant penetration in a fairly short period of time with good prices. So direct writers aren't paying strict attention to everybody's ratings.

But I think John is right. There's an acceptable rating class for strong reinsurers who expect to be your mainstays for the long haul. And since they are long-term relationships, you question whether the rating agencies are even able to correctly rate companies for that period of time.

MR. YOUNG: Chris?

MR. STROUP: I agree. I wish ratings were more important than they've been in the marketplace. I think, though, that the credit losses since September 11 event focused the primary companies on the importance of thinking about the long-term creditworthiness of their reinsurance partners for the first time in some time. A particular rating is less important than the market's general perception of a company's ability to provide capital in the long term.

MR. HOLLAND: If you look at the investment world and at the fallout from WorldCom and Enron, audit committees are going to be much more focused on enterprise risk management and where the real risks are in the event of a serious outcome. And I think that they should be asking about reinsurance, for example, what would happen if there were a change in the position of a reinsurance company? We're seeing companies with reinsurance as a material part of their business that are really relying on the creditworthiness of the insurer. There's a lot more due diligence that's being performed, with companies asking for financial information, about relationships and how you're going to fund things.

I don't know of anybody who would buy a weaker reinsurer just to get them out of trouble. I think that may be a fallacious assumption. We'll just see how the market shakes out. We hope that won't be an issue. But do we get a higher price? Some people may want to grapple with some of the more competitive companies in order to test the market on a price basis. But they may not be willing to place all of their eggs in the cheapest basket.

**PANELIST:** Well, that's not one point. There have been a lot of reinsurers acquired in the last decade or so. I can recall a number of them straight off the top. Because we don't have a history here of bailing out companies, we don't know what will happen.

**MR.YOUNG:** The next question is for Greig. Classic economic theory suggests that oligopolies should generate excess returns. What are the reasons this theory doesn't apply to the life reinsurance market?

**MR. WOODRING:** Well, I'm not sure that we have an oligopoly, first of all. I question the premise. I think there are plenty of competitors. There's plenty of competition. There's also a perfectly acceptable substitute, which is to retain the risk. Companies can fall back on that in a much stronger way if they so choose. So if the reinsurers tried to drive up rates using their oligopoly power, which may or

may not exist, I think direct writers would just start retaining more, and you'd see the reinsurers quickly buckle.

MR. STROUP: Actually, I think oligopolies exist, and we're in an oligopoly now. Maybe that wasn't the case five years ago, but the contractions in the life reinsurance marketplace over the last five years due to mergers and acquisitions (M&A) activity means that we do have an oligopoly. It may be one that might function for the first time in the next coming years. There is a substitute—retention. But once companies make a decision to outsource mortality risk and to depend on the reinsurance marketplace to provide capital, I think it's very difficult for them to find alternative sources of capital. So over time a company could retain risk, but in the short term they can't.

I think what plagued our industry is the ease of entrance. I think it's too easy for companies to set up shop and too easy for companies to fix a rating that inflates their ability to provide the long-term capital commitment to clients. So to the extent that we haven't functioned as an oligopoly, it may be because there are no real barriers to entry. And yet the barriers to exit are significant.

**PANELIST:** We could raise our prices considerably before we have to worry about investment bankers underpricing us there, too.

**MR. YOUNG:** Chris, given that many multiline reinsurers have been downgraded recently or were placed on credit watch and the apparently high returns currently available to property and casualty reinsurance business, what effects can we expect in the life and health reinsurance market in the United Stated and outside the United States?

MR.STROUP: I'll respond from Swiss Re's perspective, because we're one of those multiline companies that has been downgraded. So far just by S&P and not by Moody's, but given Moody's action on Munich, I'd be surprised if we were not also downgraded by them. Having said that, what happened is we do like every rational company does. We take a look at our opportunities and if we think we can get better risk adjustment returns in one market, then we allocate the capital. We've been very bullish on the U.S. life reinsurance marketplace and that's why we made significant investments: the acquisition of M&G, Life Re, and Lincoln. We've pumped some \$7 billion into the U.S. life reinsurance business over a five- or six-year period, because we're optimistic in the long-term about the returns on capital.

But given the hardening in the property and casualty market, it's not inconceivable to see the global multilines provide capital to the property and casualty business, because in the next couple of years there might be a better opportunity in terms of capital. What that means is that those of us who operate the life and health reinsurance business need to find ways to be as efficient as possible with the capital that we have been allocated. While we'll never be able to generate the double-digit

returns on that capital that occur in the property and casualty market in a hard cycle, we'll need to provide steady returns.

MR. HOLLAND: Talking about ratings, will the market pay for the additional capital required to sustain AAA ratings? In terms of looking at global multilines, this is the hard market they have been waiting for. There are tremendous increases. Our global premiums of the first six months were up about 30 percent. I'm not sure that our risk was up commensurately, so I think that there's a lot of interest in writing good property and casualty business in a hard market. But this goes back to the whole principle of diversification.

We have been around since 1880. We were a global reinsurer very early on, because we realized we had to diversify the market geographically. We also diversified by lines of business. We have a significant direct operation in Europe, mostly in life. They look to life to provide the stability to offset the fluctuations in a lot of the other lines. So you're not going to say, well, I have this wonderful opportunity for a rate of return in China, so I'm going to invest all my money in one country and one line of business. I think that there's still interest throughout in terms of good risk management diversification to support the life business. People in Munich are very supportive of continuing that.

MR. YOUNG: John?

MR. TILLER: Our story is similar. GE looks at where it can get the best returns. The dissimilarity in our story as opposed to Swiss and Munich is that GE has business other than insurance. Given the leverage that is available in some of the other areas, which is not available so much in the insurance arena, we can generate 20 to 30 percent returns on some financial products. So we have to compete across that.

Like Dave, the life business at ERC is looked at as a stabilizer. And like Chris, we have to go out and justify our capital, and we're looking for a diversity mix. We're still committed to the marketplace, but if we don't get decent returns or higher returns than we got in the past, more of that capital allocation will go proportionately to the property and casualty world. You talked about premium growth in the property and casualty world. If I remember correctly, our property and casualty component has nonrenewed about 30 to 35 percent of this premium in the last 12 months, and yet the premium is up over the prior year. And that's the type of increases that the rate will get and the new accounts that they're able to bring in. If you look at that extra premium, it's almost pure profit. So there is tremendous return potential in the property and casualty world today.

**MR. YOUNG:** All right, David, is the current system of self-administration and occasional audits used in the United States adequate for the future?

MR. HOLLAND: We have to have good information. We have to have transparent information. We have to be able to respond to fast close. That means that we have to work very closely with the ceding companies. You know, we have Agora.INS, which will help direct companies manage their facultative business. We've completed an ACORD pilot, where we have been certified to meet ACORD standards to exchange data between ceding companies and reinsurers. Such interchanges should be really important to be able to exchange information between direct companies quickly and reliably.

MR. YOUNG: John?

MR. TILLER:I don't think that the procedures today are adequate. One particular company is claiming \$96 million of premium refund over the past decade through self-administration error. That clearly says something was wrong in the process. I'm not picking on that company specifically, because I suspect there are others out there. That alone tells you it isn't working.

**PANELIST:** I think that the administration and the client processes today are probably not up to test. But I would say they're probably getting a little better, since this is an evolution. It's not necessarily something that's going to happen overnight. It's going to continually get better as companies get used to the ways things are supposed to be today, which is quite different than it was 10 years ago.

MR. YOUNG: Chris?

**MR. STROUP:** The reinsurance marketplace is accepting a lot of operational risk, probably more than we should. Anytime you end up in a market or a business where somebody else makes decisions about risk for the benefit of another company, you're giving away your pen. Ultimately, the company that permits that ends up suffering. So to some degree, the reinsurance marketplace has let this operational risk management fall by the wayside. We need to reassert our need to do a much better job managing the risks we're assuming.

**MR. YOUNG:** John, what changes might we see in a post-Enron world with increasing demand for instantaneous, accurate and transparent financial reporting?

**MR. TILLER:** I think there will be more demand for better, clearer transparency and transmission of accurate data between the ceding companies and reinsurers. The next thing is there will be less off-balance-sheet types of financing. Those are two major ones. We've got to be prepared to answer questions about what we're doing.

**PANELIST:** I would add to that that there's probably some suspicion cast over reinsurance structures that are built to move business from one jurisdiction to another. We're hearing about a European task force meeting to regulate reinsurers

and then that task force concept is being extended to other markets. I think it's in the offing that we're going to get regulation on reinsurance.

MR. YOUNG: Okay, questions from the floor?

**FROM THE FLOOR:** There's a lot more pressure to manage your earnings expectations. I'd like to ask the panelists how much pressure they personally feel to manage to expectations. And do you think that in the long run this is a good process that is better for the company? If it's not, what can be done to get the regulators and rating agencies educated about our long-term...?

**PANELIST:** "Managed earnings" is not a good term. Let's start with that. Nobody manages earnings. We're expected to manage objectives. I think the pressure may be a little less today rather than greater. I think in the pre-Enron world it was a lot easier to say, "make your numbers." And in the post-Enron world, with the transparency, there will be mechanisms that won't allow people to manipulate.

**FROM THE FLOOR:** That's right. There's been pressure all along. If anything, if you hit your numbers exactly on the penny every quarter, then you come under suspicion for that. It's a little bit different world today than it was. There's almost pressure to let results be what they are and not manage them as much.

**MR. YOUNG:** I have one other question that I would like to address to Greig. In light of the changes that we've talked about as far as the amount of reinsurance, the change to quota share, have the operational protocols and treaties that govern the reinsurance relationship kept pace with that change in growth?

MR. WOODRING: No, companies quota-share a block of business, and then it gets passed down to an administration department. Very often they'll have to set up a program to create this business the first time, so there are a lot of delays in recording. Companies don't supply a lot of resources to administer their reinsurance business, because they know the reinsurers pretty much take a loose attitude toward fixing things later. I think they're not really up to the task.

MR. YOUNG: Chris?

MR. STROUP: I agree with Greig. In a situation where a company reinsures 90 percent of its business to the reinsurance marketplace, it doesn't make sense to me that the primary company should make all the decisions about product development, administration, claims management, insurance and financial reporting. There has to be a balance. And the reinsurance marketplace needs to assert its rights to take a much more active role in managing the business that's being put on the books on its behalf. So there's been an imbalance that needs to be addressed, because the reinsurance marketplace is assuming too much operational risk. We've been too lackadaisical about it.

**PANELIST:** I think there are a number of things that have come up in terms of the way people do business now that are just different. Our treaties have not kept pace. If you look at claims in course of settlement, and you have a quota share treaty with five or six reinsurers, are you going to talk to each reinsurer about a contested claim? If you contact them, do you lose some attorney/client privilege? What's going to happen to extracontractual damages if the reinsurers haven't heard what you're doing and have had no opportunity to make comments?

When you write a treaty and it says you'll use normal underwriting, it's probably only loosely defined in the treaty. And, again, if you have a panel of reinsurers, how are they going to respond to questions that come up about that? The fundamental question is whether people understand the concept of reduced retention or first-dollar quota share when it comes to recapture and similar issues, which can be very serious in terms of how the business was priced and what was considered at the time. But I don't think that today's treaty often covers that kind of situation.

PANELIST: I think the whole concept that was around 30 or 40 years ago, and was the background of reinsurance, was a gentleman's agreement. I think that's all in question right now, and I don't think it's really valid, certainly not to the degree that it was, given the 90 percent quota share world. And I see this expanding around the world. To give an example, last week I was in London. Our managing director there was telling a client that a claim wasn't really covered under the policy. And we had done 90 percent of the risk. So this claim isn't covered under the policy, but we thought we ought to pay it for public relations purposes. And our managing director over there gave the right answer. He says, "That's a good idea. I hope your marketing budget can handle it." But he put it a little more politely than that. Don't expect the reinsurer to go along with those types of decisions.

MR. TILLER: I am terribly concerned about treaties that don't get signed for one, two or three years. You know, when I was in the consulting world I did a fair amount of expert witness work for arbitration or courtroom appearances around reinsurance agreements. I'll tell you flatly that every single one of those, except one, could have been avoided by a clear, well-written treaty. If you're not getting clear, well-written treaties in a very timely fashion, like 60 to 90 days, you're putting your company and the reinsurer at risk, because you don't know what that agreement is. One time I got a call to get involved in a case where there was no agreement, just a number of letters, and I refused. They couldn't pay me enough to walk into a courtroom and take a position on that. So I hope everybody is focusing on getting treaties down and documented.

**PANELIST:** And communication after the fact.

**PANELIST:** Right.

MR. YOUNG: We have another question.

MS. JOHANNA BECKER: One of our companies, New England Life, back in 1998 realized that there were problems from a quota share standpoint. They tried to change our procedures by having meetings with all their reinsurers where we set up a process whereby we would have an annual underwriting audit and an annual administration audit every year by the pool members. We set it up so that there would be a team that would come in and actually bring two members to the pool. And each year those pool members would change, so that all of the pool members would have the opportunity to come in at a reasonable point in time. Also, if they were not the ones appointed to do the audit that year, those who were appointed would seek out input from the other pool members in case they had any particular concerns.

Now, the one thing that the team auditor could not do was audit the actual rates of the other company, because we do not have a common rate scale. But they can audit their own. And then because it's reinsurance business, one could make the assumption that as long as the rates for other reinsurers were loaded properly, the calculations would be done properly. And then an audit report is produced and sent to all of the members. We've been doing that at New England since 1998 and it has worked well.

We also established lead reinsurers for claims and for underwriting, because of these issues of recognizing that reinsurers are taking on 90 percent of the risk, but that it's not practical to go to every pool member with every case. Again, this has worked out well. It is a learning experience. It was something new for us. We found that if pools changed and if pool members changed and if there were mergers and acquisitions that we had to make some changes in the process. So, again, it's not perfect, but we are certainly trying from our standpoint to address some of the concerns of the reinsurers. Also, there is a practical concern that a big company like a reinsurer can't spend the time dealing with every party on every case. And so this has worked out well for us.

MR. YOUNG: Thank you.

MR. HOLLAND: One comment. We applaud this kind of attention to detail on audit and responsibility. There's something for the reinsurers that we might have to worry about—questions of disclosure of audit results or really nondisclosure of audit results. We've had people who've asked about showing audit reports to investment analysts and bankers and others who may want to rely on these reports. That was not the purpose of the audit. It was not intended to be displayed or disclosed to other people. We don't want any secondary liability coming about because of generous use of audit reports.

MR. YOUNG: And with that, I want to thank the panel. A terrific job. Thank you all.