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Health Reinsurance

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Summary: The panel discusses the current challenges in the health reinsurance marketplace. Topics include traditional quota share reinsurance, employer and provider stop-loss coverage, difficulties in obtaining reliable and credible data from a ceding carrier and terrorism reinsurance. The facilitator leads the participants in an interactive discussion of the issues in valuing health reinsurance. Participants are invited to bring up additional discussion topics, based on their own experience.

MR. WILLIAM F. BLUHM: To me, the most important challenge in the reinsurance marketplace is helping buyers understand and quantify interplay between reinsurance, risk and cost. That has been and continues to be the challenge. To me, it doesn't just mean understanding it. It means explaining it and communicating it effectively.

There are two things that we can do as actuaries to help quantify that. As communicators, we can help management figure out what I call their "discomfort trigger," how comfortable or uncomfortable they are with different levels of risk. Secondly, we can help define the expected value of the reinsured claims versus reinsured costs and provide some quantification to that discomfort trigger, which while it is subjective, is still quantitative.

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This discomfort trigger can be stated in a lot of different ways. Typically for most health insurance managers, at least medical insurance managers, the trigger is what loss ratio can they live with. But if you're talking about coverages within, for example, a life company, the triggers are different. They might have to do with ROI or ruin probabilities or things like that. But in any event, that needs to be translated into a confidence interval.

If the expected loss ratio is 75 percent, the discount for trigger might be 80 percent. Now you might say, "I don't care. The reason I need reinsurance is because I'm uncomfortable when things exceed that amount." That amount is the variable that we're talking about—those fluctuations in the results. My way of thinking about it is composed of two different variables. One has to do with statistical fluctuation, which is a function of portfolio size. It's why the values didn't come out to the expected value. They fluctuate because you don't have an infinite population. The other is historical fluctuation, which is not a function of science, but is more dependent on things such as how good you were at predicting the expected costs. There are a lot of things that impact those values.

Chart 1 is a model for statistical fluctuation. In this case, there are two scatter diagrams here: one showing 2,000 members, one showing 5,000 members. It's a simulation of what might happen over 100 years for each of those two numbers, showing how likely it is that you'll see a fluctuation that exceeds certain points. It's a statistical exercise that you can do with normal kinds of risk simulations.

The historical risk comes from all other sources. It's a little softer than statistical risk, because everything else goes in the pot to determine why things didn't turn out the way we predicted. The health organization risk-based capital (RBC) group defined it that way. They derived the historical risk by taking the total fluctuations, modeling the statistical piece and taking the statistical part out of the total. They didn't try to quantify the pieces that went into what was left. There are values that reflect a typical company selling coverage in the marketplace and what the historical fluctuations have been in excess of the random statistical fluctuations.

The definition has to do with things such as how long it takes to file and get approved rates if you have to do that and what kind of reimbursement contracts you might have. It has to do with how quickly management reads and responds to unexpected deviations. So you can take that information and use those distributions to calculate the probability of ruin. Chart 2 shows an example of how you might want to define that discomfort trigger. You might be quantifying it for management to say here's how likely it is you will run out of money or use up this amount of money within a certain number of years with no reinsurance. Then you can go back and do the same thing with reinsurance and compare the two.

Chart 2 is a comparison showing how that probability of ruin varies, which it does quite substantially, by medical coverage. The graph on the bottom is physician coverage, which has a relatively low probability of ruin. Comprehensive coverage is

substantially higher, but actually a specialty like orthopedic surgery, which is a high severity, lower frequency type of coverage, is even higher.

So what does reinsurance do to that? Chart 3 shows what happens with the stop loss at three different attachment points. One of the graphs is a theoretical portfolio of 5,000-member groups, covering all physician charges. You can see, as you probably know, that this type of distribution is skewed somewhat to the left. The $20,000 attachment point is almost reinsurance for physician coverage. What this shows is if you put a $10,000 reinsurance in place, it reduces the variance. You can see one of the other graphs squeezing in toward the center. The variance is smaller, so the probability of fluctuation is smaller. The easiest part to see is on the left side of the graph, though it's less important because that shows what happens if your experience is a lot better than you expected.

What you're really interested in is what happens if it's a lot worse than you expected. You can see that on the right tail. It's not magnified enough perhaps to be able to measure well, but you can still see qualitatively what's going on. One graph is under another, and there is a material difference there. Similarly, the $5,000 attachment point does the same thing, only more so, and causes the graph to squeeze in more toward the expected level.

So, to me, the effective communication of that to management has been and continues to be the biggest challenge in the marketplace. It especially points out the differences between excess stop-loss type coverages and quota share coverages, which don't do this. They scale everything down by whatever you have, whenever you reinsure.

So those are my comments. Now we'll hear from Michelle.

MS. MICHELLE FALLAHI: Thank you, Bill. I'm going to talk about a basic definition of reinsurance. Simply put, from a reinsurer's perspective our goal is to protect our clients against that which they cannot control. For health insurance, we certainly consider those low frequency, high severity claims to fit into that category. An insurance carrier or an HMO can do everything right, but they're going to get some high-dollar claims that come out of the woodwork, and that's what specific stop-loss insurance is expected to do.

So with this definition, you ask yourself, how does the quota share type reinsurance fit into that? In fact, in recent years, there have been a number of people asking that question, particularly those reinsurers who had used a managing general underwriter (MGU) insurance carrier in reinsurance type situations. I'm not saying that all of those are bad, but certainly there have been some situations where reinsurers felt that, because of something that was happening far removed from them, they were getting selected against. As a result, there have been some years of losses in that area, and that market has tightened up dramatically.

There's still quota share reinsurance available out there, but I think that the reinsurers who are still committed to that are those reinsurers that are much more intrusive. They probably have fewer programs that they're on, and they're looking a lot more in detail at what the MGU and insurance companies, or whoever is taking that risk, are doing on a daily basis.

I'm going to focus on specific reinsurance because, in fact, that's really what we see the most of. Before HMOs and capitative providers came along, risk was comprehensive. That's really how the reinsurance structure evolved. It was for all charges. It was usually a high deductible and covered inpatient charges, outpatient charges and drug costs. It was all rolled together. That's really how the reinsurance program was developed, and it was pretty easy. People would pick a deductible that they felt comfortable with. On a good day, that deductible was developed using a competence in the real sensitivity analysis. On a bad day, it was, well, that's what we had last year. So there are varying degrees to how people picked their specific stop-loss deductible.

For the most part, that was really how things continued to be for traditional indemnity insurance carriers. That reinsurance program fit their needs because they probably always were looking at a higher deductible, but they have risk for all charges and that's what they want their reinsurance to cover. It's also pretty easy for them to figure out what they're going to get on a recovery basis, and it's pretty easy for them to budget.

So then come the HMOs. When I talk about HMOs, I'm really talking about HMOs or capitative providers—whoever has that risk. In recent years, capitative providers have taken the risk from HMOs, although I would have to say truthfully that I see those number dwindling. I think it probably hit its high point in the late 1990s, but it's been on the downswing. Not too many providers were equipped to take the risk. They want to go back to the good old days of getting some kind of bill charge arrangement or at least getting paid on a fee for services basis, as opposed to a flat amount.

So HMOs come along and the whole structure of reinsurance has to change, because HMOs have done an excellent job of contracting with the providers and they want their reinsurance program to reflect that. They think that the cost should be lower because they've done this contracting job. They've got fixed per diems—a fixed amount of dollars per day for inpatient on all of their network providers. They have a little bit of unknown risk when they go out of network. They want their reinsurance program to reflect that, and they want the cost to go down as a result.

When HMO reinsurance was initially developed, that was fine and that's how reinsurers did the program. They normally cover only half their inpatient services, and that's basically where HMOs thought most of their risk was. They did a really good job of contracting physician charges and outpatient. And they said, just give me inpatient only because that's where the unknown is. So because they had

network contracts, normally a typical reinsurance agreement had a $2,500 average daily limit maybe $2,500 to $4,000 depending on the service, and for years that worked.

But then, again, there was evolution. HMOs hit a bad spell for a little while in public opinion. Somewhere along the line HMOs felt the need to become kinder, friendlier organizations. So they went to more of an open access program. They allowed people more access to not just any provider, but most providers of care, and their ability to network with these providers became more difficult.

Providers, on the other hand, saw this as a window of opportunity. There were things they wanted to get back into their contracts and saw this was the time to do it. They started putting outlier provisions in their contracts: "You can pay us $1,200 a day, but if it gets to be a large claim, you're going to pay a percentage of bill charges." So that got back into the contract. The only kinds of claims that a reinsurer pays on are those types of outlier claims. So instead of having a fixed per diem in the contract, we knew we had to guarantee them X amount per day. Now we're back to a percentage of bill charges. So reinsurers have to adjust to that.

The reinsurance contract follows because those costs have also shifted dramatically. Not only are the costs going up generally, but where we were looking at inpatient having the biggest amount of costs, now costs are shifting toward outpatient. They're shifting toward drugs. They're shifting toward durable medical equipment (DME), something that can constitute a big percentage of claims. All that is new technology. Our reinsurance clients and the reinsurers were unprepared for that change. They were trying to match where all these charges were going to come from, and HMOs and the capitative providers are naturally going to ask for more comprehensive coverage because of this cost shifting. Reinsurers are trying to figure out how, if we come back to that, to set limits because we don't want this to be a selection issue. We don't want them to buy coverage on only what is the high cost and not on other pieces of it.

So, the reinsurance structure changes again. This time they're continuing to hold the average daily limit, because that's still a big piece of what an HMO contracts with their healthcare providers. But they're limiting outpatient services. They're putting limits on skilled nursing facility (SNF) and rehab dollar amounts. They're putting limits on eligible charges on drugs. Drugs are a huge issue. Everyone is aware of that.

You can have a hemophiliac who easily runs $800,000 or $900,000 a year. Hemophiliacs are perfectly healthy if they get drugs called blood factors. They're born hemophiliacs; they don't suddenly get this. But as time goes on, they become immune to these blood factors—they don't work as well as they did before. So drug companies have to develop new blood factors—designer drugs—and they may only use them on half a dozen people in the country. When that happens, they have to

charge for all the research and development even though they're only going to use it on six people.

In the *Wall Street Journal* about a year and a half ago, there was a report about a hemophiliac. They were pumping $30,000 worth of drugs into him every 15 minutes. In 37 days, it was $5.2 million worth of charges. He died after 37 days, but it was an important case for a number of reasons. One of them was the sheer amount of the charges, but the other thing was that this individual had depleted the country of blood factors. They were going to Europe to get it because we were completely out in the United States. There were a lot of ethics discussions about allowing this to happen. But the point is that drugs are very expensive. It didn't use to be a covered item, but now it certainly has to be or the exposure is too great for the client.

So why is this a problem? It's a problem because now you have a reinsurance contract that has a lot of inside limits, and it's difficult for the client to figure out what they're going to get back on the recovery. It's equally frustrating for the reinsurer to figure out when they look at it at renewal and when they look at it on a new-case basis. What kind of data do we have? Do we have bill charge data? Do we have paid amount data? Do we have paid amounts with the ADMs or before the ADMs? Do we have inpatient data? Do we have drug data? Do we have outpatient separated? It's very complex and it's equally frustrating for the client. So again, we evolved from this because we're trying to track the risk that our clients have.

What are the limits? Why is this so complex and what can we do about it? That's a good question. I think it's unnecessarily complex, and I think that there are a couple of things we can do. One of them is to increase the deductible for HMOs and for capitative providers. Reinsurers get concerned if they think that there's something that somebody is going to select against them on. They would be much happier if they could combine all of the charges that take a higher deductible. That's what indemnity carriers have been doing for years. It's uncommon for an average-size indemnity carrier to have a deductible of less than $500,000 per person. A lot of the HMO contracts that are out there have deductibles of $150,000.So why the difference?

They have $150,000 deductible, and they have all these ADMs, and they have internal limits. If they put all those charges together and move it up to something closer to $500,000, it becomes more of a reinsurable interest. It becomes more a factor of volatility and less a factor of higher cost shifting for these particular charges. It's better for everybody if you move up the deductible, take that risk, and then really do the same job that you have done in the past on networking and contracting. But not every small change can be reflected in a reinsurance contract. I think that's just a trap that we've gotten ourselves into unknowingly.

I think that the other thing that you need to do is really develop a sense for what's powerful. What is the right deductible? What would create a loss to your company

or will have impact? A lot of people are looking at commissioner's annuity reserve valuation method (CARVM) type coverages. They want a certain deductible for transplants and a certain deductible for other things, and they're trying to look at different programs. I wonder about that. I don't understand why it makes a difference if you have a transplant versus something else. Why is that more of a problem to your organization than a burn? I think there's a lot of energy and a lot of work spent on analyzing different routes to go in, but I think moving that deductible up to a tolerable position can cure a lot of it.

I think that actuaries, in general, are critical to that process because that's where the change happens. That's where the paradigm shift is—where the actuaries step in and tell the operations people and the underwriters, "Get the organizations to accept the risk where it should be and then make things a little smoother to the end." Reinsurance programs, like anything, evolve. I don't think we've seen the last of it yet; there will be more evolution. I think consumer-driven healthcare is going to provide some interesting developments, but it will take a little while for that to happen. I think you're a key part of that, and you realize that, too, or you all wouldn't be here.

With that, I'm going to hand it over to Jim, who is going to talk about terrorism.

MR. JAMES R. GRANT: I would like to talk about terrorism reinsurance. I want to talk about September 11. Anybody notice anything ironic about that date? It's today. This is the two-year anniversary. I'm sure each of you remembers where you were. I was in Washington, D.C., at an industry meeting similar to this one. At nine a.m. they adjourned and made an announcement that a plane had crashed into the World Trade Center. We all went to the TVs and, sure enough, they replayed that. Then the second plane crashed. Most of us thought they were simply replaying the first event. Then the Pentagon was hit, and they started to lock down Washington. Then the challenge was to get back home, because trains, planes, buses and cars weren't going anywhere. So it's ironic that today is the second anniversary.

To put things in perspective, Chart 4 shows the top 10 most costly world insurance losses from 1970 to 2001. Look at the one that's number one on the list. It is, in fact, the events of September 11. The insured losses in 2001 dollars have been discounted about $20 billion right now. Since this chart was produced, I've read some other articles that indicate that the total expected insured losses are probably going to be in the $35 to $40 billion range. So you can see that though it was fairly close to number two, which was Hurricane Andrew, by the time all is said and done, it probably is going to be much higher than that.

In terms of the total cost structure here, only about one-third of those families of survivors who can apply for reimbursement because of losses have done so. The time frame to do that is going to terminate very soon. So the conjecture is that there could be a lot of liability suits coming if, in fact, only a third of the people who

can apply for those benefits, and therefore waive liability, are going to do it. So that means that the total could go up significantly.

Was this one or two events at the World Trade Center? There's a lawsuit to try to determine this. Why is that important? When we talk about catastrophic coverage, there is a provision called reinstatement. Reinstatement means you go through the cover, you pay the premium again and you get the cover reinstated and it will be set up to cover you a second time. The people who managed the World Trade Center say there were two. The reinsurers and the insureds say there were one. There are about $3.5 billion at stake when that decision comes out of the courts, and that could change this total, as well.

Everything else on the top 10 list was a natural disaster. I was very surprised to see that. I think it's important to step back a minute and talk about cat. covers. A cat. cover is a different type of reinsurance. It is meant to protect against a single event that involves multiple lives. There are variables that have to do with the pricing. One is the maximum any one life (MAOL), which is the maximum minimum life. This pertains to the risk per life that you retain yourself, because if you're reinsuring risk, you're not going to get recoverable on the cat. cover. There is a deductible, which is usually a dollar amount. There is a life warranty, which means you have to have multiple lives involved in this. I think the lowest life warranty I've seen is three lives that have to be involved to trigger it. In the individual life or group life, that's typically what it's been in the past.

There are two triggers here. The first is the deductible, which is a monetary amount, and the second is the life warranty, which is a minimum number of lives. The deductible is often determined by the life warranty times the maximum minimum life. That's an algorithm, and it's very simple. But in truth, when you look at terrorism in the example on the medical front that I'll show you, you can have hundreds of lives involved, and so it's not quite that simple anymore. For example, if you had only two lives involved, but you penetrated your reinsurance deductible, it wouldn't trigger coverage. If you had eight lives, but you didn't penetrate the deductible dollar amount, you wouldn't have coverage. So it has to have both of those elements.

The premium is usually paid in a minimum of deposit. That means that up front you give a check to the reinsurer and then there's a true-up at the end of the year. A group life or individual life cat. will typically have a rate that's per mean million, and that minimum deposit premium up front is usually 80 percent of what they think the ultimate premium is going to be. But at the end of the year, you apply the rate against your volume and you make an adjustment. If, in fact, you've lost volume, you still never are going to go below the minimum of deductible premium. That's why they call it that. In most cases, the reinsurer has decided it's going to be at that point because they don't write it at a lower cost than that.

How many of you are familiar with the government backstop called TRIA? After the events of September 11, the government was very concerned because the insurance industry was saying we'll cover this event, and we can do it. But if we have another one like this, it could bankrupt us. Then there was a big part of the U.S. economy that was concerned that it wouldn't be covered if there were terrorism events. There was a feeling that the economy could crumble as a result of this. So the government stepped in and created the Terrorism Risk Insurance Act of 2002.

It was enacted by Congress, but established within the Treasury Department, so it's actually the Treasury Department managing it. The Federal Government is going to share the risk with the insurance industry. As I show you the structure, you'll see that's exactly what it is. They created a reinsurance of sorts with coinsurance factors, deductibles and things of that nature.

This is a three-year program that's going to stay in effect through 2005. This was a temporary fix and the Treasury Department has emphasized at several different points in time that this will expire. One year prior to its expiration, the Treasury Department will decide whether this should continue after the year 2005. A lot of the evidence I'm seeing is that it probably will not.

Who is required to participate? All insurers and self-insurance entities that deal in the commercial property and casualty lines of business, all companies licensed or admitted in any state, eligible excess and surplus (E&S) carriers, state residual entities and workers' comp funds, companies approved for property and casualty by federal agencies and all primary and excess commercial property and casualty. Reinsurance is not covered. Medical malpractice is not covered. Health is not covered. Life is not covered. And monoline financial guarantee is not covered.

The Treasury Department said it was going to review TRIA and whether they should include group life. About a month ago, they determined they should not. But it was an interesting announcement because they said, "We understand there's little capacity for cat. covers on group life. It's very expensive, but we're still not going to cover it under TRIA." So they were compassionate, but the decision was made that they weren't going to cover it.

What is an act of terrorism? This is important, because a lot of different things could occur that, if you're buying terrorism reinsurance, you think should be covered, but may not be. TRIA says that it has to be dangerous to human life or property, result in damage in the United States and be committed by individuals acting on behalf of a foreign interest. They're not going to cover domestic terrorism that isn't connected with a foreign interest. It does not include the following: Acts committed in the course of war. Are we at war with Al Qaeda? Technically, Congress has not declared war, but that could be an interesting debate. Acts created by an individual <u>not</u> acting on behalf of a foreign interest. Oklahoma City wouldn't have been covered under this. And acts resulting in commercial property

and casualty loss of less than $5 million. This is the industry deductible that the government has placed on this Act. In other words, if there is an act of terrorism and it meets all the standards we talked about, there have to be at least $5 million in aggregate losses for an event before TRIA is going to be triggered. So they're not going to cover small claims. They're not going to cover an event that doesn't have at least $5 million of losses in aggregate across the industry.

It's based on the previous year direct earned premium for the subject lines of business. There are deductibles set, which means the insurance company will retain 7 percent of the 2002 direct earned premium for 2003. So we look at 2002, determine what the direct earned premium is, multiply that by 7 percent, and that's the retention. For 2004, it goes up to 10 percent. After 2005, it goes up to 15 percent. It's calculated on a consolidated basis for all the insurers in an affiliated group. So if there's a parent of multiple insurance companies, they use the aggregate factor.

There is also a coinsurance factor. When you reach your deductible above that, this act only covers 90 percent of losses, and the insurance company retains 10 percent. And there's a cap on the liability in any one year of $100 billion. To put that into perspective, we think the losses for September 11 are going to be maybe $40 billion total.

There is no free lunch. If the government pays out under TRIA, they can then surcharge to recoup losses paid. This applies to the commercial property and casualty premiums. It may not exceed 3 percent of the annual premium charged. But they will go back to the insurance companies and ask them to pay this back, so it is a short-term solution for the insurance companies.

The "make available" requirement was instituted because there were exclusions in property and casualty coverages for terrorism. The government said, "We're putting this backstop in place. You eliminate your exclusions. Offer it to your buyers," and that's exactly what's happened. If nuclear, biological and chemical terrorism was lawfully excluded, it could continue to be excluded in any terrorism risk coverage offered on the retail side.

Chart 5 shows some work that was done by my company recently. We had clients who said, " I've got TRIA, but they're asking me to retain more risk than I'm comfortable retaining." So we said, "Well, what if we carve out and you buy reinsurance within your retention?" This graph illustrates a company that has $100 million of direct earned premium. So its deductible for the 2003 year is going to be 7 percent or $7 million. They're responsible for the first $7 million before TRIA kicks in. They say that's too much. So we were able to go out to the insurance marketplace and, after they decided they'd keep $1.5 million, they purchased reinsurance at $5.5 million in excess of that to bring them up to the $7 million. So we piggybacked that and then put TRIA on top of that, and they felt much more comfortable. Fortunately, there's capacity and the prices were right. So these are

some of the creative things that have been done as a result of TRIA. It seems to have worked well so far, but we haven't had any claims, so we don't know.

Chart 6 shows that very few people are buying this. I spoke with an underwriter who told me about TRIA and the problems it has created for her company. She said, "In the end, I've only received a total of 7 percent additional premium for terrorism because very few people are buying it. And where we're uncomfortable with offering the risk, we price it so high that we know that it won't be purchased." So it was an interesting comment from the perspective of an insurance company.

This shows the results from a survey that went to agents and brokers that asked, "Are the companies you represent buying terrorism coverage now that it's being offered?" They broke their client companies down into categories of small, medium and large, depending on commissions and fees. The 45 percent who responded said 1 to 5 percent of their small clients are buying this. So most of these companies are not buying, which is shown at the left end of the chart, and very few are buying at the high end, which is the high percentage of purchasing.

Over a year ago, we were working with a client who said, "We're interested in exploring terrorism reinsurance for our medical book of business, a large healthcare carrier, and we want to cover nuclear, chemical and biological risk." At that point in time, which was probably at the end of 2001, that was typically what was being excluded. We collected a lot of data and I learned that the reinsurance marketplace is willing to be creative. They're willing to work with clients to determine terms and conditions that have never been determined before. We were helped a lot by the Bermuda market. As you know, a lot of capital went into the Bermuda reinsurance market. We found they're more receptive to creative ideas as long as they can get their price for it, which sometimes is a pound of flesh.

We started from scratch. There was nothing off the shelf that would cover this, so we had to begin with objectives from our client and try to translate those into terms and conditions. It took us about six months to get this done. What we were able to do is create a treaty that was 12 months in length, which is traditional. We were able to get it to cover terrorism, and we included nuclear, chemical and biological terrorism, which was unheard of at the time.

We had a difficult time in trying to determine what constituted an event. The idea of the cat. cover is to cover multiple lives that are involved in a single event. But how do you define a single event? This is what's going on at the World Trade Center on that issue. Typically, events are defined by distance and time. We ended up defining a terrorism event as anything that occurred within a 100-mile radius and within 168 consecutive hours, which is seven days.

So what does that mean? It means that if somebody poisons the water supply of Los Angeles on a Sunday, and somebody poisons the water supply of Minneapolis on Monday, those are two separate events. They are outside of the 100-mile radius,

although they're within the 168 hours. What if somebody hits the water supply for L.A. on Sunday and then goes to San Diego on Monday? Let's assume that wherever the water supplies are they're within 100 miles and they're within that seven days. It's considered to be one event. Why would a reinsurer do this? They're trying to define their risk and make sure that they are not going to be covering something that they can't get their arms around. It's as simple as that.

Then we had to define what is terrorism risk and what isn't. We got everybody to mutually agree that any federal, state or local agency or authority would officially determine it. That doesn't mean that, if there was an event, there wouldn't be discussion on whether this was an event or not. Was it heard on the news or who, in fact, called this a terrorism event?

The loss-incurred period was 12 months. This means that any loss incurred within 12 months of the event that could be a result of the event was, in fact, reimbursable for the company. As far as health coverage is concerned, the person that was injured didn't have to be within 100 miles and didn't have to be injured within seven days. That simply was used to define an event. We thought this was fairly generous because we originally started with three months, then six months, and then eventually we came out with 12 months.

FROM THE FLOOR: Would the event, in case of a medical event, be considered the onset of the event, or would it be the period that a claim was actually incurred in a provider's office? For example, let's say there was a nuclear attack and someone came down with leukemia and it was diagnosed within the 12-month period. Would all those claims that were a result of that condition be covered?

MR. GRANT: That's a good question. I don't know if I have the answer to that, but my understanding is that it would have been covered. The original illness had to be incurred within that 12 months. I'm trying to think if we put it in run-off language for something like that, and I can't remember.

FROM THE FLOOR: So then it could be a significantly long period of run out for those claims.

MR. GRANT: Sure, there could be.

FROM THE FLOOR: Thank you.

MR. GRANT: When I talked about cat. covers, I talked about some of the variables of pricing. Life warranty was one of them, and that really defines the number of lives that have to be involved. In this particular case, we were talking about hundreds of lives, because the carrier was willing to retain a significant amount of losses before they wanted the insurance reimbursement. Again, this is one of the variables we used in negotiating the price.

Quite frankly, for terrorism coverage it's pretty tough to talk about deductibles under $5 million, because the reinsurers get nervous when they're in the working areas with potential for lots of claims. They'd rather there be an elevation where they're dealing with truly catastrophic issues. So I've seen deductibles written with hundreds of millions of dollars and I've seen them at $50 million, $5 million, $10 million, $15 million. This, again, is important because of pricing. The more you're willing to retain, the less you're going to pay for your reinsurance.

When we wrapped this up, we were able to obtain $200 million of total coverage for this particular client. Today, I think the total limit that's available in the marketplace is anywhere from $500 million to $1 billion when you put several reinsurance resources together for a single client. I've seen an evolution. I've seen capacity increase. I've seen prices come down a little bit. But I must tell you that, as far as I know, very little of this has been purchased because it is very expensive.

The premium for this was about 10 to 12 percent on line. Rate on line is simply a way of pricing something. It means that if you bought $10 million of coverage and the cost was 10 percent or 12 percent rate on line, the premium is $1 to $1.2 million. So if a company's going to buy $20 million and it's 10 percent rate on line, it's going to be $2 million per premium. Ultimately, I think this was primarily the reason it became too expensive and it was never purchased. So it became an academic exercise.

How many of you are familiar with modeling? When it comes to terrorism or catastrophic coverage, especially in the property and casualty area, modeling has been the way we've gone for years. Whether you're a reinsurance broker, a reinsurer or an insurance company, you're probably accessing modeling to some extent. There are companies that specialize in modeling that provide software and outsource it. You can lease their modeling and create your own capacity in-house. It looks at the probability of an event and at the probability of the recoverable cost associated with an event. It kind of throws all those elements together and says, "Here are the chances your losses are going to be X; here the chances are they're going to be Y."

There are more sophisticated models being developed every day. I read about one that simulates 24 different weapons types. What they'll do is say, "Okay, if we have weapon one, what's the chance that this is going to happen? And if so, how many lives would be involved?" They take census data and concentration information from the insurance company and feed it into the computer and come out with a range of possible losses. How dependable is modeling? I have some reinsurance companies that will not underwrite without it. I have others that say there are too many variables. It may be fine for property and casualty, but when it comes to terrorism, we don't have enough historical data to be able to validate the information we use to make these assumptions.

Pools are a great way to create an alternative to reinsurance. They tend to be less expensive. They require cooperation among insurance companies to get together and decide on certain terms and conditions and share risks. One example of a very successful pool is the special pooled risk administrators (SPRA) pool. It's been in existence for about 30 years. It is basically a cat. pool, so there has to be a catastrophic event: multiple lives and single occurrence. It also involves a deductible, the maximum per life covered and, typically, the retention of the client. The SPRA pool has been operating very successfully for about 30 years with two different pools: one for group life and one for individual life.

I can't remember anybody ever talking about getting out of the pool or getting into the pool until September 11. People were trying to get out because they ended up paying more in claims associated with other companies than they had themselves. People were trying to get in because they looked at the cost of cat. covers that they previously bought for almost nothing going up 10 and 12 times as well as capacity dropping in half. They decided they need an alternative, so they entered the pool. Swiss Re now manages it after being managed by Lincoln for a number of years. I believe they have made some changes to address some of the issues that people had as a result of September 11.

How many people here are members of the American Association of Health Plans (AAHP)? The AAHP is in the process of developing a terrorism pool. When I say developing, I have to be careful because I've called them several times to ask "What can I tell people about your pool?" And the answer is, "You can't tell them anything because we won't know anything until October."

I do have some sources, which I can't reveal, that have been able to give me some important information. In essence, they're trying to put together a participatory pool. They're working with their members and some team members to do some analysis of their potential terrorism risk. Then they're saying, "Okay, here's what we think the entire pool risk would be. Here's your share of the pool. Here's what we think your potential terrorism claims would be. Here's what it's going to cost." I think there's some up-front cost, and then there's some retro cost if they were hit or not. Ultimately, I think the intent is to get back any monies less some expenses. In the end, if there are no claims, it's very inexpensive relative to buying reinsurance like we've talked about. But I was told that this is very preliminary information.

My experience with pools is that they have tried to develop them at various times. A number of companies will talk and go through various checkpoints. Everyone is very comfortable with the terms and conditions, happy to share the risk. There's a need for it. They're committed. They want to do it. And then the day comes and you say, "Take out your pen, sign on the bottom line," and poof, it disappears. The pool never comes about. I hope that doesn't happen in this case. In the industry, we need to think more in terms of creative ways to solve some of these challenges.

Pools are not new. In Europe, they've had pools to cover the property and business interruption due to terrorism. In the United Kingdom, they have a pool called Pool Re. This particular pool was developed in the 1990s to address the challenge of the IRA bombings that were occurring. In 2002 they expanded it to cover all terrorism. Austria created one in 2003 specific to terrorism. Most of these are government sponsored with insurance companies participating and taking some of the risk. France had a longtime pool for natural catastrophes that they expanded to cover terrorism in 2002. Germany created one in 2002. Spain created a pool in 1941 because of the Civil War and the losses that were occurring there. In the 1980s, they expanded it to cover terrorism. I read recently that Australia is looking at this. On the other side of the coin, there is a pool in Luxembourg called the Special Risk Insurance and Reinsurance Pool. It was set up in April 2002, and they're closing it because of a lack of demand.

As I work with my clients, especially on terrorism, I can tell you that the one thing I've learned is that if you work hard and try to be creative and try to communicate effectively, you can develop coverages that people haven't even thought about before. I think that's a very positive outcome of all this. I don't want to be a pessimist, but everything I read says that TRIA will not continue. The government will not extend its participation in the reinsurance business. Wayne Abernathy, the Assistant Treasury-Secretary, was quoted as saying, "We shouldn't expect TRIA to be renewed."

Thank you, and I'll give it back to Bill for questions.

FROM THE FLOOR: In listening to all the speakers, one thing that struck me relative to health insurance is it didn't seem like there is any mechanism in place in case of a SARS outbreak that got out of control. It seems like that would have a devastating impact on the health insurance industry, particularly in the epicenter where it occurred, if it was, hopefully, confined just to one point. So it seems like all the risk-bearing bodies involved would need to have some sort of catastrophic coverage in that situation. Can anyone comment on that?

MS. FALLAHI: From the research that we did on SARS, we didn't think it was going to have a huge impact. What made SARS so newsworthy is that it was a brand-new virus that there was no treatment for, and they had never seen it before—it was a mutative gene. But the reality was you were sick, there was nothing you could do, and in 10 days you knew if you were going to survive or not.

From a loss perspective, for medical reinsurance, this is not a costly disease. This is not a costly outbreak. The quarantine was costly, but it's not like if some chemical were released and all pregnant women went into premature labor. That would have been an outbreak with massive costs simply because there's such a high cost of treating premature births. But from the SARS perspective, there was nothing you could do except keep them comfortable. There was no transplant. There was no drug. There was nothing.

FROM THE FLOOR: Do you see any common demand for any epidemic type coverage? Do you see that coming down the road?

PANELIST: I have. Demand probably isn't the proper word. I've had a lot of client discussions about this and there has been some concern. As we go to quantify it, some of the concern goes away. But we've also had conversations with reinsurers, and I believe there's a potential to create such a coverage. In fact, ING Re, Michelle's company, offers a medical cat. cover that, I believe, would cover SARS. Am I right?

MS. FALLAHI: Yes.

FROM THE FLOOR: Michelle, when you were speaking about HMO reinsurance, you said that maybe a better way to run the reinsurance would be to combine all expenses and pay it as if it's a regular reinsured event. I think from a reinsurer's point of view, the concern is that HMOs have more of an ability to control claims than insurers do. And so I think there's a fear by reinsurers that if you do that, then at some point there's going to be an incentive for the HMO just to go ahead and say, "Pay everything."

One of the ways to address that is to add a coinsurance to the excess coverage, but I think it would probably have to be a coinsurance that would be felt by the HMO. The excess coverages that I've seen sometimes include a 10 percent coinsurance to go along with the excess coverage. Maybe if that were 30 or 40 percent, maybe that would work. But I think that reinsurers, as insurers do, like to control their costs and so probably that's why you haven't seen that change at this point.

MS. FALLAHI: I certainly agree that we need to keep people interested in a large claim as it continues on. And there's a great deal that can be done when you have these catastrophic claims. The unfortunate part is that an insurance company or an HMO only sees one of these claims maybe every three years, and the reinsurer sees a lot of them. That's the only kind they see. So I think that one of the things you should think about when you're looking for a reinsurance carrier is what kind of services do they have to help you contain costs in these very large unusual claims because, in fact, it can be done.

And it's not that you will be a disinterested party, but if you're going to have coinsurance—which you should have; I think that balances the playing field—then you also should have a partner that knows what they're doing when it comes to unknown territory. So I agree with everything you said. It really comes down to what can the reinsurer bring to the table.

MR. STEVE SCHNEIDER: With regard to the terrorism coverage that Jim talked about, we had some discussions about this issue at Blue Shield, but how do you define what losses are related to the terrorism event? There's the event definition and then there's a 12-month incurral period. For something like radiation sickness,

that would be pretty clear. There might be some issues of accumulating them data-wise, because there might be a lot of lives involved.

And smallpox would be clear because that doesn't really exist now. But what about something like poisoning the water system? Wouldn't you get claims just coming out of the woodwork? How would you identify exactly what's due to the terrorism event and what might just be bad trends that you miscalculated? I'd be interested in any comments on that from any of the panelists.

PANELIST: I don't have an easy answer for that, because the next step was to get into that kind of language in detail. That was an issue that was raised as to how we were going to do that. So we never did solve that issue.

MS. FALLAHI: In any insurance company organization that I've been involved with and some that I haven't been involved with, it seems like the people who place claims are pretty much the most under-loved, under-cared about people there are, and the systems that they work on are sometimes not very sophisticated. I think that when it comes to this kind of stuff, training those people to put the right diagnosis code on can save you millions of dollars. There's got to be an awareness of how these big events are going to be tracked or not tracked based on what your back office does and how your system performs.

This is the right time to be paying attention to that and trying to understand what it is. You know, it's not an easy process. Even with non-terrorism claims, if you have a premature baby who has a heart condition that develops pneumonia, you have to know whether those claims analysts are putting in prematurity as the primary diagnosis, or the heart condition, or pneumonia. If it's all over the board, there's no way to track that. So, it's not a popular concept, but it's time to pay attention to what those people are doing and it's time for them to get the training that they need and you want them to have.

PANELIST: That's a good point.

PANELIST: I can also see post-terrorism syndrome occurring and a lot of similar things that if you're not careful in defining them up front they are going to become problems later.

PANELIST: Adding on to what Michelle was saying, I've had clients who have bought specialty types of carve out in medical reinsurance like organ transplants and things of that nature. In some cases, we've ended up terminating it because it was difficult to administer and track claims and decide what claims could be submitted and what couldn't. There seemed to be no way to ultimately solve the problem, either because of internal issues or simply because of communication between reinsurer and insurer in terms of interpretation.

So I would say any of you who have reinsurance, look carefully at how you're paying your claims and how you're monitoring your reinsured claims and submitting them. It's not unusual to go in and find that companies are missing reimbursable claims to the reinsurer.

Chart 1

Statistical Fluctuation

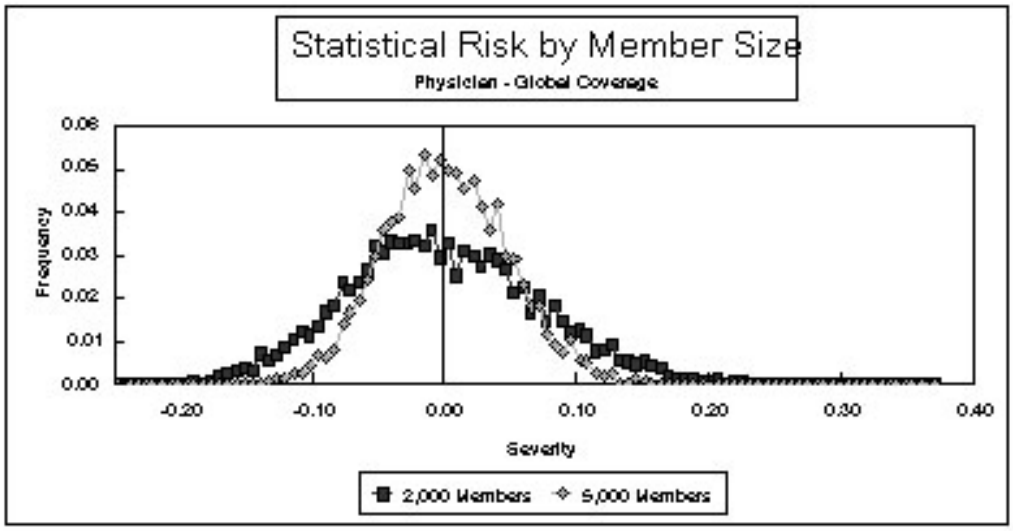
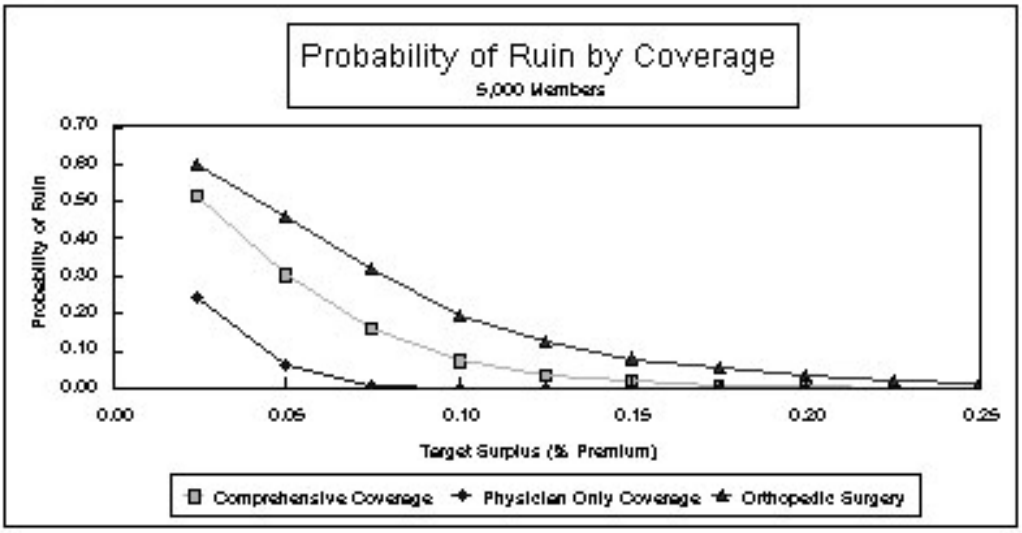


Chart 2

Putting them together:



("Ruin" can be defined as the Discomfort Level)

Chart 3

What does Reinsurance Do?

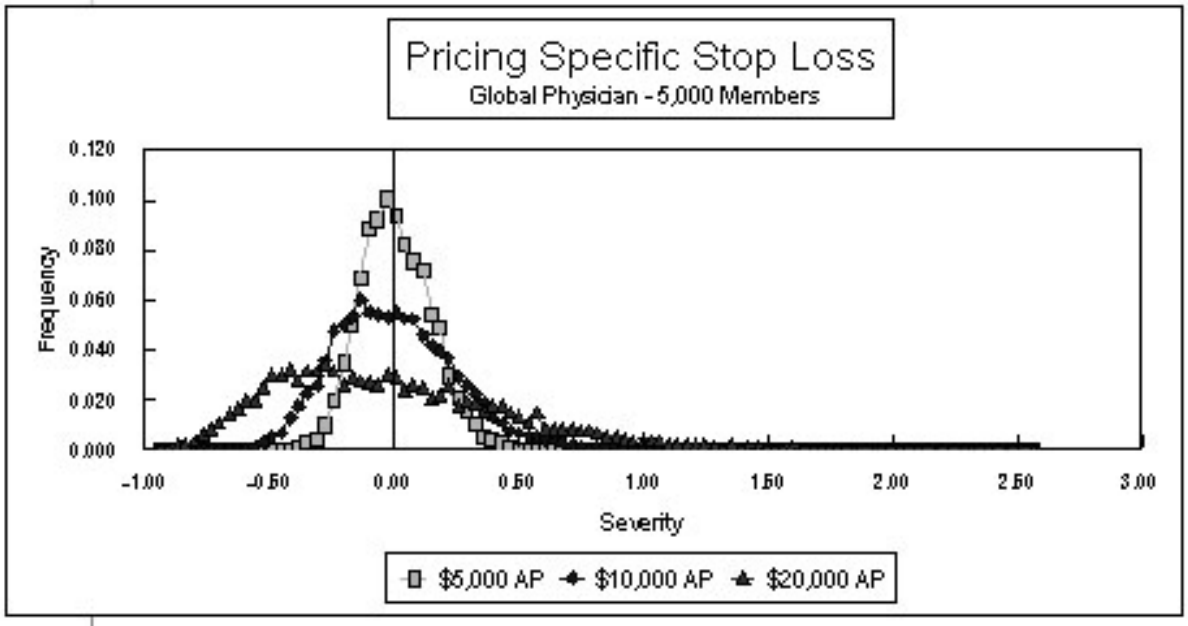
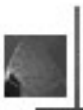


Chart 4



Terrorism Reinsurance

The Top 10 Most Costly World Insurance Losses, 1970-2001 ($ Millions)

Rank	Date	Country	Event	Insured loss in 2001 US Dollars (1)
1	Sept. 11, 2001	United States	Terrorist attacks on World Trade Center, Pentagon and other buildings	$20345 (2)
2	Aug. 23, 1992	United States, Bahamas	Hurricane Andrew	$ 20,185
3	Jan. 17, 1994	United States	Northridge Earthquake	$ 16,720
4	Sept. 27, 1991	Japan	Typhoon Mireille	$ 7,336
5	Jan. 25, 1990	France, United Kingdom, et al.	Winterstorm Daria	$ 6,221
6	Dec. 25, 1999	France, Switzerland, et al.	Winterstorm Lothar	$ 6,164
7	Sept. 15, 1989	Puerto Rico, United States, et al.	Hurricane Hugo	$ 5,990
8	Oct. 15, 1987	France, United Kingdom, et al.	Storm and floods	$ 4,674
9	Feb. 25, 1990	Western/Central Europe	Winterstorm Vivian	$ 4,323
10	Sept. 22, 1999	Japan	Typhoon Bart	$ 4,293

Note: Losses are excluding liability.

1. Adjusted to 2001 dollars by Swiss Re.
2. Preliminary estimate for insured property damage and related coverages only.

Source: Insurance Information Institute; Swiss Re, sigma, No. 1/2002. Insured losses for natural catastrophes in the United States from Insurance Services Office Inc.

Chart 5

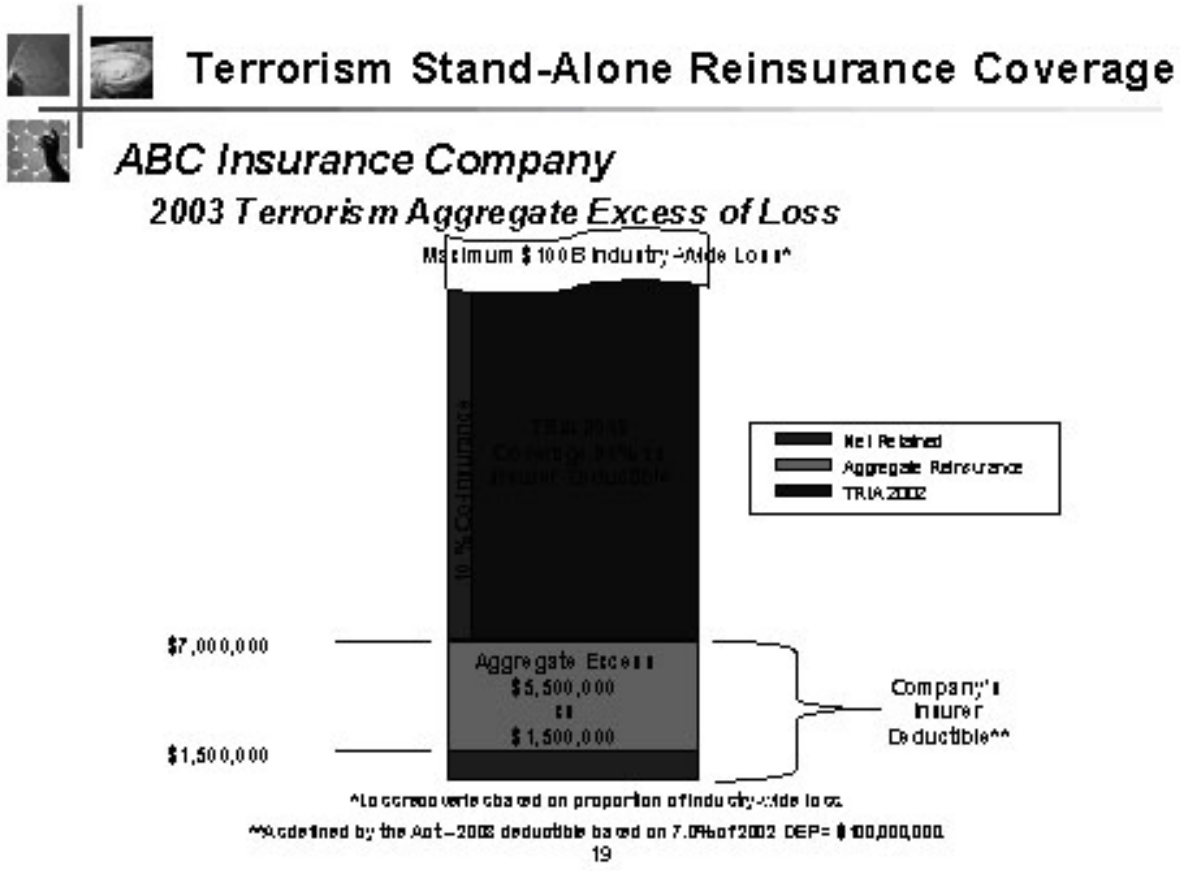
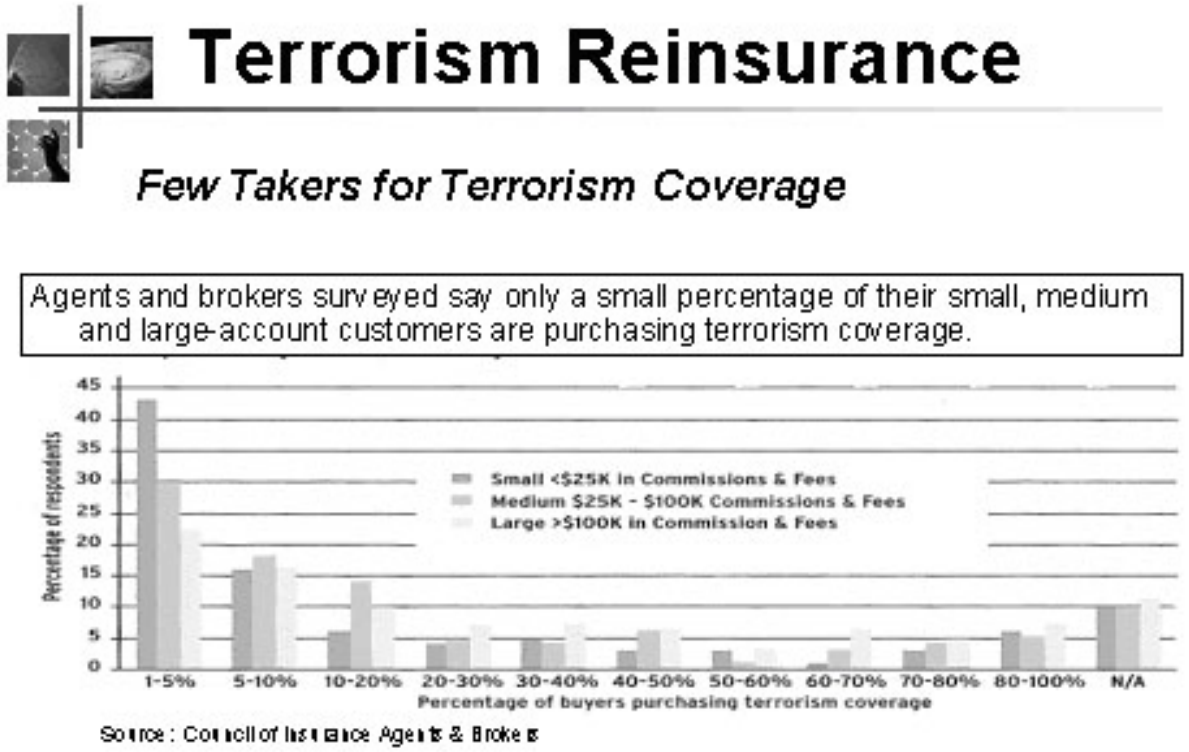

Terrorism Stand-Alone Reinsurance Coverage
ABC Insurance Company
2003 Terrorism Aggregate Excess of Loss
Maximum $100B Industry-Wide Loss^
Net Retained
Aggregate Reinsurance
TRIA 2002
$7,000,000
$1,500,000
Aggregate Excess
$5,500,000
$1,500,000
Company's Insurer Deductible^^
^Loss recoveries based on proportion of industry-wide loss.
^^As defined by the Act – 2003 deductible based on 7.0% of 2002 DEP = $100,000,000.
19

Chart 6


Terrorism Reinsurance
Few Takers for Terrorism Coverage
Agents and brokers surveyed say only a small percentage of their small, medium and large-account customers are purchasing terrorism coverage.
Percentage of respondents
45
40
35
30
25
20
15
10
5
0
Small <$25K in Commissions & Fees
Medium $25K - $100K Commissions & Fees
Large >$100K in Commission & Fees
1-5%
5-10%
10-20%
20-30%
30-40%
40-50%
50-60%
60-70%
70-80%
80-100%
N/A
Percentage of buyers purchasing terrorism coverage
Source : Council of Insurance Agents & Brokers