

# **RECORD, Volume 26, No. 3\***

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**Chicago Annual Meeting**  
**October 15-18, 2000**

## **Session 9PD** **Reinsurance Role in Product Development**

**Track:** Reinsurance/Product Development

**Moderator:** GRAHAM JOHN BANCROFT

**Panelists:** KATHERINE A. ANDERSON

W. DAVID FAIRHALL

DIETER S. GAUBATZ

**Recorder:** GRAHAM JOHN BANCROFT

*Summary: A panel of reinsurance experts presents the benefits of reinsurance and how to leverage these benefits during the product development process. The panel presents these benefits for life insurance, annuities, and international expansion.*

**Mr. Graham John Bancroft:** I want to introduce our panel and give a brief background on our participants.

Kathy Anderson is vice president and chief product actuary for ING Re. She graduated from UCLA in 1986 and joined Transamerica Direct. She spent two years on the direct side and then moved into the reinsurance division of Transamerica. There she pioneered the idea of the reinsurer offering product development to the direct writers. Transamerica was really the first off the block with that service, and they were very successful. Kathy joined ING Re in 1996 where she has really developed ING Re's product development process with respect to working with direct writers. I'm also very pleased to note that Kathy has recently been elected to the Reinsurance Section Council.

Dave Fairhall is second vice-president and consulting manager of annuity products for Transamerica Reinsurance. Dave graduated from the University of Manitoba in 1976, and he's had 24 years of industry experience and 13 years with Transamerica. Dave has a very strong background in annuities and has worked with insurance products and group pension, as well as benefit consulting.

Dieter Gaubatz is second vice-president and director of global product development at Lincoln National. Dieter graduated in 1975 from the University of Waterloo and spent 22 years with a major Canadian insurance company—11 years in Canada and 11 years in the U.S. He's worked extensively with all lines of business, individual

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and group. Dieter joined Lincoln in 1997 and spent one year in the group international markets. His current position focuses on international product development and research.

**Ms. Katherine A. Anderson:** I've been asked to cover the role of a reinsurer in the development of life products. I'm going to do that by going through four different elements that come up in the product development process. They include the price, design of the product, underwriting, and administration that go behind the product.

We hope you take away from the session an appreciation for the benefits that a reinsurer can bring to the process and a greater understanding of how bringing the reinsurer into the process early and throughout the development of the product that the process, the end product, and the ultimate expected profitability or financial performance of the portfolio will be improved.

I want to go through three different types of reinsurance arrangements or relationships that a reinsurer will have with the direct writing company on life products. The first is the traditional structure of reinsuring your business on an excess basis. The second one is a first dollar quota share arrangement that is typically associated with the product development relationship but obviously could exist without that. The third is the use of a reinsurer when you're entering a market for the first time, and it's either experimental to the industry or it's new for your organization, and what a reinsurer can do during that process to help out.

I'll start with the traditional excess reinsurance arrangements. Historically, this type of arrangement with a reinsurer is not addressed on a product-by-product basis. It really is a project in itself to determine what the best retention limit is for your organization and then to have reinsurance in excess of that. The primary reason for that type of reinsurance is to even the playing field among all insurance companies in the industry. The small company that is just starting up with \$50,000 retention can issue a \$1 million policy and compete with the larger players.

It obviously helps to stabilize earnings, especially for the small- and medium-size companies that are getting into the business or are still in very much a growth mode. It does that by reducing the variance. Obviously, if they are issuing policies everywhere between \$10,000 and \$10 million, the variance can be very large without a reinsurer helping them out on the large cases.

Not that the reinsurers like this, but a great value that can come out of reinsurance on an excess basis is an early claim. Because of an accident, this could be very early after introducing a product. Whether this claim is on a \$10 million or \$100,000 policy, if you have a reinsurer, it's a much easier claim to swallow because of the reinsurer taking a large portion of that.

In the traditional excess reinsurance arrangement on the underwriting side, the support from a reinsurer primarily comes on a facultative basis. This is in complicated health situations where there might be multiple health issues involved with an applicant. The reinsurer looks at those more often, has a little bit more

experience on assessing that expected mortality, and helps out in that way in a traditional arrangement. The reinsurer also assists in the financial aspects of the largest cases and do financial underwriting for ceding companies.

A little bit more common today, even in traditional excess arrangements, is consulting on the development of preferred guidelines or the development of and definition of different classes that you would put on a product. In a traditional excess arrangement you obviously get some strain relief that helps your ROI. The large allowance in the first year will reduce the strain, allowing the ROI measure to look better for the organization. This obviously will vary between a large company and a small company. If you're ceding over a \$1 million excess, this isn't going to be a big impact. If you're a smaller company issuing average sizes above your retention, then this is going to be significant in the pricing of your product, to refine your prices and still meet your return requirements for your organization.

I'd like to go through a simple example of the value of traditional excess arrangement. A new company introduces a new product. It has issued 20,000 policies in the first year with an average life about \$100,000. About \$2 billion in face amount is issued in that first year. It has a retention of \$250,000 and has placed reinsurance above that amount. The expected mortality in the first year on this product is \$0.50 for every \$1,000 that has been issued. If you calculate that out, that's about 10 claims in the first year at \$100,000 apiece.

The following charts show different scenarios of how claims may emerge and where reinsurance would play a role. Chart 1 is an example of a stream of claims throughout the first year with a retention of \$250,000. Obviously, with the reinsurance as just described, anything above \$250,000 is not going to hurt the company unexpectedly. You can see even with reinsurance there certainly is more volatility, but if Claim 5 is a \$2 million claim, obviously the volatility's reduced because the organization is only taking a \$250,000 hit. Our expectation is 10 claims at \$100,000 apiece, but they don't come in that way. This does average out to be that amount so that the end result for the first calendar year is as expected, and the organization is happy with that.

Chart 2 shows when the organization decides not to get reinsurance. The only problem I had with this chart is that I had to scale it down, so you can't see the true magnitude between the claims. You'll see a relative base where that \$2 million Claim 5 is very drastic. The first two are \$10,000 claims versus the \$2 million in the middle years.

This can be applied to a large company as well as a small one. An example I would give is when a large company is typically in the fully underwritten business and it decides to take away some of its underwriting guidelines to make the underwriting process a little bit faster. In that exercise and in designing that new product, it chooses not to get reinsurance because \$2 million is their typical retention limit. They go into it in the first year, and by the end of the second quarter they have a \$2 million claim. Management can start asking, "Are you sure you related well to the underwriting, techniques, or tools that were cut out of the process?" Management starts questioning whether it was a good decision to reduce the

underwriting or go to a simplified issue basis. They go into the third quarter, and actually if it's only one big claim, they can say that it was a statistical fluctuation, they made good decisions, and the new program is going to work. Then the first claim you get in third quarter is a \$500,000 claim. The credibility of selling the organization in this market is impacted. Putting reinsurance on an excess basis or a little bit lower limit when you're going into a new market helps the large organization as well.

The last example I have for an excess basis is the same kind of claims, just in a little bit different order (Chart 3). In the example I just mentioned where a large company might be going into a new marketplace and has sold its management they do appreciate the impact of the reduced underwriting. But immediately in the first quarter it gets the \$2 million claim. That will make it very difficult to convince management that it was a good decision to reduce the underwriting and go into this market without reinsurance support. You can see throughout the next couple of quarters the claims do get a little bit more reasonable. You're starting to build the credibility back up within the organization. Now what happens here is right at the end of the year there's a large claim, Claim 11? Average claim size is more at the \$550,000 mark instead of the expected \$100,000 mark. It obviously impacts year-end earnings and bonuses of the organization. It is an unfortunate situation. Even beyond the financial benefits of using a reinsurer, it can help you communicate and be more successful with your management team as well.

Traditional excess reinsurance obviously helps the price. If you know the impact of reinsurance as you're developing a product or before you close down the development of the product and introduce it, you're obviously more prepared to describe it to management and set up the expectations of that product going into it. You're obviously able to refine your price more if you know how much reinsurance will help you reduce your strain and make your ROIs better.

With respect to design consultation, in a traditional reinsurance arrangement the design consultation may or may not be there. It would be there if a ceding company asked us for help or asked us a question. We would certainly offer that. But typically the turnaround time in structuring a traditional excess arrangement is very short, and oftentimes the product is already complete.

Underwriting, certainly from a facultative perspective, is ongoing for those substandard cases and the large sizes that we underwrite. Typically there will be a referral to a TPA if administration is needed. That typically will come in the early part of the process, but it's not very commonplace in the traditional setup. I think price and underwriting are the two areas where traditional reinsurance arrangements have helped in the past and continue to help. The more you know about those as you develop your product, the better prepared the organization can be when they introduce it.

The second type of arrangement is the first-dollar quota share arrangements. I have a passion for this, and this is my favorite thing to do with client companies. You develop very close relationships and get to know each other better. You recognize which entity has the risk tolerance for each element. You're able to

leverage that back and forth and come up with a good end result for all involved. This started in the late 1980s, but the first big deal we closed was in the early 1990s.

One of the unique aspects of the arrangements is that the reinsurer who has helped intimately develop the product is also a risk bearer of that same product. Oftentimes they share and experience the same result as the ceding company. If something did not work out appropriately, both organizations are feeling it in the same magnitude. If a repricing or redesign is needed, they both have the motivation to support that.

There is a lot of product and market consultation that goes with these arrangements. Typically, most reinsurers that are in this business now, and there are several today, have databases that track the products in the marketplace and what's happening in the market. When you're designing your product they may be able to tell you what features have been tested in the market in general, what's not working, or what features have been accepted very well by the consumers and are being included or attached to most products going forward. This service has grown to be of great value to many organizations. Also, they provide resources and experts to help with the number crunching and to look at all the different scenario tests and sensitivity tests.

There's a lot going on in our industry. It takes a lot of resources to address the issues that are associated with and impact the product and the product performance. Reinsurers in these relationships typically offer that pricing support, and you're able to look at a lot of different scenarios both with reinsurance and without. I do encourage that, and that's been a part of it since it was created, to show the costs and impact of reinsurance, as well as the benefits. Reinsurance is a cost. We're just insuring your product, but there are benefits to it. I think it's important that both are demonstrated throughout the process. You should be looking at both your new products being developed without the reinsurance element in it and look at it after.

The TPA and third-party underwriter (TPU) services were not a part of the original concept but have emerged in the last five-10 years, certainly more in the last three years. When many companies develop a new product, it's hard to get the product in the administration queue and get it set up in the administration system. One of the requests that comes with the development of a product is to bring the administration services with it. Many reinsurers now either has invested in a TPA or they have very close ties to an administrator that is provided throughout the development process to get set up.

The same is true with underwriting services. In my experience, and maybe we can ask some of the other reinsurers afterward, with TPUs there are a lot of questions. We do a lot of research, and we have put our arms around the cost of underwriting business outside of the direct organization. In the end it's typically not used. There is a lot of research and a lot of information provided, but very few companies are actually taking the step to take underwriting outside. They are doing it on administration on new products but not the underwriting.

As I mentioned, one of the big benefits of these arrangements is that you develop the reinsurance program at the same time you're developing the product, and it's more important on a first dollar, too, because it's a direct impact to every policy sold. It's important to get to know each other well, share information, and be very up-front with your partner so that you can identify the places where you can leverage to get a better benefit. You'll know the impact of reinsurance all the way through so decisions can be made and communicated accordingly.

With partners, I want to emphasize that relationship. I believe that for the end product and the end result, being a better partner enhances the expected profitability of these products. You've got to trust each other. The more you open up and share, I think, the better results across the board for both organizations. It is an increased awareness, and whenever you have more data and turn that into knowledge, you can only benefit from that. To have two strong organizations working together and combining expertise, the end result is proven to be enhanced. Our profitability and our clients' profitability in these arrangements have exceeded all of our expectations. You do get more comfortable each time you meet and you get to know more people throughout the organization. There's greater comfort, and you're able to personalize the arrangement between the two organizations.

The ROI is usually improved because the allowances typically are 100 percent for the first year or very high for the first year. An additional piece that has come into play, especially lately, is reserve management due to XXX. The reinsurers are able to significantly reduce the strain of the products to direct writing companies. With that reduced strain there is an enhanced ROI that comes out of the direct product. The other benefit of the reinsurance arrangement for first dollar is the reinsurer can help levelize the expectation by age or by risk class.

Our industry has pushed some specific ages and risk classes to a substandard level in terms of profitability. Male preferred non-smoker, ages 35 and 45 cannot be profitable in our industry as a stand-alone or profitable relative to any kind of reasonable measure an organization has. They've been spreadsheeted too much. They're used to place an organization in the industry where they like to be competitively. Companies have brought those down enough that they cannot fairly contribute to the expenses associated with that risk class or that age and also contribute their fair amount to profit. There is a lot of subsidizing that goes on, particularly for term products.

First-year strain obviously is highly reduced. There is not as great of an investment by the direct company to get into these businesses. The reinsurer is picking that up.

Break-even years are smoothed by cell and accelerated because the allowances can be structured a little bit differently than they are traditionally. Typically it is 100% in the first year and flat renewals. In product development arrangements, they typically vary. They'll vary by risk class, and they can vary by duration as well. This helps to levelize and address some of the issues that might be troublesome to the direct writer.

In a product development relationship where we do go first dollar, my opinion is it can help across the board. They are very strong, beneficial relationships. All the expectations that were put into place on the deals in the past few years have been exceeded. I believe it primarily comes from just having more experts in the mix of developing this product. You have reinsurance experts, and you have experts from the ceding company that know their culture, their experience, their target market and their distribution arms. When you combine that knowledge, both the intimate knowledge of the organization with the expanded knowledge of the industry in total, you get better results. You get better results across the board.

The last life element structure I was going to talk about is experimental markets or new markets that your organization might want to get into. If a reinsurer has prepared to enter this market, it is in it, or it is getting ready to get into it, it has likely been researching this market for a couple years. An example is critical illness. We just entered that on January 1, 2000. We spent two years prior to that doing a lot of research with a tremendous amount of databases, and that's a big investment. If an organization now wants to get into that new market, it comes to a reinsurer that has already invested and put the money and resources into that market. The organization is able to benefit right away as opposed to spanning that same amount of time, a two-year research period, and investing the money it takes to do that.

Similarly, product and market intelligence may have already been researched. If the reinsurer has been doing this research, it is well ahead of the curve and can help transfer that to you as the product gets developed. Similar to the other arrangements, sharing the risk with the reinsurer protects you from those high claims that disappoint your management right away. It helps you to control the volatility of your claims and enhance your expected results in the end.

Capacity. Obviously, entering a market, you may not want to have large cases, but that won't stop the consumers from wanting to buy them or the agents from wanting to sell them. You typically do want to deliver to that need, and having the capacity of a reinsurer behind you can allow you to do that.

There are several other services that may come up depending on the market or the issue that's being addressed. Some examples of new and experimental markets include Internet sales, which are very common today. We get a lot of questions about how to take advantage of the believed improved expense levels. How do you manage the conflict of distribution between the Internet versus the sales team? We get a lot of questions about how to underwrite that business. The desire is to have as few of tests as possible, to have as little of human interaction as possible. Our underwriters spend a lot of time talking through the cost of eliminating an underwriting technique. Obviously that's the same with reduced underwriting on the critical illness, as well as for the preferred customer. Underwriting is a very important part but for different reasons. Companies want to try to assess the price of eliminating that particular tool or technique in the underwriting process, and how much mortality did they just pick up because of that? There is a lot of underwriter involvement. Whereas on critical illness or on preferred guidelines, the total

opposite direction is what are the ones I can add that get me a big bang for doing it? So reinsurers are highly involved in the new and experimental marketplaces.

Depending on which market is being entered into, I believe the reinsurer can provide all pricing, design consultation, underwriting and administration. Administration actually is a very big one on new marketplaces, getting that set up. And the underwriting, as I mentioned, is very large in the new market process.

**Mr. W. David Fairhall:** I'm going to cover the role of product development of reinsurers from an annuity perspective. What I'm going to be covering is, first of all, how a reinsurer can help with annuity product development. Second, I'm going to talk about how to work effectively with reinsurers. The second part will be more general, not necessarily just applicable to annuities. I think it overlaps a lot with what Kathy said, and so I'll try to move through that part of it quickly, just try not to repeat it.

How can a reinsurer help annuity writers? First, I was going to look at the needs of the annuity writers. As far as product development, the direct company needs are product information, distribution needs, surplus and liquidity management, risk management, and administrative solutions. As for products, I break it down into fixed deferred annuities versus fixed immediate annuities and then also between variable deferred and variable immediate annuities. I think everyone knows quite well that the industry focus has been more on the deferred annuity side, although certainly we expect immediate annuities to expand into the future.

With respect to product issues, generally annuity writers need product innovation and differentiation regardless of product type, and there are many examples of product innovations. On the fixed deferred annuity you've got direct recognition annuities. There are also equity-indexed annuities that have been around a little while. On fixed immediate, companies are always trying to come up with liquidity options. I think we've now got Actuarial Guideline 9(c), which will allow substandard mortality to be reflected in reserving. We may see some looking more at substandard payout annuity business.

On the variable deferred annuities, some of the product innovations are, of course, the product guarantees that I think most people are familiar with, the guaranteed minimum death benefit (GMDB), the guaranteed minimum income benefit (GMIB), and the guaranteed minimum accumulation benefit (GMAB). Another innovation that's coming out is long-term care (LTC) riders—actually adding a rider onto an annuity product that provides some type of LTC benefit. Another one that we've seen recently is a life insurance rider to cover the taxes assessed on the death benefit of a variable annuity. That's something I think that's going to get more interest in the very near future. As far as variable immediate annuities go, are there ways liquidity options can be added or are there ways of adding guarantees to the payout so that the periodic benefit doesn't go below a certain level?

Of course, a reinsurer can help with a number of areas with respect to product innovation ideas, with respect to pricing the product, whether it's doing an original

pricing or a second-opinion pricing. They can help in general with the product development and implementation process, product filings, and even ongoing product management including rate setting and reserving and the like.

With respect to distribution, annuity writers need access to successful distribution. I think that goes without saying. They also need to deal with market conduct risk and the conflict between distribution outlets. Typically, the reinsurer looks to the annuity writer to provide successful product distribution and also to manage the market conduct risk. The reinsurer can also help, however, with things like marketing materials, development of training materials, and sales illustrations.

A reinsurer can help with surplus and liquidity management. I'm really defining surplus management as dealing with the solvency requirement of needing sufficient capital relative to levels under risk-based capital requirements. For liquidity management, I'm just referring to having sufficient cash flow to cover benefits, expenses, and reserves. Reinsurance can help with both surplus and liquidity management. It generally takes the form of coinsurance or modified coinsurance. Under both forms, the reinsurer is actually taking a portion of the risk of all product risks on the particular product type.

On fixed annuities, reinsurance can be used to provide surplus as well as cash relief; while on variable annuities, and in this case we would really be thinking about modified coinsurance, reinsurance can be used to provide cash relief. The reinsurer provides cash to cover up-front acquisition costs in exchange for a portion of future mortality and expense fees. The annuity writer's need is generally cash and not surplus. This is because even without reinsurance, surplus to cover the acquisition cost is offset by the Commissioner's Annuity Reserve Valuation Method (CARVM) offset.

Annuity writer needs on risk management and profitability include enhancing the profits of a particular product and assistance with all elements of risk management, including covering all kinds of product risk, such as persistency risk, asset default, disintermediation, minimum interest rate guarantees, and longevity risk. Product risks also cover certain benefit guarantees such as these GMDBs and so forth we mentioned earlier, and various product risks that are applicable by product type.

What are the ways that a reinsurer can help to enhance profitability and manage risk? We mentioned coinsurance and modified coinsurance before. A second one would be specifically covering guaranteed benefit risk such as these GMDBs and so forth. Offshore reinsurance, and I'm going to discuss that in a moment, can provide some accounting arbitrage and help with profit improvement. Ongoing product management includes asset/liability management, rate crediting, and also expense management to the extent cheaper administration solutions can be implemented.

A reinsurer can help with administrative solutions because a client's needs in this area typically focus on handling product innovations, cost management, and the speed of implementation. Reinsurers can help with administrative solutions on a

consulting basis or in working with their own affiliated TPA or perhaps a joint venture partner of the reinsurer.

Coming back to offshore reinsurance arbitrage, I think you'll find most reinsurers you deal with these days have offshore capacities, and even a lot of direct companies are setting up their own offshore capacities. The key advantage there is that the offshore reinsurers don't have to follow U.S. statutory accounting rules. They can actually hold economic or GAAP reserves. Their pricing advantage can be used to improve the profitability, even offer higher commissions on the product, or even improve the credited rate. I'm going to try to give an example of that, and while this example is general, I'm going to try to put some numbers around it.

If you take an example of a fixed annuity, and probably the most relevant example right now would be a product with, say, a five-year guarantee, like a CD-type annuity sold at a bank, there are situations currently where the valuation interest rate is lower than the credited rate than is being offered currently, so you're generating some significant reserve strains. If you take that as an example and the product is reinsured offshore, the reinsurer doesn't have to hold the CARVM reserve, including that interest guarantee component that is driven by the valuation rate versus the credited rate. That's a significant advantage.

As an example, assume a 50% modified coinsurance arrangement on a fixed annuity, say it's got a 5% commission, and you've got a 200 basis point spread that the product was priced for onshore. The reinsurer applies its offshore advantage, and say it can experience refund 30 basis points on the reinsured portion of the reserves. The ceding company can use that 30 basis points on the reinsured portion to increase the credited rate or just keep it for profits.

Alternatively, suppose the reinsurer applies its offshore accounting advantage and increases the up-front allowance. Instead of paying the 5% commissions as an allowance, they pay an extra 1%. The ceding company could then use that additional 1% allowance to improve profits or to increase their commissions on the ceded portion.

Regarding working effectively with reinsurers, I think Kathy touched on a lot of these issues quite well, so I'm going to move forward quickly. What are the services the prospective reinsurance partners have to offer? What are your desired products or services? How do you select a reinsurer? What due diligence do you do on them? How do you negotiate terms? How should the ongoing relationship work?

Regarding the services available, there are certainly financial solutions that the reinsurers can offer, whether it's risk management or capital management. There are operational solutions, such as product consulting and development or administration support, whether that's actual policy administration or reinsurance administration. Other services available may be expert knowledge such as risk assessment, investment management capabilities, asset/liability management, or product expertise such as market research, latest product designs, and risk analysis.

In terms of choosing reinsurance services, of course, the issues are assessing your own internal competencies and then determining which services are critical to you and which services have no value. It's important to understand your specific short- and long-term financial needs, whether you're trying to reduce earnings volatility, manage surplus, or just finance new business.

In terms of selecting reinsurance partners you want to ensure partners offer the critical services you need. Clearly, defining expectations is important. It certainly goes both ways—understanding the reinsurer's expectations as well as defining yours. In terms of due diligence in selecting a reinsurer, I think the things you want to look at are financial security, proven track record, recent or pending ownership changes, access to capital, and the smell test—the general trust.

In negotiating terms, I think it is important to share information. There are many reasons to share information. A reinsurer may develop a better solution than anticipated. The final treaty will be based on mutual understanding. You will end up with a tighter partnership in the long run.

For the ongoing relationship, it's important to complete treaties quickly, provide expected reporting, and have a good communication about meeting expectations for both parties. It's good to reward your reinsurer for valued service. I think all the reinsurers will agree with that part of it.

While it's desirable that both partners should be profitable, I think we all want to emphasize that reinsurance is insurance. We are in the business of taking risk, and we're not trying to cut it one way, one-sided at all.

**Mr. Dieter S. Gaubatz:** As I was thinking about what to present on the subject of the role of reinsurers in the non-U.S. markets, I quickly came to the realization that I could only do a superficial analysis of the broad subject. There are generalizations that apply in certain markets but not others. It'd be very easy for someone from a particular market to comment that it really isn't that way where they do business. I don't know what he's talking about. The same principles that we deal with every day are valid in international markets. It is the different foundational facts that exist in those markets applied to those same principles that require unique solutions in some of those markets.

For the most part, the relative role of the reinsurer and a direct company are the same in a multinational environment or within a single economy. Kathy and Dave have already covered these subjects with a general focus. In addition to the perspectives that a reinsurer can provide to a foreign company, I will also include a few special considerations that are involved in the relationship between companies from different environments.

The first question that we ask is, what is international? I hate to tell you there is no definition of international. There are many regions, and each has its own characteristics, its own success criterion, and its own problems. In our own domestic market we have an inherent understanding of what is needed. For

example, we know why people buy insurance and, therefore, we have a general idea of the types of products that they are buying or might buy in the future. This is because we think of our own needs and those of our friends and neighbors. Often we even develop this knowledge subconsciously. This built-in knowledge does not transfer to other markets. If we use our preconceived ideas, we will have problems. Actually, we'd probably have to go back to school when we first get involved in international markets.

From an American perspective, there are really two separate focuses in international markets. The first one is how does an international reinsurer deal with a foreign client? The international reinsurer has to deal with the management of a domestic company from a different culture, but there's also a different skill set that a direct company has to have when they enter a market because, in addition to the management of the company, they also have to deal with the everyday employees and understand the problems that exist there. They have to provide products that are specific for their clients as well. The issues and the principles are the same for both of those perspectives, however, the focus of what is important will probably vary between the two types of situations.

I'm going to review five issues. The issue of communication and understanding the market has particular significance in dealing in the international arena, as I've already mentioned. We have to make sure that we really understand our client as well as our client's clients. The relationship developed should really be viewed more as a partnership because each of the parties brings something to the table; each of them adds something to the whole package. A reinsurer cannot expect that they know everything about that market, but they also have things to add because of the exposures that they have from other places. I'll also discuss the sharing of actuarial and other risk management techniques and the use of that information in the local markets.

The first issue that we have to be aware of is terminology. When you're talking to a foreign actuary it's important not to take for granted that the term that you're using has the same meaning as that actuary does. I have a number of examples, the first one is "personal accident." We all have an understanding of what personal accident is in the U.S., that it's a very specialized type of insurance. But in some markets, that's just taken as accidental death coverage.

We have a real understanding of what "critical illness" is. When we went into a different market all of a sudden it became something—(by critical it meant the worst part of an illness, and it ended up really being dismemberment insurance). Does DI mean disability insurance or does it mean dismemberment insurance? Quota share, coinsurance; we understand the difference, but sometimes people don't recognize what those differences are. It's not sufficient to just use the terms, but there has to be a general approach to make sure that it is explained what is meant in those situations.

Just as in the U.S., there is a wide range in the level of professional expertise in various markets. A large mistake can often be made in stereotyping individuals or processes used in other cultures. Different techniques of choice can be justified

because of particular factors in a local market. Just because we don't use it anymore or it doesn't have any applicability in the U.S., when you look at the situations in other markets you can understand why they actually do that. It really does make sense.

Local traditions must be understood and reflected to be effective in a market. Participating in the "takaful" (i.e., insurance) market in Asia cannot be done without understanding the effect of the Islamic code on insurance. Some of these differences are very small but can be disastrous if they're not properly reflected.

What does the word "yes" mean? In some countries it means my ears are hearing what you're saying, but it doesn't mean that I have agreed with what you're telling me. There often have been individuals that have left a visit and thought it was very successful. They thought that everything had been agreed to, only to later on find out that it wasn't even close to that situation.

Body language and verbal cues all built into our social understanding may not have any value in another society and may even cause problems in developing relationships. That's because sometimes the body language has exactly the opposite meaning in different cultures.

Insureds' practices. The local practices used in underwriting, including the types of questions asked, the types of fluids collected, and the amount of follow-up that's included in the process will each vary. They must be reflected in the particular value of the underwriting that is done in those markets. Trying to change those processes, as a reinsurer, often results in a quick trip to the door. They're doing it their way, and they know what they're doing. That's where we have to be careful that we don't impose our way of doing things on others.

The state of the economy can also have a fairly dramatic effect on how we deal in another market. The types of products that are sold are often the function of what that economy is. In the U.S. we've had a very good, growing economy for a long time period, but there are other markets we deal in which the economy has much more of a roller coaster ride. When the economy is at a low point you have to deal with it in a different way than you do when it's at a high point. Even when it's more variable it's much more important to know what's really going on.

We are very fortunate in that most of us have as our mother tongue the business language of most of the world. However, in international markets language is still the most obvious issue. It's important to remember that even though our client speaks English, it is often learned as a second language, and, therefore, the comprehension may not be what we assume it really is.

I really haven't even scratched the surface of these issues, but these are important principles to remember in dealing with those markets. I haven't even really talked about product development. That's because product development, the process and the things that we know as actuaries in the U.S., are very similar internationally, but all of the packaging and everything else that goes with it, has to be a part of that product development process. That's really what I'm trying to focus on.

In my opinion, the types of problems that could occur are almost impossible to overcome without having a member of your team who understands the community that is being served, someone who is from that market and not just a peripheral person but somebody who is deeply involved and understands the processes that we have here as well.

An important part of the product development process is in understanding clients' needs. Reinsurers involved in the product development process also must understand those needs, the needs not only of our clients but also the needs of our clients' clients. Why are they buying insurance? The reasons vary quite dramatically, resulting in a wide variety of popular products in various markets. Some markets are very savings focused, but even here there are different reasons for savings that can result in different products. Education plans are important in some markets, retirement plans in others, tax management in different markets, and general wealth accumulation. Each of those four types of savings reasons can result in different product designs.

Protection against medical conditions creates a market for riders such as dread disease, hospital cash or surgical cash. Protection from the effects of premature death is probably the last important need to develop in international markets.

How are these different needs created? It's also important to know that. One is tradition. Where are they coming from? Another is the economic situation, the types of incentives that the local government is trying to offer. What private sector solutions are those governments trying to use in order to solve the social problems? Each one of those things affects the products and the types of things that are involved and that are created in that local market. There's no way that we as reinsurers, as foreigners coming in, can change that and supplant our ideas onto that. Rather, we have to understand those and then adjust what we have to offer for those markets.

Regions. Earlier, I said that there is no such thing as one market. I included these, not because those are markets, but because there are differences. I've got Latin America as a market. However, when you look at Mexico, Chile, Argentina, Brazil, and Columbia, every one of those is a market on its own and requires a separate solution. The same thing can be said about Europe. There are many different markets there, yet when we have the management in our companies, and they think about these international markets, they say, "Well, that's one area." Every one of those has to be dealt with individually based on its own characteristics.

Many plans look very similar to the ones that we have. In many markets, the individual life endowment plans are still the hot button. That's still what people buy in those markets, permanent insurance in some form. Term insurance is probably not yet that popular in many markets. However, when we ask individuals from other markets, term is the one that they always say is improving, is increasing the most. Some countries deal with life insurance almost on a group basis. Payout annuities are actually very common in certain markets because of the social needs of that particular society and that is their way of preparing for retirement.

Unit-linked products seem to be a bellwether. Certain markets are saying that they want to find a new, innovative way of giving their clients or population a greater value for their money. China is trying to deal with that one right now, but when you look at what they actually have available to fund those it's a very difficult problem.

Critical illness is really an unusual one because this is a product that is common throughout the whole world and popular throughout the whole world, except in one place, the U.S. We almost have to ask, "Why is that the case?" There are a number of different hypotheses as to why that might happen. When you look at our medical-care system as to what we have in the U.S., people can say what they want, but I believe it's the best in the world. We don't have to worry about medical care as much as other countries do.

Many countries have socialized medicine. A lot of socialized medicine programs have very difficult times because of the funding that's needed, and, therefore, the quality is very poor. How do they supplement that? Through critical illness policies. Other countries can't even afford it, and, therefore, they encourage these types of plans. It's very interesting to see the competition sometimes between companies within a market as to how to sell this. Sometimes it gets down to one company that will cover 35 illnesses, and the other will cover 37 illnesses. When you look at what they really are, they're all the same ones. It's just different labels and different names. But all of those things are important to understand when you're dealing in those particular markets.

Total and permanent disability (TPD) is also very common because of the disability type of issues that exist in those markets. The thing to underline here is you can't take any one of these products and say that that's the way it is in the rest of the world. It bears understanding that every one of those products will have a different popularity in different places.

What's involved in a partnership among a reinsurer, a foreign reinsurer, and a domestic life company? One of the best examples of a true partner relationship with a client is the need to determine where the market is heading. The local company understands its client much better than the reinsurer does, but the reinsurer will likely have already seen products in other markets that are very similar to the new ones that the local market is contemplating. Together they can work on ensuring that the pitfalls that have been experienced elsewhere are not repeated here. Sometimes we can even say the pitfalls that the reinsurers have learned through experience are the ones that they can help others to keep from going through again. This includes sales and marketing issues that can occur with the introduction of new products. We have to consider what the distribution force is of a local market because we cannot just take those things that we already know in the U.S. We have to create them specifically for the type of distribution system that exists there. That doesn't mean that the ideas that we have, the things that we have already learned, are useless, but it is the derivation, the taking of that information and adjusting it to the local market, that makes this partnership so valuable.

There are also block-of-business issues that any market must face when introducing new products. The reinsurer has gone through these issues in other markets and can give advice. For example, smoker/non-smoker policies are just becoming popular in some markets, and to that we can add preferred products as well. The U.S. experience of dealing with the potential change of the characteristics in the existing block of business can be a resource of ideas for the local market also.

Some markets are in a very high developmental phase, with many new coverages and ideas. Dread disease particularly is spreading in new markets in other countries. Marketers are often looking for high profile low-cost diseases to add to the design of their products. This is in anticipation of death, and therefore it shouldn't add much cost is often an argument that is used. Actually, many of the proposed diseases are insurable. Mind you, they're substandard, but they're insurable in the U.S. Therefore, reinsurance professionals make a good sounding board to review various marketing ideas. The factual research that we provide has helped companies develop much sounder plan designs. Reinsurers have also been exposed to a much wider range of benefit definitions and other contract wordings, sometimes again due to that very painful experience that they have suffered in other places.

Reinsurance underwriting manuals are used extensively in foreign countries. All of the major reinsurers provide their own versions to clients. Reinsurance participation goes beyond that, though. Second opinions on substandard cases and large-amount cases are quite common. Reinsurers also provide training needs for the local underwriters, and it is often the only educational source that those local markets may have. Most underwriting information is transferable between countries, but even here local factors must be considered. For example, the value of information such as an attending physician's statement (APS) will vary by market. When you ask the local market what they think about the APS that they receive from their doctors, some of them will say that they're accurate. Other ones will say that they're very general and that they're not reliable. All of those things have to be reflected in that local market. To a lesser degree, claims manuals and consulting and training on claims are also provided. Fraud detection is one area where it's important to know what is going on around the world.

A wide range of techniques are used around the world. Discussions on the use of alternative techniques can be very fruitful for local markets. The discussions, however, must be done with care because it is still the local market decision on what to use. An example is the technique of age offsets. They are still being used for female rates, smoker rates, and now even some places are contemplating using those for preferred plans. This concept of age offsets was developed to simplify calculations and administration. Initially, they were only used for the female rates. The amount of insurance on females is very low in some of these markets, and therefore the error in these formulas was relatively small in products where only a small percentage of the premium was actually used for the mortality. As an example, in the endowment plans, mortality proportion of the premium is a very small percentage. If you have a 10% error in the mortality on 5% of the premium, you get 0.5% error. It's not very significant.

However, in discussions on the use of age offsets, there are a number of factors that could be discussed with the clients in making sure that they really understand the ramifications of what they're doing. Significantly improved computers are allowing much more accurate calculations and there's much less need for simplification, except in some cases where companies still have old legacy administration systems that can only deal with the one type of rates. Most of the premium on term insurance, on term plans, is used to pay for mortality risk. Term plans are becoming more important, and as a result, the built-in pricing error can actually be several times the plan's actual profit margin.

Mortality pricing accuracy can provide a significant competitive advantage in term markets. The technique is being used for situations in which there are much higher sales of females than there were initially. Regarding male smoker/non-smoker plans, in many countries smokers are half the population, and therefore you're going to have half the policies with smoker rates. And this will be on the males, and therefore it becomes a very large proportion of the total block of business. The approximations that you put in can have a dramatic effect, although not if all of the companies in that market are still using that approach. However, the first ones that change are going to have a competitive and profitable advantage. If the local companies aren't going to do it, then we know that the phenomenon of the whole world opening up is also very common. New international companies are coming in with their established techniques, and when they use their processes, they are going to find that they have a competitive advantage in the right places if they don't use those approximations.

Markets without significant local experience often start out with other tables. One common table is the 1980 CSO. We all know what the 1980 CSO is. First of all, it was built around 1980, and it was meant to be a valuation table and not a pricing table. It's used in some countries as the basis for their mortality. It's quite appropriate to do that in certain startup situations. The latest country that is just starting their insurance program that is actually probably going to use the 1980 CSO is Vietnam. There are no insurance statistics on that. However, with the proper collection of data, the time can be decreased before more accurate assumptions are available for the local market. Often reinsurers are in the best position to be a catalyst for this change by the experience studies and those things that they can provide to their clients there.

There are many countries in which there is no local data because markets are just emerging, because the markets have a small population, and sometimes it's because the companies are small and cannot afford to actually do a lot of the analysis that we do in the U.S. Reinsurers are often in that unique situation to quantify local experience and then to enhance the value of the available data. By enhancing the value, I'm talking about being able to take information and relationships that we know in other markets and putting those on top of what we learn in those particular markets. Even then we can't just take those relationships, but in order to do an accurate job we have to try to reflect even the differences in the population characteristics. Actually performing experience studies for clients expands the knowledge of the direct company as well as of the reinsurer. This

work cannot be done by the local company alone, or by the reinsurer alone. It is truly a situation where the partnership is of the greatest value.

In closing, it becomes very important to underline everything, to understand that the relationship between a foreign reinsurer and a domestic company is a partnership. I know that the one thing that came through in the presentations that Kathy and Dave had is that that also exists in the U.S. It just comes back to saying that the markets really are no different. The principles are the same. The only things that matter are some of the facts and how those principles are applied in the local markets.

**Mr. Alan Igielski:** I noticed all three of the speakers belong to large insurance organizations that have direct writers of insurance. I want to know the effect of having direct writers who may be competitors with your clients under the same corporate umbrella.

**Mr. Fairhall:** We segregate our reinsurance operations from our direct side and act independently. When we collect our market data, we look at our direct side as just another insurance carrier out there. We don't really have access to their internal information. We have to gather external information and treat them really as one of the other industry players. I mean we really try to wall-off what we're doing on the direct side versus the reinsurance side. The direct side is comfortable with that.

**Mr. Gaubatz:** The answer at Lincoln is pretty much the same. I've worked at Lincoln for a little over three years now, and I don't think I've talked to somebody from the direct side for more than about five minutes. I really have no idea as to what they're doing.

**Mr. Bancroft:** I'll concur with that. It's the same with my company. But any situation where you'd have information sharing between the direct side and the reinsurance side, you'd find the reinsurer would go out of business pretty fast. I think there's very much a division between the areas.

**Mr. John M. Bragg:** We're in the experience studies business. That's our niche at Bragg Associates, so I should make some comments about mortality accuracy and also about critical illness. I'll start with critical illness. I did write an article for the *National Underwriter*. It came out a couple of months ago. I am absolutely swamped with e-mails from all around the country, mostly from brokers and agents saying, "Yes, it should be pressed by management and made popular, and how can we get the products?" It's the stand-alone products they want.

We have a new report about older-age data and tables that some of you would be interested in, I hope. It certainly shows that the mortality is way down. For instance, the 2000 Individual Annuitant Mortality tables are far too high in the important annuity paying ages, ages in the 70s and 80s. They're okay for ages in the 90s, though. But what about the important annuity paying ages? I believe in mortality accuracy.

I was swamped by the number of people with questions about critical illnesses all around the country. Where can we get the products? I've heard it said that we don't have national health insurance, and that is why it's not popular. The panel brought out the other side of the coin, that the medical care is better in the U.S.