

RECORD, Volume 31, No. 2*

2005 New Orleans Health/Pension Spring Meeting
June 15–17, 2005

Session 81 SEM Disability Reinsurance Seminar, Part 1

Track: Health Disability Income, Reinsurance

Moderator: Dennis Yu

Panelists: Andronico Lucas Castillo
Robert T. Lumia
Jeffrey L. Schuh

Summary: Even simple reinsurance agreements for disability insurance can be quite complex. This seminar explores the keys to successful disability reinsurance arrangements. Panelists in this session discuss a variety of issues central to such agreements. Topics addressed include financial terms, administrative provisions, claims and underwriting issues and tax and regulatory implications, in addition to the variety of possible reinsurance agreements, from standard coinsurance and excess share programs to more complex structures.

MR. DENNIS YU: This is part one of the disability reinsurance seminar. I'm Dennis Yu. I'll be your moderator. First to speak will be Andy Castillo. He's been with Munich American Re for 18 years, currently in charge of individual disability income (IDI) and long term care and critical illness reinsurance pricing. Before that, Andy was involved in life insurance pricing. Next will be Jeff Schuh. Jeff has been with ING Re for three years. He has been working in various product lines for 12 years including long-term disability (LTD), short-term disability (STD), work site disability, cancer insurance and critical illness in a variety of roles. Last but not least will be Rob Lumia, who is with Group Reinsurance Plus at Hartford Life. Rob has been in the business for 13 years, and at Hartford for the past year. He's been involved in pricing, filing

*Copyright © 2005, Society of Actuaries

NOTE: The charts referred to in the script can be downloaded at:
http://handouts.soa.org/conted/cearchive/neworleans-june05/081_bk.pdf.

projects, experience analysis and reserve buy-out evaluations. With that, we'll start with Andy.

MR. ANDRONICO L. CASTILLO: I am going to talk about IDI and reinsurance of IDI, and then Jeff and Rob will talk about LTD reinsurance. I'll begin with what one should think about when designing a reinsurance program, and then I'll talk about the various forms of reinsurance arrangements and funding methods. First, there are many reasons why a company would need reinsurance. A company may be looking to enter a new market, which could be multi life, standard issue or work site. It could be a life insurer wanting to expand its product offerings through adding disability insurance (DI) riders. It may be that the ceding company is worried about issuing larger policies or about limiting claims for life. As you know, it doesn't take much for a single claim to impact your financial results. A single claim of perhaps a \$5,000 or \$6,000 monthly income policy would probably be easily into the millions. The ceding company may be interested in limiting total claims in a single year, or it may want to minimize volatility. Of course, the ceding company would want to minimize the cost of reinsurance. Alternatively, it may be concerned about funding growth or reducing surplus strain or using capital more efficiently. It may be looking to buy an in-force block or may want to exit a line of business and may want to sell a block. If a ceding company thinks about putting together a reinsurance arrangement, it also needs to be concerned about the ease of administering the reinsurance agreement itself. The ceding company might need to access disability expertise, ranging from product development or pricing support to underwriting or claims.

In developing a reinsurance program, one should also think about the reinsurer profile, especially its financial strength and commitment to the market. You also need to think about reinsurance services and what you're looking for from the reinsurer. It could be product development, but product development assistance can really be a lot of things. It can be as simple as general product or market knowledge, or you may need help in product rate development. You may also be looking toward reinsurer support for underwriting and claims in terms of manual development or developing guidelines or requirements. You may be looking for some support or training for the underwriting or claims personnel that you have. Audits can provide sort of a scorecard for the ceding company to see how well their processes are working. Facultative support on both the underwriting and claims sides can also be beneficial for the ceding company. Our reinsurers can also help out in the financial experience analysis, especially on some of the blocks of business that we insure with them.

So you now want to proceed in putting together a reinsurance treaty or agreement. The treaty could be with either one reinsurer or a group of reinsurers. There are a lot of items you need to think about, and in some cases you will need to make some decisions. In some cases, you probably need to negotiate with the reinsurer about what works best for both parties. One of the things you need to think about is the reinsurance arrangement and what type of reinsurance funding method you are

going to use. You may also want to think about the duration of reinsurance coverage that you're looking for. I'm talking about the more traditional forms of reinsurance, where the reinsurance actually stays in force as long as the underlying policy stays in force, so the duration of the coverage is quite long. You also may want to think about retention limits. There are many considerations in setting retention limits. The retention limit depends on the company's tolerance for risk and volatility. It is different from one company to another. One thing to keep in mind is that too high of a retention limit may not provide enough reinsurance premium, which may make the reinsurance program less appealing to reinsurers.

In terms of underwriting, you need to think about the automatic binding authority or automatic issue limits. That's the amount at which, if you exceeded that, you would have to submit the case to the reinsurer on a facultative basis, and that reinsurer would have to explicitly accept the risk for reinsurance. As an example, let's say the auto issue limit is \$8,000 and the DI application is for \$8,000 or below. If that case is issued, then the amount is automatically reinsured. If the retention was \$4,000, then the reinsurer automatically reinsures the next \$4,000. Typically there's wording in the treaty that says so long as you follow the agreed upon underwriting guidelines, then it's automatically reinsured. If the application is in excess of \$8,000 monthly income, then the case can be submitted facultatively to the reinsurer. You need to think about all this at the ceding company because it could impact your time service in terms of your time service to your field as well, even though I think the reinsurers are fairly sensitive on a quick turnaround under facultative assessments.

For claims, it's the same thing. You need to think about automatic claim limits and facultative support, which works similar to a new business underwriting. Reinsurance administration is becoming more and more important in terms of all the requirements, perhaps showing some impact of Sarbanes-Oxley. You need to have a conversation with the reinsurer and agree on what administrative requirements would be preferable to be up front rather than later on.

Recapture provisions should be considered, giving the ceding company the option at a future period of time to recapture the risks reinsured. As I mentioned before, it's typical that the duration of the reinsurance agreement is as long as the duration of the underlying policies, which in most cases is to age 65. You're giving an option to the ceding company to recapture the business that's reinsured. The recaptured provisions typically should address the procedural rules that you should follow in case the ceding company does exercise the option to recapture. You should plan for the disposition of the open claims at the time of recapture, and what you are going to do with the open claims at that point in time, whether you allow the ceding company to recapture it or not. You should also talk about what reserve transfers there ought to be from the reinsurer to the ceding company, and not only what amount of the reserves to transfer, but how you calculate it. There are also probably going to be recapture fees and market value adjustments and assets transferred. Typically, recapture provisions allow the recapture after a policy has

been in force for about 10 or 20 years. I should note, however, that not all treaties that are negotiated have a recapture provision; it depends on whether it's needed or not in a particular arrangement.

I want to talk a little bit about the tax implications and state premium taxes in reinsurance treaties and reinsurance agreements. It may or may not explicitly reimburse the ceding company for state premium taxes that are paid on the portion of the premium ceded to the reinsurer. However, you need to be clear with that so that when you actually do start the arrangement, it's clear as to whether those premium taxes are payable and by whom. Under IRC Section 848, the pseudo deferred acquisition cost (DAC) tax is typically to be paid by the ceding company based on the premium revenues only. You need to keep in mind that for reinsurance, the DAC tax is based on the net reinsurance cash flows between the ceding company and the reinsurer. That includes the net cash with premiums, less allowances, less claims, less any cash that's transferred that goes between reinsurer and ceding companies. There are provisions in the reinsurance agreement on how to treat these cash flows for tax purposes.

If you compare to the direct companies, reinsurance is relatively unregulated, but there are some regulations that one should be aware of. The Life & Health Reinsurance Agreements Model Regulation is sometimes known as the risk transfer regulation. It specifies certain requirements the reinsurance agreement must have in order to have appropriate credit for reserves and appropriate credit for reinsurance recallables such as assets. New York Regulation 102, for those that do business in New York, is the New York version of the risk transfer regulation. It has some significant differences compared to the model regulation. There's also the Credit for Reinsurance Model Regulation as well as IRC Section 845b, which in essence says that the tax commissioner has broad powers in making adjustments to any transactions and any reinsurance contract that has significant tax avoidance effects. Some of these regulations affect some of the reinsurance agreements, but I think they're more important in terms of looking at financial reinsurance arrangements. For the traditional reinsurance that I'm discussing, I think we're usually well within the requirements of these regulations, so they're not much of a worry.

Reinsurance covers are defined as what's ceded to the reinsurer and what the ceding company retains. The basic common types that we have are quota share, where a certain proportion of each policy is ceded to the reinsurer. The proportion is a fixed percentage that can vary from 5 percent even up to 100 percent. Excess cover means any amount in excess of the retention limit is ceded to the reinsurer. The retention limit can range from \$2,000 monthly income in certain companies up to perhaps about \$7,000 or \$8,000 monthly income for some companies. The limits can vary by benefit period, by class, by issue age or by some combination of those parameters. Modified quota share is a hybrid between quota share and excess where a fixed percentage of each policy is retained, but no more than a certain dollar amount. The rule could be that 60 percent of each policy is retained, but no

more than \$4,000 monthly income. Extended wait is a less common cover, but there are two common forms. Extended elimination period is where the ceding company retains 100 percent of the risk on claims until a certain period of claim payments have been made. As an example, if you have a two-year extended elimination period, the ceding company pays 100 percent of the first two years of claim benefits, and thereafter, the reinsured takes over the claim payments. There's also the dollar deductible, which works like an individual stop-loss arrangement. The ceding company retains 100 percent of the risk up to a certain dollar amount, and the reinsurer then picks up any excess that needs to be paid as claims. The most common of the covers is the excess, and the extended rate as I said before is much less common.

There are some nontraditional forms, including aggregate stop loss and some financial reinsurance type arrangements. Frankly, I don't know where you can get stop-loss cover currently. We don't offer it, and I'm not sure who does.

As a funding method, YRT is for morbidity risk only. The premium rates are independent of the original plan of insurance. The premium rates might not even follow the claim cost pattern of the contract, so you need to be concerned about that. It could be experience rated or not, but most of the warranty arrangements that I'm aware of are not experience rated.

One of the advantages of YRT is that it is the simplest form. Also, the alignment of interest between ceding company and reinsurer can vary depending on whether you have a quota share or excess arrangement or modified quota share. There is also a low initial outlay and minimal surplus relief. The administration may or may not be simple. For some companies it may be simple; for some it may be impossible. It just depends on the company. There are other issues for YRT. You really need to be specific as to what's covered and what's not, especially on the product features, including how you handle waiver of premium coverage, how you handle survivorship benefits, and how you handle some of the policy features that you have in the contract in terms of who's liable for those payments between ceding company and reinsurer.

In coinsurance, the reinsurance coverage is essentially the same as that of the original policy issued. In essence, the reinsurance premium of coinsurance is the same as the policy premium, and then there are reinsurance allowances that are intended to cover the ceding company's commissions and expenses. One advantage of coinsurance is that the reinsurers share proportionally in all risk. The alignment of interest between reinsurer and ceding company again depends on how your quota share or excess or modified quota share is set up. The allowances are uniquely developed for each product.

Though I've already discussed extended wait, I want to talk about how the premiums in extended wait are developed. It can be either YRT or coinsurance. Since the expanded wait has more volatility, the ceding company and the reinsurer

may not be aligned. Administration could be an issue for some companies, but on the other hand the extended wait should limit the reinsurance cost.

There are differences in opinion as to what is effective. I think it really depends on each individual's perspectives on some of these arrangements and whether you're funding growth or what have you, which is effective or which is good, poor or moderate.

MR. JEFFREY L. SCHUH: I'm going to talk specifically about excess reinsurance. That's really our bread and butter at ING Re. Rob is going to talk about quota share reinsurance, specifically the turnkey variety. We have quota share at ING Re, but we're not set up to handle a full turnkey service, like the claim adjudication and underwriting shops. I'm going to cover the same categories as Andy—an overview of some of the structures, the financial terms, the administrative provisions and some of the underwriting provisions associated with excess.

Why choose excess reinsurance? The main point of my presentation today is that excess can be very flexible and designed to fit any unique situation. That was an eye opener to me when I moved over to reinsurance three years ago. I thought that for excess reinsurance once you've seen one, you've seen them all, that the carriers had similar treaties, just different attachment points. But what I've found out is when you've seen one excess reinsurance arrangement, you've seen one excess reinsurance arrangement. They vary quite a bit.

Another advantage of excess reinsurance is compatibility. Excess does play well with other types of reinsurance. You can have different types of reinsurance on your block. You can have excess in one portion of your block, quota share on the other and you can have excess on top of quota share. Cost is also an advantage of excess reinsurance. It's much less expensive than quota share, since you're not splitting first dollar risk premium and you're also not paying for the turnkey services. So if cost is an issue, excess is a good option. The main benefit is volatility protection. It takes some of the edge off the peaks of the expected volatility and fluctuations you get from large claims. Those are expected fluctuations, whereas surplus protection would be more for the unexpected fluctuations, something from extreme events or catastrophic or terrorism events, things where your surplus may be at risk. Excess helps protect your surplus from those fluctuations.

There are different types of excess. My informal term is excess of dollar, but it's more excess of loss. Also, instead of extended wait, I call it excess of time. In my limited time in reinsurance, I've seen a bigger spread in the attachment points. It seems like for years group care is attached between \$5,000 and \$10,000. But we're seeing smaller carriers that were at quota share wanting to go excess, and they pick a lower cash-in point such as \$2,500. Conversely, the larger carriers that were at \$10,000 now have enough mass that they want to go upscale and go to \$12,500 or \$15,000, so we're seeing a slightly larger spread.

In a garden-variety excess arrangement with excess of \$5,000 with a \$20,000 gross monthly benefit claim, if the direct carrier keeps \$5,000, the reinsurer takes the next \$15,000 up to \$20,000. So the reinsurer has 75 percent of the risk on that claim. That ratio is key. Most of our treaties are structured so that the reinsurer shares proportionately in all the offsets or any cost of living adjustment (COLA) increases, so from that point on the reinsurer has 75 percent of the liability for that claim. Not all the treaties are like that. Some of the older ones don't have proportionate sharing of offsets, but by and large that's how the reinsurance treaties are structured.

For an example of excess on top of quota share, let's look at the same claim, \$20,000 a month and up to \$10,000 of gross monthly benefits. There might be a 50/50 quota share with the direct carrier keeping \$5,000, the quota share reinsurer at \$5,000 and the excess reinsurer keeping \$10,000. For this scenario, the same objective is achieved: the direct carrier is limited to \$5,000 of monthly benefits. But the purpose of these two things is different. This is strictly volatility protection. This carrier might be looking for some capacity. They might not want a straight 50/50, because on a \$20,000 claim they still have \$10,000 of it and they may want the quota share services. They may want the turnkey services, the claim operation and underwriting help.

When there is an offset on the regular excess arrangement, the reinsurer takes 75 percent of the risk, so they're taking 75 percent of the net benefit. If there's a \$2,000 offset, the reinsurer gets 75 percent of that offset and pays \$13,500 and the direct carrier pays \$4,500. Things get a little bit different with the excess on top of quota share, depending on whether the excess reinsurer does or does not share in the offsets on a pro rata basis. If the excess reinsurer shares in the offsets pro rata, it ends up looking a lot like the regular excess. The direct carrier has \$4,500, and the excess carrier here has 50 percent of the claim so they get 50 percent of the offset. If the excess reinsurer does not share pro rata in the offsets, then the quota share pieces split that \$2,000 offset between them equally, so it does have an impact on what the direct carrier pays.

Excess of time or extended wait reinsurance that is usually in combination with excess of dollar. For example, excess of \$5,000 a month and excess of 12 months is really analogous to a reinsurance elimination period. If you had a claim that was \$10,000 a month but only goes for 11 months, there is no reinsurer liability. If it goes for 13 months, it's just one month of reinsurer liability. It's not retroactive; it is acting like a reinsurance elimination period. Of course, your reserves have to account for that, so it does complicate the administration a little bit.

There are a couple of other miscellaneous arrangements. Using excess of X dollars for groups with maximums greater than Y is one way to reduce the number of small dollar claims. If you have an excess treaty that's excess of \$7,500, there may be a field underwriting authority up to \$8,000 a month of maximum benefit. There may be a concentration of groups with \$8,000 maximum benefits and an excess of

\$7,500. You may have a lot of reinsurance claims that are only \$500 or less. What you can do is have that excess \$7,500 only apply to groups that have maximums of \$10,000 or above. It's not going to eliminate all the small dollar claims, but it could reduce, by a fair amount, some of the small excess claims.

What I have mentioned up until now is a live example. These are all arrangements that are currently out there in the marketplace. Carriers actually employ all of these, and we've had clients and prospects with these in place. We have received a couple of requests from different carriers about excess of reserve or a disability type of stop-loss product. The stop-loss product can be pretty difficult to target. If your aggregate target's too high, it ends up being more like a cat cover, which we don't do.

By far the most common funding method is fully pooled. Conversely, refunding or bill-and-call rates or swing-rated rates that can float up or down based on the experience are more rare. They're not practical for LTD direct products, much less reinsurance excess LTD, where we have leverage of volatility. We have very few of those, and they're very expensive. Interestingly, I've seen the aggregate corridor twice in the last year. There is an aggregating specific type of coverage on stop-loss, where you may have a specific deductible of, for example, \$200,000. If you have a \$250,000 claim, that \$50,000 then gets pooled with everything else above \$200,000 for an aggregate deductible. It's like having two layers of deductible, which is similar to what this aggregate corridor does. The specific deductible is the individual claim excess, say excess of \$5,000, and then you accumulate the reinsurance paid for an amount of time until you hit a dollar threshold, for example \$1 million. It may take a year and a half past that period to hit the threshold, and then the reinsurance kicks in. The direct carrier is essentially self-funding the first \$1 million of reinsured paid claims. It reduces some of the dollar swapping between the reinsurer and the direct carrier. It's an interesting funding mechanism. We've priced it and quoted on it, but it is administratively much more complex. You have to track each underwriting year, the cumulative paid, and when that aggregate hits that \$1 million, and when it kicks into reinsurance.

There are several methods for choosing an attachment point. Certainly the popular one is history or inertia. Our current excess is X dollars; it's always been X dollars; it will always be X dollars. You don't have to worry about tracking the change. But it's also determined by the company's appetite for volatility. That's company specific. It can depend on what type of company. A stock company may want to stabilize earnings, so they may pick a lower excess. A similar-sized mutual company may have a stronger stomach for some ups and downs, so they may pick a higher attachment point. Some carriers choose to manage their reinsurance premium level. They may have an internal limit that they don't want to pay more than \$5 million of reinsurance premium or pay more than 5 percent of their block, so they manage that by changing their excess level to achieve that goal. Another way of picking an attachment point is by stochastic analysis, either done by the carrier or the reinsurer. This is a tool that we use and rely on quite a bit at ING. I'll give you a

quick overview of how this type of analysis works.

Our Monte Carlo model is a homegrown model. It was built in Lotus first and then Excel and we're pushing it to Access. It's basically a census-based model where you enter all the salaries, genders, ages, plan designs and features that you can into it. For each life in the census, Monte Carlo rolls the dice to determine if that person is disabled using incidence rates. It's like a binomial distribution to see if they are disabled. If they are disabled, it rolls the dice again to see how long they're going to be out based on continuous tables. Then, based on that, it rolls the dice again to see if they are going to get Social Security offsets and if so, whether it will be full family or primary types of offsets. You run the simulation through the entire census. After some sample runs, you see where it starts to converge to an average expected claim level. Using that, you calibrate the model. You normalize it to where you think it's supposed to be. We use the output of that model to get at its underlying volatility and how much risk we are assuming as a reinsurer.

In the distribution of the reinsurance claims that came out of the model, for excess \$4,000, the first simulation came out at only \$1 million of reinsured claims. The median was \$3.4 million for claims over \$4,000, and the worst-case scenario was \$9.3 million. In the summary of statistics, the standard deviation is \$900,000. By itself, \$900,000 as a dollar value doesn't mean anything. You have to look at it in relation to the means. A standard deviation of \$900,000 if expected claims are \$100 million is not a big deal. But if expected claims are only \$1 million, \$900,000 of standard deviation is a big deal. The ratio of those two, which is the standard deviation divided by the expected claims, is the tool we use to help set an excess level that we're comfortable with. There's no golden rule as to what this number should be, but intuitively if your one standard deviation is more than 50 percent of the mean, that's a lot of risk. That's a lot of volatility we're taking on, so we would want to push it down from there. Conversely, if it's only 10 percent, the direct carrier is probably sending away too many premiums and giving up too much of its profits. That's the tool we use to help narrow the focus of where an appropriate attachment point would be.

The administrative provisions for excess include the different ways your reinsurance can attach. If you start a reinsurance agreement on January 1, it can be a clean cut across all of your group policies at that point in time, or it could be on a risk-attaching basis where it only attaches as groups come up for renewal. If a group has a July 1 renewal date, the reinsurance doesn't attach until July 1. That's useful for the underlying carrier so that they can pass along any changes in reinsurance costs at renewal time, but it's also administratively much more complex to do it that way, so you have to weigh those pieces together.

Another administrative provision is premium submissions, which is an important issue. How you pay your reinsurance affects a lot of things, more than you might imagine. It affects how we price it, it affects the underwriting provisions that go into the treaty, it affects the exposure gathering requirements of the ceding carrier and

it introduces the concept of leverage trends into our pricing. Those are critical issues. The main methods that we use to bill a reinsurance premium are exposure based and percent of premium. For exposure based, it's much like the method of a direct carrier. We would express it in the form of per \$100 of reinsured monthly benefit, so that if a group came in and it had a large amount of reinsurance exposure, there would be a large amount of reinsurance premium payable on that group. Likewise, if the group had no reinsurance exposure, there would be no reinsurance premium on that group. It closely links reinsurance premium with the actual exposure. That's the desired method. It's a little more complex to use this method, because you have to have the administrative systems to do that.

The other end of the spectrum is percent of premium. That's the easiest method for carriers to use. You charge a flat 5 percent across your whole block for your reinsurance premium. Unfortunately, this doesn't line up the reinsurance premium with the exposure on a group-by-group basis. There's a lot of subsidization going on. As an example, we had a facultative request where the premium we were getting on this group from this particular carrier on a percent of premium basis was only \$100,000. But when we ran it through our manual rater, we would have needed \$1 million of reinsurance premium if we had charged it on the exposure-based method. That group is being subsidized by all the groups that don't have any reinsurance exposure. That example shows one of the reasons we have much tighter control with percent of premium. We have tighter underwriting controls just to make sure that a large case with a significant amount of reinsurance exposure doesn't throw those scales out of whack, that it doesn't upset the subsidizing between the two.

It introduces the concept of leverage trend, which I'll illustrate briefly with a simple example. You have an in-force group with an individual on that census with \$120,000 annual salary, or \$10,000 a month, at a 60 percent benefit, so the gross monthly benefit that they're eligible for is \$6,000. The attachment point for reinsurance is \$5,000, so their reinsurance exposure is \$1,000. If you assume this group stayed in force for another year and he had a merit increase of 3 percent, everything goes up by 3 percent including the direct premium, including the reinsurance premium, if this is all a percent of premium. But the reinsurance exposure went up by 18 percent, because this attachment point acts like a leveraged deductible like with medical pricing. If our premium has gone up by 3 percent, but our exposure has gone up by 18 percent, that's something we have to account for in our pricing. It's not unique to disability. Our life area has the same issue with groups that are priced on a percent of premium, because a lot of times face amounts are amounts of total salary.

Underwriting provisions bring up the same issues as percent of premium. We don't really have large case notifications with exposure-based groups, because we're confident that our exposure base rates are enough to cover whatever exposure is being written. But with percent of premium groups, we want to be careful that a huge exposure doesn't come on the books. It upsets that balance of subsidizing, so

we might have some large case notification requirements for the direct carrier. It may be by number of lives, such as any group over 20,000 lives, by a street premium over \$1 million or \$5 million, by reinsurance exposure that's more than 20 percent of the total, or maybe a variation from the formula rate. If they're quoting 40 percent off of their formula rate and we're getting reimbursed as a percent of their premium, then that's something we may use as a trigger.

Other notification triggers we might use could be industry, occupation, certain plan designs or maybe certain extended rate guarantees. Another one that we use at ING is an underwriting point system that basically combines all those factors into a matrix that assigns certain point values to certain of those items. When you add them all up, if that point value is more than 10, for example, then we require notification. That way, if we feel we need to tighten or loosen the underwriting controls or notification requirements, we can just move that point value up or down. Thank you.

MR. ROBERT T. LUMIA: We're gradually moving across the reinsurance spectrum. I want to talk about turnkey reinsurance: what it is and how it works, functional responsibilities including what needs to be done to make it successful and who does what, financial terms of the deals and some regulatory issues that need to be considered when entering a deal like this. The competencies developed by a reinsurer that does turnkey arrangements also allow it to be able to do reserve buyouts, so I'm going to briefly just touch on reserve buyouts, what they are and some of the keys to success. My focus is going to be more from a non-financial, non-actuarial standpoint. It's more about how the deal gets structured to be successful, some of the keys to success and some of the concerns you have to look at ahead of time to make sure it is successful.

Turnkey reinsurance is typically done on a quota-share basis or first-dollar proportional share. After that is where it starts to deviate from some of the traditional reinsurance opportunities. Most of the time, a turnkey opportunity is going to include services attached to it, such as claims and underwriting, where the reinsurers bring in some of these competencies and capabilities. The division of who does what between the ceding company and the reinsurer can be driven by the quota share arrangement or by the competencies of both parties and who does what better. Turnkey opportunities are most successful where both organizations come together and form a true partnership, melding together to get a product out to the marketplace.

From a ceding company's point of view, there are several reasons for getting into a turnkey arrangement. Product innovation is probably the top one. For a company that doesn't have disability, for instance, they may be looking to get in and develop a contract, develop rates, the functional abilities and the filings. It may take a long time to ramp up. Entering into an arrangement with a reinsurer that has all these capabilities and can transfer some of these competencies over is a quicker way to get to the marketplace. You may also have an insurance carrier that already has a

disability product, but may want to refresh their product or refresh their contract or look at rates again. With turnkey, they can enter in and get results quicker and get out to the market quicker.

The reinsurer may be able to bring functional expertise, including claims paying abilities, management opportunities or underwriting expertise that the direct company might not have. There are also the traditional financial aspects of sharing the liability and reducing the capital strain. From a reinsurer's standpoint, it gives the reinsurer a chance to look at it as more of an alternate distribution rather than a reinsurance opportunity. It's a chance to get more product out to the street more quickly through more distribution channels, as well as a chance to build up scale by getting more product out there to reduce expenses.

Some of the services that can be included in the arrangement are claims, underwriting, actuarial services, compliance and marketing. Some of the things that typically are not included are premium administration, billing and things like that, more of the back-room services.

For claim services, there is a range that can be included, from more intensive to less intensive from the reinsurer's perspective. The reinsurer can do full claims adjudication, collecting all the information, determining whether a claim is valid and actually paying it and managing it going forward. It can do advice to pay, where the information is all collected by the ceding company and passed over to the reinsurer. They determine whether it's a valid claim or not. The ceding company is the one that's actually paying the claim, but the reinsurer determines whether that claim should continue to be paid going forward. In other arrangements, the reinsurer is not as involved as much. They may be involved only in complex claims or litigation. The ceding company may even do all of the claims themselves, with the reinsurer just coming in and doing some audits. A lot of what's driving this is the quota-share percentage. The more risk that the reinsurer has, typically the more they're going to be involved in paying the claims. Rehabilitation services and special investigation units can also come as part of the package. They are valuable because in a lot of cases those are expensive competencies for a company to build up. A reinsurer can bring those in, which is a good way to reduce claim costs.

There are several keys to success. In instances where the reinsurer is actually paying the claims, when a claimant is calling in with a claim, the phone is generally answered "Insurer ABC," rather than "Reinsurer XYZ," so the face to the claimant is that insurance company. Communication is key between the two companies, especially making sure their philosophies are the same and making sure there is agreement on how claims are going to be processed going forward. Clear contract language is necessary, from the actual policy itself to making sure that the contract is tightened up and knowing that both parties know how the claim should be handled. There also need to be clear processes for handling litigation, including which company is going to actually take the lead in defending claims if there's litigation and who's hiring lawyers going forward.

A reinsurer can bring underwriting abilities to the table also. They can do all the day-to-day work, the presales, sold case installations and renewals, and can bring their tools with regard to rate manuals and rating systems. For profitability analysis and data tracking, there is a lot of data that has to go back and forth between the two parties. It's important to lay out at the beginning of a deal what data is needed so you can get robust analysis going forward to see how the deal's progressing. Underwriting guidelines are certainly part of the package. A lot of times reinsurers provide assistance with large, complex cases and also are a facultative outlet for the direct company.

There are a number of metrics that can be used to feel out how the arrangement is going. Loss ratios show if the deal is making money or not and can highlight pricing issues. If there's a target market set up in advance between the companies, close ratios will show if there is adherence to the target market. Poor adherence to it will drive up your expenses, which will drive up your costs. There may be a defined target for sold to manual ratios that you want to shoot for. If it's higher than where it was set to be, you might be too conservative and miss out on potential opportunities. Or if it's too low, it might be translating back to loss ratios to poor profitability. If you see that your quote activity is moving down as time goes on, it may be driven by lower opportunity. Maybe the ceding company is working with two reinsurers. There may be quotes that you're missing out on. The quote activity may tell you if there are problems with the relationship. In addition, if there are two reinsurers, measuring persistency will show if their business is moving from one reinsurer to the next. Of course, measuring sales is key. Each one of those can tell a story, but a lot of times you'll see them move in similar directions and tell you if the relationship is progressing the way you think it should be.

To achieve success in underwriting, up front, you need comprehensive due diligence. The turnkey arrangement is really bringing together two organizations and two philosophies. It's really important to understand how the companies are doing their underwriting, what kind of quality controls are there and what type of philosophies are there, and to make sure there's agreement between the parties on how the arrangement should go forward. Processes should be flexible. It's ideal to have a lot of data flowing back and forth between the companies, but you need to know what's efficient, what can happen quick enough and keep your expenses low, and still get all the information that you need to adequately track the arrangement. Determine what the most effective lines of communication are. If the reinsurer is actually doing the underwriting, it might make sense for the reinsurer to interact directly with the sales force and the broker, or it might make sense for the reinsurer to work through the ceding company's underwriting unit. There are pros and cons to both. If you're dealing directly with the sales force, you may have higher speed and more efficiency. You may be able to get more information on a case-by-case basis. If you're working through the ceding company's underwriters, it may provide a filter so that you're not getting in as many quotes that you might turn away, so it might improve the efficiency that way.

It's important to establish the appropriate level of underwriting. One company doesn't have to do all the underwriting; you can split it between the ceding company and the reinsurer. You can split it by case size, standard industrial classifications (SIC) or geographic region. A lot of that is going to be driven by volumes, efficiency, time, and how quickly things can move back and forth. You need to establish clear expectations of target markets. Once again, if you have a joint philosophy and you're adhering to those target markets, you can maximize your close ratios, minimize your expenses and make the product more competitive. You also need to implement strong quality management rigor. And you really need the strategic alliance between the companies. You're bringing together two cultures and two philosophies, and you want to make sure they're working in tandem.

Turnkey arrangements also include actuarial and compliance services. When turnkey arrangements are put together, usually it's with a larger reinsurance company and a smaller niche market player or a smaller insurance company. Actuarial and compliance might only be small areas in those ceding companies. A lot of value can be brought through product development and pricing, filing expertise and regulation monitoring. It's a way to get leverage from the experience of the reinsurer, which may have a broad base of experience and resources.

When you have a direct company working on its own, you have a certain level of expenses built into your products. As you start adding more parties to the arrangement, expenses can increase, which would make the product less competitive. It's very key to make sure your processes are efficient and not duplicate efforts. You may also have reinsurance intermediary fees as well, so it's a real struggle to make sure that all your processes are efficient and that you're keeping your expenses down.

Typically you have your ceding company, a direct company that's working with the broker, and the employer and employees as claimants. As you bring a reinsurer into the arrangement, you have a lot more communication going on. Efficiency becomes more important to maintain your expense ratios and to keep costs down. Adding more lines of communication to a deal like this can lead to some inefficiencies, so it's very important up front to define what your lines of communication are and what's best for each arrangement. Quite honestly, every arrangement is different, so you need to identify what works best between the two cultures.

There are some financial issues to look at. With a turnkey deal, you usually have two levels of agreement between the reinsurer and the ceding company: a reinsurance agreement and an administrative services agreement. You want to make sure that those are written in tandem and that there's no contradictory language between the two, because obviously when that arises there are problems. It's rare that it happens, but I have heard of instances where the reinsurance arrangement may say to handle claims one way, but there may be language in the administrative agreement that contradicts it, so you really have to be careful that they work together. With advice to pay versus the reinsurer actually paying the

claims, there may be a differing opinion between the two parties of what should be paid. In these cases, documentation is key. Lastly, there is retro coverage. Typically you think about a ceding company and a reinsurance company entering into these arrangements, but there's often a retro on the other side that may be providing excess coverage. While there may be issues with speed and getting things issued between the two companies, you have to remember that the retro is on the back end too, and has certain requirements in providing coverage on the back end, so it adds a layer of complexity and can take more time.

Training is essential. You want to make sure that both parties are aware of how the arrangements should be structured. It's important that everyone understands how the contract is written and what the key levers are in pricing. Training is often done to numerous audiences from the reinsurer to the ceding company down to underwriting, claims and the sales force. It helps to make sure that everyone is in sync. Training should be more dynamic than just at the beginning of a deal. Personnel can change on both sides of the arrangement, and you want to make sure that everyone's kept abreast of how the deal should be working and all the specific contract features.

Regarding regulatory issues, as with any company that's doing business, you might have multiple state filing requirements. One of the advantages that a turnkey arrangement provides is the reinsurer has probably seen a lot of different filings that they've done for different clients, so they may be able to anticipate some questions that might arise, which might help expedite the filing process. Intermediary disclosure should also be considered. With all the investigations that have been going on recently, it's important to make sure everything is disclosed and up front, to hopefully avoid future heartache. Another issue is ratings triggers. In a reinsurance deal, there might be wording in the contract that says if a reinsurer's ratings go below X, the deal can terminate. From a ceding company's point of view, that's interesting and helpful, but as the reinsurer, you really want to be careful. You don't want to get into a death spiral if you're having financial issues and you also have arrangements unwinding at the same time.

I'd like to touch briefly on reserve buyouts. As I stated earlier, turnkey capabilities lend themselves to allow reinsurers to do reserve buyouts. They're typically done on blocks of disabled life claim reserves. The key to making them successful is the claims management and paying ability of the reinsurer. The ceding company says they have a block of 100 disabled lives on the books that they don't want to deal with any more. They want to get it off the books. From the ceding company's point of view, it gives them an opportunity to strengthen their balance sheet, get some of the liabilities off, free up some capital and redeploy resources, both financial and human, to get into another line of business or something like that. Reserve buyouts allow that ceding company to focus on their core competencies and not have to worry about these liabilities. From a reinsurer's standpoint, it's beneficial that they can use their claims management abilities to manage these claims possibly better than the ceding company would have, and also maybe to build up some scale and

leverage their expenses.

For these reserve buyouts, a reinsurer needs to do some effective due diligence up front with the ceding company's claim shop. A procedural review will help them understand how they handle claims and what their claims philosophies are. A claims file review will show if those procedures and philosophies are going into how the claims are being paid and handled. From there, the reinsurer can step back and decide if they can do better than the ceding company was doing. It may present opportunities for claim savings. It's important for the reinsurer to maintain financial discipline. When you do a deal like this, it's not like you can reprice going forward. You're locked into your liabilities when you bring them on, so it's very important to maintain that rigor through the up-front process.

Please define acronym highlighted below. Or is it IBNR?

You need good true-up language. At the time of pricing, you have 100 claims that they're pricing. Six months or so after the transfer of claims, the reinsurer has the ability to go through and reprice the claims. They may identify some claims that were terminated at the time of pricing that they didn't realize. They may also find some incorrect data as of the time of pricing, not things that have changed in those six months, but things that were incorrect as of the time of the initial pricing. Repricing makes sure that both parties have an equitable deal up front.

You want clear and definitive contract language. Probably the most important point is to clearly identify what claims are part of the deal. There are two ways you can look at a reserve buyout. There can be a roster of 100 claims that you look at and that's it, plus maybe claims terminated along the way. Alternatively, there can be IBNR, where you say all claims prior to the effective date of the deal are included too. I've seen it done both ways, but you just have to make sure it is very clear what liabilities you're purchasing. Accurate results tracking is key, but every deal is different. You need to look at each deal on its merits to make sure that your assumptions make sense. Look at your claims savings assumptions and recalibrate with each deal that you do going forward to see if it makes sense. Lastly, from a file transfer standpoint, you may be getting a block of 100 or 200 claims all of a sudden when you do a deal like this. From a reinsurer's point of view, you want to make sure that you have your claims staff ready to handle them and make sure it doesn't disrupt your overall business because you have to reallocate resources to handle the transfer of claims. Thank you.

MR. YU: I'd like to address any questions that you may have or any topics you'd like to bring up.

FROM THE FLOOR: Inaudible question.

PANELIST: There are two ways you can handle it. You can do it on an assumption basis or a co-insurance basis. If you do it on a co-insurance basis, you don't need that consent. If you do it on an assumption basis, I think you do have to get

consent from the holders.

FROM THE FLOOR: Inaudible question.

PANELIST: You can take it on a 100 percent co-insurance basis.

FROM THE FLOOR: Inaudible question.

PANELIST: I don't think you have to have approval to do that. It's just a co-insurance deal, so I don't think there's any sign-off on that from the claimant's standpoint. I don't think it would be like an assumption reinsurance deal where you have to get a signature from every policyholder involved. Basically if it's an indemnity deal, then I think you'd be all right.

FROM THE FLOOR: This is a question for Robert. I'm curious what you're seeing for an exchange of cash. Are you seeing cash paid from the ceding company to the reinsurer to cover the reserves or are you seeing assets transferred? In particular, as interest rates are dropping, are you having any problems with the idea that the reserves might have been invested in the old, higher-yielding interest rate environment and now you as the reinsurer can't afford to use that kind of higher evaluation rate?

MR. LUMIA: Typically what I've seen is it's on a cash basis, so the assets really stay out of the picture as far as a market adjustment or anything like that.