Cowbell Cyber - Vice President, Risk & Insurance and Reinsurance at Corvus Insurance

Interview conducted on January 17, 2023

Topics
Reinsurance, Risk Management, Capital Efficiency, Regulation, Brokers, Diversification, Property Exposure

Summary
A Tegus client speaks with the Vice President of Risk & Insurance and Reinsurance at Corvus Insurance about the insurance-linked securities (ILS) space and how insurers view these solutions compared to traditional insurance. The conversation covers the competition between traditional reinsurers and alternative new entrants in the alternative space, capital efficiency, pricing, and regulation in the ILS market. The liquidity of the ILS market and reinsurers in the event of a major catastrophe is also discussed, along with the effect of regulation on pricing. The advancements in the ILW market and how it compares to CAT bonds in minimizing business risk are also explored, with the Vice President noting that larger insurance companies with property exposure tend to use ILW more than others. Finally, the conversation covers the length of credit agreements with reinsurers, trust in the reinsurance market, and the asymmetry of information between insurance companies and reinsurers.

Expert Details
Vice President, Risk & Insurance and Reinsurance at Corvus Insurance. Expert can speak in depth about why insurance companies invest in insurance-linked securities.

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance. The expert is responsible for the company's alternative reinsurance capacity which involves sourcing alternative capital for insurance capacity. The expert is responsible for providing white-labeled risk management tools and a fully reinsured cyber solution for carriers, MGAs, and risk pools looking to embed cyber coverage into their core policies.

Prior to Corvus Insurance, the expert was the Senior Vice President at Houlihan Lokey, Inc., leaving in July 2020. The expert was responsible for providing corporate finance advisory services, including M&A and capital raising, to the insurance industry.

The expert can speak to about 10 years of experience with M&A in the insurance industry.

Q: Are you familiar with the insurance-linked securities industry? If so, in what capacity?
A: I am responsible for alternative reinsurance capacity, including ILS capacity, at Corvus Insurance

Q: Why are insurance companies engaging with insurance-linked funds? What are the drivers of premium pricing?
A: ILS provides access to capacity ouside of traditional reinsurance markets. Insurers want to diversify their risk capital sources and obtain levels of coverage that might not be available in traditional reinsurance markets. While traditional premium pricing is mostly tied to the insurance market pricing cycles, ILS pricing is typically less based on overall insurance market pricing, and more on the portfolio being insured (as well as competing investment opportunities)

Q: What are the considerations and tradeoffs when opting for coverage via catastrophe bonds vs traditional reinsurance vs. industry loss warranties/other insurance-linked securities?
A: For a variety of reasons, traditional reinsurance provides the most seamless coverage. Examples include:
-Cat bonds introduce some risks - coverage is losses occurring vs. risk attaching, introducing a refinance risk

for the cedant.
-Cat bonds have a preset date to cut off loss development while traditional reinsurance coverage usually lasts indefinitely.
-Cedants don't always have access to funds when needed with a cat bond - they might have to wait until the settlement date.
-ILWs introduce basis risk (and can have many of the disadvantages listed above)

Tegus Client
Thank you for taking the time to speak with me today about the insurance-linked securities space. The insurance industry and these sponsors of CAT bonds and also these reinsurance solutions, the ILW and so forth. To start off, how does the insurance company look at all of those solutions? And how do they move forward with them vis- à-vis the traditional insurance?

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance
Sure. And think of like a traditional insurer similar to a bank, right? So, a bank will get deposits in regular way, but they'll also get a bunch of other funding, whether it's securitization or issuing bonds or what have you.

So, insurers, to get enough capital, to issue the amount of policy that they feel like is the right amount to issue, they also turn to a bunch of different funding sources. The most common and the most heavily used is the traditional reinsurance markets.

But as these alternative markets have developed, much like a bank, the insurers look at it and they say, "Well, I can either get better pricing. But at the very least, I can get funding diversification. I can get different pricing exposure."

When I say that, like traditional reinsurers may increase prices because of something that happened in a market that you're not even focused on. Whereas ILS investors are going to look at different factors to set rates.

And you get a bit of cost diversification in there as well. But ultimately, these insurers are saying, "Hey, I want to sell, call it, 1,000 policies next year. To do that, I need one billion dollars of capital, and I'm going to need to turn to the reinsurance market. And on top of that, I want to sleep well at night as were the Board or the CEO."

And I want to know that if some unmodeled, unheard-of event happens that we're protected, our company is not going to be blown out of water, we're going to maintain our A rating, quite frankly, is where they need to be. And we'll be able to continue going on. And yes, our reinsurance costs will go up in the future, but we'll have saved ourselves from that major catastrophe and blowing up the company.

Tegus Client
Okay. You mentioned that difference in funding. So, you have the traditional reinsurers and the alternative. Can you speak briefly about these alternative ones? Is there more growth coming from alternatives? Is there more interest in that from the insurance standpoint? And if there is, why is that?

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance
Yes. So, if you look at the alternative markets over the past 10, 12 years, and I think Aon publishes an annual report on this. The alternative capital has flattened or plateaued, if you will, over the last couple of years.

There could be any number of reasons behind this. Some of it might be the insurers' demand, but some of it is also going to be competing assets, competing opportunities for these investment managers as well.

When they go to renew their reinsurance program, they're going to sit down with the reinsurance broker, because all these programs are brokered. And they'll sit down and the reinsurance broker will get some insight on.

Here's where we see the market pricing. And by the way, market pricing, there's quota share capacity. There is excess of loss capacity. There's aggregate stop-loss, there's CAT bonds. There are all these different ways that an insurer can package the funding together to get the additional capital they need to sell the policies for the year.

So, the brokers sit you down and say, "Okay, here's where we see the CAT bond pricing. We had Hurricane Ian; a lot of capital is still tied up." So, we're seeing prices harden from the ILS markets, mainly because there's just less capacity available due to Hurricane Ian, would be one example.

The traditional reinsurers also got burned pretty hard by Hurricane Ian and they're looking to recoup some margin, not just in their property business, but they'll try to spread it across all their businesses.

So, those rates are going to go up as well. And then you've got some alternative new entrant players in the alternative space, who are trying to make waves. They don't have a ton of money. They've got maybe collectively like one point five billion dollars, maybe two billion dollars of capital to deploy between them.

So, they're probably not going to make a dent in pricing, but they can help fill gaps in people's programs. So, you sit down with your broker, it's a long process. You go to market, you've got feedback on your program, you get feedback from your reinsurers, during the year, you are talking to new potential reinsurers, you're talking to potential ILS investors.

And you sit down and you figure out how to move forward. Usually about a month before the effective date, you'll issue what are called firm order terms, which is, hey, reinsurers, are you in or not? Here's the exact pricing.

You have been talking to ILS investors and negotiating some rates with them at that time as well. Usually, even like the broker programs, you're going to want to know that you've got some good support coming to the market for the price that you're issuing at.

And then you'll sit down and say, what's going to be the most cost-effective way for me to structure the program? Do I buy some quota share capacity and really free things up, although it's expensive? Or do I take more exposure in what they call the attritional layers, the non-CAT layer because CAT cover is So, expensive, but I need CAT cover, like the catastrophe cover is the one thing that everybody needs in the industry?

Because like you'll lose your credit rating if you don't have the right CAT cover. So, you put it all together. And if the ILS pricing is more favorable, which it generally isn't just because there's a lot less capital efficiency in the ILS structures than in traditional structure.

So, usually, what ends up happening is, you'd say, okay, here's my appetite on the traditional side and at a certain point, either the traditional carriers are going to max out on capacity, So, they'll say, "Hey, you want to sell one billion dollars of premium, I can only reinsure you to a $10 billion aggregate stop event. If you're worried about more than that, go to the CAT bond markets." And then you go to CAT bond markets and you fill maybe your $10 billion to $20 billion layer, So, something like that. But they're all heavily brokered and that.

I think there are some places where they compete with each other, like in the quota share space, for example, and those upstarts in the Insurtech ILS entrants who are probably competing. But you're right. For the most part, it's a complimentary package.

Tegus Client
When you say a quota share, what do you mean exactly?

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance
So, are you familiar with the London market?

Tegus Client
London market?

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance
Yes, like the London, like Lloyds or I'm just trying to match. So, in London, they call like a proportional. So, a quota share basically means, if you take a 20% quota share, then I'll pass you 20% of everything I write, and you're on the hook for that full amount, versus aggregate, nonproportional is if I lose more than one million dollars or if my loss ratio is above this or claims bigger than a certain size, then you step it.

Tegus Client
Got it. And you mentioned capital efficiency and pricing. Can we just, I mean, dig deeper into that, So, premium pricing. I mean from my perspective, from an investor perspective, we look at pricing from a rational asset pricing model, right? So, I mean, prices are determined rationally.

But from what I observed in the ILS market, price was not necessarily influenced by market dynamics but regulation as well. So, can you elaborate on your comments on the capital efficiency on the ILS vis-à-vis traditional? And also if you can just give us some context into what drives pricing and for the same risk, why would one insurance company accept a lower price vis-à-vis higher one if that makes sense.

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance
Yes. And think of pricing like in fixed income, a 20% fixed income bond most people would run screaming from, right, because it implies a huge amount of risk. So, yes, keep that in mind, too. So, from a capital efficiency side, the ILS structures are set up So, that after day one, there's no credit risk to the investor.

And that means that the exposure has to be fully collateralized. And that requires a significant amount of capital. So, what would that mean if there was a stop-loss treaty where you said, "Okay, you're an ILS investor, you're covering me, the insurer, and for excess of 120% loss ratio up to a 200% loss ratio."

So, you have 80 loss ratio points that you're participating on. And if I wrote 100 of premium there, then the maximum loss that you could sustain if I have a 200 loss ratio would be 80%. So, you need to put that 80 into a trust on day one. And then we'll agree that based on your risk, let's say, 10% of premiums accrue to you.

So, of the 100 premium I collect during the year, I'll put 10 of that into your trust. And at the end of the year, assuming there's no claims, you're going to pull out the 90. It's really after about like 15 months or So, you're going to pull out your 80% plus a 10% premium plus all your interest income, and that's your returns.

If a traditional reinsurer were to do the same thing, they would take the exact same structure, 80 excess of 120. They will get the 10 premium assuming it's the same deal. And they would say, okay, if there's a loss, they call it bordereau and send me the loss report and I will reimburse you.

And there is that credit risk to the reinsurer. But as a result, that reinsurer can take that 80 of exposure and they can place the capital supporting that, they can run more than one deal with that. And that comes down to their risk management and their rating and what have you. But they're not required to hold as much capital for the exposure.

Tegus Client
Got it. And also in terms of capacity, if we think about capacity and what determines capacity from ILS standpoint and reinsurers, I mean, for example, I mean, Hurricane Ian, for example, when Hurricane Ian with some major catastrophe happening, how typically do they differ in terms of capacity liquidity providing?

Basically, what I'm asking is, do the alternative or the ILS market more responsive, more responsive in terms of providing liquidity after these hurricanes or major catastrophe happening because of their end users and the end investors willing to capitalize on that opportunity? Or you don't see any difference in terms of liquidity providing?

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance
So, I'd say it's less of a liquidity terminology. Hurricane Ian was unique, such a big event. Normally, you would expect to see everyone, reinsurers, ILS investors come running back saying, "Great, I used to charge

you nine percent, I'm going to turn to 12% now" and re-up.

The problem, the liquidity issue that hit was these ILS investors. And by the way, I'm in like not in the property CAT section. So, I'm not sure if the Ian collateral has been released yet. But as of a couple of months ago, a lot of the loss picks were in the ILS layers.

And that meant that rather than returning all the collateral at the end of the term or a month or two after the term, it gets held onto. And normally, these ILS investors have all this collateral return that they then want to go and deploy and now they can't.

Like all these deals, we were talking to ILS investors for 1.1 renewals. In the conversation in September was very different than the conversation come November. Even you had line sizes, people were talking, yes, we'll put 20 to 30 into the program and come December, they're saying we can maybe squeeze five.

They're having a really hard time coming up with that collateral because they've got to wait for it to be released, even if they don't expect it to be fully utilized by the Ian plan. I'm not aware of like a liquidity-providing facility that helps them get over that. It would be interesting if someone could structure something like that, but I just haven't heard of anything like that.

Tegus Client

All right. And also I mean, on the topic of pricing, if you can also elaborate on the effect of regulation, I mean some of the anecdotes we stumbled upon during our research is that, for example, I mean following a major catastrophe, right, when for example, the insurance companies need to respond for regulation, they have too much risk on their books, So, they have to respond accordingly, maybe offset, I mean transfer that risk to the reinsurers or what have you.

So, they are under extra pressure to do So, to abide by the regulation and henceforth avoid the downgrade of any credit scores or I mean, credit scores or any credit metric? So, they are under pressure to basically accept a higher premium. Is that common in the industry?

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance

Yes. After things get really bad, insurers in the U.S., have what's called a risk-based capital ratio. It's monitored by the regulators. And if they fall below a certain level, then the regulators step in and exert control over the business, first they exert supervision and then they exert control. But before then, like you mentioned, the rating agencies will have taken action.

And most of the U.S. commercial market is insured by A-rated carriers, and that's carriers who are rated A or A- by AM Best. For some reason, the insurance agents in this country prefer to look to AM Best for that. It's going to be very like similar results to S&P and Moody's. But I mean, as I'm sure you're aware, every rating agency has its quirks and how they do things.

But if AM Best were to downgrade you from A to B+, that's the start of a death spiral for most insurance companies because they lose that top-line premium, the statutory accounting rules are such that you have to book all your costs upfront and then recognize your profits a couple of years down the road. So, you just had a bunch of your capital wiped out, you get downgraded.

You can't sell as much. You probably have to pay your agents a little more. You've got a lot of pressure on you to turn around. So, one way, probably the like a wholesale quick fix way to shore up your capital would be to do some sort of loss portfolio transfer or some reinsurance deal on your historic business, where you can alleviate the capital required to support that and then show that you're back to like an A rating level of capital.

You can do it prospectively as well where you say, like I need to be smaller. I'll get a quota share for 80% of my business. The problem is like that can be hard to get. A lot of reinsurers are hesitant to jump into that because they're worried that you're going to try to like try to use their balance sheet to get yourself out of your hold by maybe getting volume or commissions or something like that.

They don't really trust the results as much. So, they prefer to do it like a historic deal where it's okay for everything I wrote last year and the year before, you're going to make sure that we don't lose any more money. Like we'll pay you a certain premium and that's it, we cap our losses and now we can get on and we know rating agencies are comfortable with our capital levels again.

Tegus Client

Okay. And also if we can dig deeper into the ILS space for now? I mean from what I understand is, I mean even in the ILS, we have a different instruments and I mean it feels like pros and cons determining on your perspective.

I mean if you would focus on the bigger two, which is the ILW, the warranties and also the CAT bonds, So, from when you are sourcing alternative reinsurance and if you look at ILWs and CAT bonds, how do you categorize these in your mind? And what are the pros and cons of each from your perspective?

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance

Yes. So, ILWs and CAT bonds are going to be, of the alternative reinsurance market, they're probably north of 90% of it. And the reason is that you can set up a CAT bond and an ILW where the investor has a risk of loss, two point five, two, one percent typically. And ILS investors are used to that loss level. A quota share will typically have a risk of loss of maybe like a 10%.

And I'm not sure fixed income investor can price that very well, and it would just be expensive. So, the CAT bonds end up being where a lot of the volume goes and ILWs, you use them interchangeably, where one of the benefits beyond just that two point five, that percentage risk of loss, it's easier to make these instruments more capital efficient.

Because when I say that you can, if I were to place a CAT bond with you January first this year, by like January 31 of next year and by the latest March 31, I know if I'm like 99% certain whether or not I've triggered your layer. And in the 98% of times that we're not going to trigger a layer, I can return that capital to you.

I've held your capital for 15 months. So, that return I'm giving you is your IRR is going to be a lot better. The quota share, even if you do it where you're only covering like a fixed amount of time as opposed to a fixed amount of policies, you probably still need another like 24 months to release all the capital because you're almost guaranteed that you're going to have some losses in your layer and therefore, there's going to need to be some collateral held back.

And it's also because we were fairly certain that there's going to be losses in your layer. We don't know how much those losses are and how much they will fluctuate. And we need a buffer to get comfortable that the coverage is going to be there because once we return the collateral to the ILS investor, it's gone.

We can't turn around and say, "Oh, we got it wrong, that loss deteriorated. We need some more money back." It's spent already or returned and you can't get it back. So, those two factors make the CAT bond and ILW markets more favorable for investors.

In terms of which is preferred, a CAT bond is typically preferred by an insurance company because it's specifically tied to your book like, "Hey, if I'm a homeowner's insurer in Florida, but it turns out that I was only concentrating, like I had a huge concentration in Florida. Well, you know what, my Hurricane Ian losses aren't going to So, bad."

So, I probably haven't triggered your coverage and you get all your money back. But I'm comfortable knowing that if I only wrote business in Florida, then I would have been properly covered as well. So, it covers you for the intricacies of your book.

Conversely, from the ILW side, an investor is not equipped to dig down into the granularity of what the policies are and what the counties are. The CAT model that investors are running have probably done it a lot higher level than that. And it's harder for them to price in that, okay, I can feel comfortable about what my windstorm risk is for Florida, but I don't know my windstorm risk is for company A's business in Florida.

So, an investor will probably give a better pricing for an ILW and you don't have to hold the capital as much.

They're a lot simpler to run. So, hey, there's a Hurricane Ian. I was in Florida. We know it's triggered. All right, we sent a notice to ILW.

A lot of them are all-or-nothing covers. Or like, "Hey, we've reached your layer, we're taking the collateral" and that's over. So, it's pretty quick and insurers like it for that reason, too. But you can see there's like pros and cons for both sides, but those would be the most significant ones.

Tegus Client

Yes. So, it seems that the CAT bonds minimizes definitely business risk. But, I mean from our observations, it seems that also the ILW market is advancing as well to minimize that business risk in terms of you have these industry loss indices that take into account state-weighted exposures or county-weighted exposures. What do you think about that? Do you think that's going to favor ILW because of the CAT bonds going forward because of these kinds of advancements?

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance

Yes. The indices are getting, yes, more intricate that does pose some challenges. Investors might not be as comfortable with the more specific indices. But it's still not perfect. When we looked at doing, I was talking to one of the ILW index vendors. They track the losses and the like.

And what we found was they had a hard time stratifying exposure at the policyholder level. So, if you're like a small business-focused insurer, a lot of the ILW impact is coming from the large corporations because their claims are just that much larger.

And if you feel like that, to me, is like one of the main areas of basis risk because it's hard to even though you can say, okay, yes, we can stratify by location and maybe we can get to industry. There's a bunch of ways we can do it. But they haven't found a way to marry the loss data with the portfolio data, the policyholder data.

And you'll always have that degree or until they do, at least, you'll have that basis risk there. But that being said, the general feeling that I got when I was trying to explore the basis risk is that incrementally moving up, moving within the ILW structure, So, instead of you attaching at a $50 billion, you attach a $52 billion or $48 billion, that wasn't a huge difference and there's other things you could do such as, okay, we're small business-focused.

So, our ILW index, we're going to cap all losses at $20 million. So, that's going to get rid of most of these large corporations and it won't get rid of their losses, but it will stop them from having such a skewed impact on the portfolio. You can start doing things like that. And I wouldn't say consensus because we didn't get down to execution or anything.

But the feedback from investors seems to be that if we were to over-insure, So, meaning our basis risk was more to the upside, like we're more likely to get positive results because of the basis risk that, that wouldn't be very costly for us, meaning that like we could probably get positive basis risk exposure without it costing that much more for it.

The challenge was like how anyone going to get comfortable with that because it's a serious amount of money getting the CFO, the actuaries, getting them to wrap their heads around more complex way of calculating the index, which can't be back-tested as easily and doesn't have a huge track record of success as a more traditional structure. So, it enters those kinds of challenges if you will.

Tegus Client

That's great. Actually, we were also thinking about the same thing. I mean from one perspective, for example, if you look at ILW, I mean the structure of ILW seems to be becoming more and more advanced, I mean, sophisticated or complex. So, from one perspective, from the reinsurer in this example, more structured, more sophisticated, more specific ILW contracts may be better because they can segregate and have a specific risk exposure that's consistent with their own objective.

But how about insurers, the insurance company, I mean you alluded this at the moment. So, you have this like, for example, I mean, on top of my head, like ILW contracts that they are binary, you have something like a windowed and layered.

So, it seems that there is a demand for these alternatives or ILS managers or fund managers on the ILS market to have some specific risk exposure, which can be obtained by structuring the ILWs as they see fit, but how the supply side reacting to this, the insurance companies?

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance
Yes. The ILW market is certainly making a lot of advances. And you're right, it's certainly not all triggered like pay all or pay nothing. I would say, a big company like travel, many of the mega bulge insurers in the U.S., their portfolios are So, big that an ILW cover can get comfortable with it because the risk is really spread.

They've got a that can feed in, feed out. lot of averages are going to play in their favor and think it will help balance out. If you're like a regional mutual with a specialized business, that's going to be harder to get comfortable with.

And you're also going to have less resources to understand how your risk can map to an ILW risk because a lot of your actuarial and analytical resources are going to be like they're probably not spending their energy there just from what I've seen.

So, premium volume-wise, I would say, like the more advanced ILW structures, they should be great because most of the ILS premiums are going to be coming from these bulge insurers. When you get into where is the growth in the market going to be coming from, then you probably need the more structures that are like have less of the basis risk and are easier for the finance team that we're seeing.

Tegus Client
Okay. You mentioned something, I mean if we would categorize them based on your experience, do some insurance companies tend to use ILW, not ILW, but ILS securities as a whole.

Do some type of insurance companies, maybe you segregate them by size or type of insurance companies life, property or what have you. If you were able to categorize them do certain categories of insurance companies use ILS more than others?

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance
Well, certainly those with like property exposure just because a lot of the ILS markets has focused towards the property market. That right now, that's the main one, just because it's easier to get the return structure and the risk profile to match with the ILS investors through that. It would be larger. This is a fairly expensive way to get capital.

And it tends to be like something that you used to diversify yourself. And just that alone implies you've got to be on a certain size to get that diversification in place. So, yes, I would put them much more into, I don't know where the cut-off is, honestly, but you can see a lot of the CAT bonds that are announced, there USAA, Travelers or even like you saw Beazley just announced a cyber CAT bond.

Beazley has got like, they have one of the biggest cyber business globally. They've got like over, I don't remember the numbers. But I think I want to say over three billion dollars, but that's irrelevant. But really, they're doing these really sizable, they have these really sizable books.

And they could put a little bit of coverage to fill gaps or they can structure maybe some of their traditional coverage around, if the ILS market is harder than the traditional market, you might start with ILS and figure out how to structure things around it.

Because you're not always looking for what's my cheapest coverage this year. You know you want to have a 10-, 20-year relationship with these capital providers. And you know that when they're hurting, you've got to pay them more and it might be more expensive, but when you're hurting, they're going to come to your rescue.

Tegus Client
Okay. So, on that ,I mean on the broker business, right, for example, if I wanted to insure my car, right, I just go to my local insurance provider, just have a seat and just probably these days, we'll just do it online. How has that played out with the insurance companies? I mean, speak about the reinsurers, the ILS providers, what is the ecosystem like.

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance
Yes. It must be like close to 100% of the reinsurance that's place is brokered. There's a handful of companies that have their own in-house brokerages because typically, the brokers can take one point five to three, four percent of the premium for themselves. So, it's quite expensive. But really, I think if I was an insurer and I were to show up at an ILS investor's office, it'd be like, where is the broker? It'd be a little bit different, I guess.

Because it's not the typical approach. But you've got from the reinsurance broker world, you have both, the ones you're familiar with, Marsh, Aon, Willis Gallagher, Willis and all of them. They, like the big ones, everyone is familiar with, there's a bunch of niche players as well that some of them specialize in ILS.

A lot of them have a good capability in it but have other niche specialties themselves. You don't, insurance companies can have more than one broker So, that I wouldn't have two brokers going out trying to place my property CAT program, competing with each other.

But I would have one insurer ,maybe I'll decide to have one insurer, place my property CAT program, and I'll have another insurer work on my workers' comp reinsurance. And because those programs are unlikely to get much economies of scale from each other. So, you would have heavily brokered for all of it.

And the brokers have really good relationships with the reinsurers and the ILS investors and they can get real-time feedback on issues and concerns and things that need to be changed for the structures. And they corral everyone together to figure out the best pricing because in an ideal world, you're going to go and try to place, say 100 of reinsurance call it, and you'll get bids for 150.

And you've got to figure out how do we turn that 150 down to 100? Or is it price and you work together with everyone to put that together? But I'd say and one other quirk in the market, which I don't know if you've like ever read a traditional reinsurance agreement versus like a traditional credit agreement.

But the two main differences are reinsurance agreements are like 1/10 length of a credit agreement. You'd be shocked at how small they are based on relative to the amount of money being transferred. And two, today, January 17, I wouldn't be surprised if more than half of insurers have not executed their 1.1 renewals yet.

They're still negotiating terms. They've agreed to what they call a slip, which is high-level summary terms, it's like an advanced term sheet. And if there is a claim between yesterday, then everyone would expect the insurers to honor the slip, but they're still negotiating the treaty wording, probably even today. So, it's another quirk. I don't think a bank would release funds without having a signed credit agreement.

Tegus Client
By the way, I'm just curious, is that because of the capital market, there's more disclosure requirements and therefore, credit agreements tend to be lengthier with reinsurers?

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance
I think it's that the reinsurance market has been built on trust. And there's a term, I'm trying to remember what it's called, but it's essentially the reinsurer courts and arbitration panels have enforced that the reinsurer has the right to be taken care of as if they were the principal.

And sorry, the term is utmost good faith. So, the cedent, the insurance company, has to treat the reinsurer with utmost good faith. And that principle has enabled like relationships to persevere through the good times and bad. And the understanding that, hey, if you had a blowout year, you, the insurer, if you had a really bad year, the insurer is going to go to the reinsurer and say, "Hey, we had a bad year. Here's what we did wrong, here's where we want to fix."

And the reinsurer has been close with the management team for a long time. And they say, "Hey, we backed the management team. This is a risk business. No one can predict something like Hurricane Ian. We see how you're maybe overly concentrated here didn't factor in."

You thought 20 miles inland was safe, but really, it needs to be 30 miles inland or change some policies. But they'll tend to renew and say, "Okay, you're going to get better rate where we lost last year. We're going to make it up in the future." And similarly, if you've had like, hey, you had a really bad year, four years ago and then you had following three years were like really middling.

You, as a reinsurer, could turn around to the insurance company and say, "Well, look, we haven't been making any money from this relationship over the last four years, like we really need to start changing that." And then the insurer is expected to work with them to get them a better result to pay them back for that support over the past few years.

Tegus Client
And is that, I mean it seems that there are some intangibles happening there. Is that also translated when you, I mean, I'm thinking about like these ILS and CAT bonds like the new kids in town, right? And the reinsurers, insurance companies, right, that they are used work with each other for a long time. So, what is your perception for the insurance company? Is that trust exportable to an extent also to these new providers that CAT bonds and what have you? Or is there still needs more time for that trust to be built?

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance
Yes. I don't think, I'd be surprised if someone executed an ILS structure off of a slip and said, "Okay, you're on risk, we don't have your collateral, but we know you're going to put it in there." Thinking about it like, if you're reinsuring against hurricane risk, you might be okay with that because you know what, there's not going to be a hurricane for a couple of months, you feel pretty good about that.

But for the most part, the ILS structures are built So, that you don't have to trust each other, right? They're built So, that there's no credit risk. It's tried to be as regimented as possible. I think, but that being said, USAA or whomever, whose CAT bond got fully paid out by Hurricane Ian, they know that their prices are going up.

And they actually want to find a way to repay the ILS investors because they want to get that coverage back in place. So, that like, hey, we all have to make money relationship, I'd say that's still there. That's like intrinsic within the industry.

It's more like, "Hey, we can execute on a slip or I gave you my word three months ago. So, yes, we're signing it even though I'm not happy with the way the deal is today." Those are kinds of traditional reinsurance markets. But certainly, I'd say the repayment bit, is what people would expect. If investors aren't making their returns, they're going to go away, they're going to go somewhere else.

Tegus Client
Yes. By the way, I'm sorry, can you repeat that the last thing you said about the case on what you have mentioned at the moment?

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance
So, if like, for example, I'm the insurance company, we had huge claims from Hurricane Ian, you had to repay. I captured all your collateral. You had a full loss for the year.

Tegus Client
Right.

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance
I'd be expected to, like, over time, get you those returns back. That's a lot of money. I can't get you all your

collateral back next year. But everyone would expect me to pay you more and give you a better deal to keep you around because I want to renew your cover, right?

And after a total loss, I need to show you that doing something, a, to improve your risk; b, to improve your return, for you to get comfortable to re-up after that. Yes, so, that's where we all target getting to.

Tegus Client
Okay. I think one final question. Do you see any differences in use cases or basic interaction or structural changes from insurance companies in Europe versus that of the U.S. or maybe in Japan as well, and how they interact with ILS and the insurance-linked securities as in general?

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance
Yes.

Tegus Client
For example, the U.S. insurance companies, I mean is the ILS market larger and therefore, these insurance companies in U.S. use it more or maybe they're used to it. It's a bigger market. They're used to it right now. So, the prospects for them to using more in the future is also higher? Or do you see it more or less the same between these regions?

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance
Yes. So, I need to caveat what I say, when you talk about like London, Japan, U.S., like there's where the risk emanates from, and then there's who's writing the risk. So, a lot of like 2/3 of the London market is ensuring U.S. risk, for example. But where is the risk generated from?

Most of the exposure is coming from U.S. and then Japan as well, like the wind exposure. You get into, I'm not sure things like quake because you get into real market specifics, like what's the insurance penetration and what have you. But from the standpoint of the insurers and where they sit, the ILS, because it's fully collateralized, even though it's more expensive, it's like a safer bet for an insurance company to take on as reinsurance.

The reason being is that if the reinsurer goes out of business and the insurance company is like a general creditor, they're an unsecured creditor of the reinsurer. And it takes a really long time to write down the estate. So, not only do you not get all your money, but you got to wait a really long time before you get any of your money.

So, it's not a good position to be in when the reinsurer runs into financial difficulty. Whereas like the ILS structures, the money is there. So, you don't have to take on that credit risk. The regulations are going to give, in some instances, more credit for that coverage than they would for a traditional reinsurer.

So, under, like Solvency II, you might get some benefits of an ILS structure versus like a traditional reinsurance structure. And those would drive more activity towards ILS to the extent that either like the difference is material or that the traditional markets haven't found a way to work within that. But to me, that would be one of the biggest demand drivers from the insurance standpoint is that getting that additional regulatory benefit by avoiding the credit risk.

Tegus Client
Okay. By the way, I thought of another question because I think the final question here is, what is the asymmetry of information looks like from the insurance companies and reinsurers? I mean is the insurance company able to model the risk better or equal to the reinsurer?

Vice President, Risk & Insurance and Reinsurance at Corvus Insurance
So, the insurance company has better data on their book, but the reinsurance company has better data on the market. So, the insurance company will end up in different places. The insurance company can do a much more granular analysis around the exposures.

The reinsurers don't get a lot of data on the policyholders, they have to write it in. So, if it's something like a windstorm, they might just get like ZIP Code data, they might get premium, total exposure and ZIP Code. That might be all they get. They might ask for something more, but they're not getting what's the homeowner's income.

And do they have a dog and So, the insurers will sit down and do this really detailed analysis like, "Hey, we found that our insurers who sell the new roof for the last five years have a 20% better loss ratio. So, we're going to find a way to target homeowners with new roofs."

The reinsurer can turn around and say, they're like, "Hey, you have a big concentration in Southwest Florida, we've got some catastrophe models that are showing that, potentially, there's a lot of damage that may come from there. And on top of it, we think that you're underpricing your risk relative to some other people around you." And there are very different pieces of insights and the like and how they get used.

Tegus Client

Well, thank you again for taking the time to speak with us today. This was very helpful. Enjoy the rest of your day.
