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U.S. Structured Credit Roundtable: Industry Leaders Discuss Trends In The Catastrophe Bond Market

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Panel Discussion

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Recently, Standard & Poor's Ratings Services sat down with leaders in the catastrophe bond industry to discuss current issues and trends. Credit Analysts Deborah Newman of Standard & Poor's Structured Credit group and Gary Martucci of Standard & Poor's Financial Institution group moderated the roundtable, which included:

- Michael Halsband, director at Deutsche Bank in the Capital Markets and Treasury Solutions Group
- Barney Schauble, managing partner at Nephila
- Paul Schultz, CEO of Aon Benfield Securities
- Peter Nakada, managing director at RMS for the Capital Markets and Life Risks groups.

What follows is an edited excerpt of the discussion. The opinions expressed in this article are the opinions of the individual participants, not necessarily of their employers or of Standard & Poor's.

Panel Discussion

Standard & Poor's: Peter, Sandy was viewed as a category 1 hurricane but had the central pressure of a category 3. Does your model capture such events, and what were the underlying factors that caused Sandy to take on the characteristics it did?

Peter Nakada: The relevant issue is the central pressure versus wind speeds at landfall. Sandy was such a low central pressure storm that it sucked more water into the surge wave than it would have if it had a higher central pressure. So that made the surge much more damaging than you would have imagined for a Cat 1 wind. So it was serendipitous that we released our Version 11 model before this because it had explicitly built in the hydrodynamics of surge. The model contemplates storms that have very low central pressure over the water and that could create surge events that were higher than the wind speeds would imply at landfall.

Standard & Poor's: Do you think, then, that models need to be updated to account for severe weather events, which have become more frequent? Does the property/casualty industry have to change its views on severe weather risk for the northeast?

Paul Schultz: Generally, our view is that commercially available models are a tool for clients to help gauge their potential exposure and aggregation risks. We believe each client should develop their own view of the risk using the commercially available tools.

From our perspective, having a multi-model input and using what's available within your own set of data are the most important factors to help clients manage risks associated with these different types of exposures. We believe that the multi-model approach is the best way to look at risk but each client should adjust the inputs into the models based on their own experiences. Again, we do not encourage reliance on any one single model.

Michael Halsband: I find it hard to disagree with Paul's observation. I think most investors in this sector will accept, with some degree of due diligence, the observations made by the modeling firms, but they won't rely exclusively on them to formulate their view of the risk in any particular transaction.

Regarding whether the P&C industry has to change its views on severe weather risk for the northeast, I think that there may be a perception of a greater degree of frequency of catastrophic events in the northeast. But that aside, time will tell in short order whether or not the market views northeast risk as no less peak than that in the Gulf and south of the U.S.

Barney Schauble: I agree with Paul and Michael's comments. Any investor is hiring a manager for judgment. One way to describe the market is that there are two types of investors in this asset class; for example, if you consider a pension fund as a generic investor. Some look at each individual security and read the expert risk analysis, ask questions, and talk to the sponsor and make their own determination of whether they want to buy an instrument based on ratings and other criteria.

I think the more savvy of those investors have a healthy degree of skepticism about what they're being told for risk and return, like they would for any security. If somebody said "there's this great high yield bond or this great mortgage-backed security," they look at it and make their own judgment as to how to consider the risk/return analysis. Other investors, and this is the majority by capital, hire a manager for judgment. They're not hiring the manager to run the instrument through a third-party model that simply reads them the results.

There's a temptation after each event to say that a model should be updated if that exact event wasn't within the model's physical set of conceivable events. I'm not sure that's really the point of a model. We think the idea is to give you a range of risk outcomes to give you a broad-picture sense of risk.

Hurricane and general catastrophe exposure has for a long time been a peak exposure for the insurance and reinsurance industry. You can see that by the issuance of bonds by companies like Travelers and others who have a high concentration of exposure in the northeast, and you can see that in terms of pricing. What people pay per unit of risk in the northeast versus in California, versus in Florida, it's certainly higher than in many other parts of the world.

After any event you see more demand for protection from homeowners to small businesses up through the reinsurance market. You often see either less supply of capacity or more wariness about it and therefore higher pricing, so I think the model's output and the industry view are two different things. You can look at places, like the U.K., that haven't had an event for a long time and for which pricing is relatively low compared with the Northeast U.S., for example, but it doesn't mean that that's driven by the model output.

Whatever the model output is does not linearly drive the view on pricing in the industry: they are two different things, and that's a subtlety that I think is important.

Standard & Poor's: Sandy did not make landfall as a hurricane, yet the governors of New York, New Jersey, and Connecticut had indicated that the hurricane deductibles don't apply, that instead of the 1% to 5% you're going to just use a much lower number. Do you think that can have an impact as something that models will have to try and consider or that even the industry now has to start considering when pricing risks? Could it make a material difference in the claim by either a primary company or when covered by a cat bond?

Michael Halsband: It's interesting the observations made by the governors and insurance commissioners in the states that made such declarations. Ultimately, those regulatory declarations will be dispositive on a number of coverage questions in the primary insurance market, certainly. I think you need to dissect that from the definitions that are found in the various cat securitizations, many of which are reliant on a determination by the NHC or some of its affiliated arms, as to what is a hurricane and when that hurricane occurs. So whether or not that has implications on the bonds is

bond-specific, and I'm sure Peter will tell you how they model hurricane events that degrade into tropical and post-tropical or extra-tropical storms.

Peter Nakada: We do think that's an issue and what we've been doing for our clients is running scenarios that are what we call ground-up, meaning they ignore the deductibles for residential. For commercial we've kept that in place but when we look at waiving the deductibles it's really a residential issue. It's not a dramatic impact but it's certainly significant and it's material, and we do think that folks should be looking at that as a scenario as we go forward, because with storms that are at the threshold it certainly changes the results.

Paul Schultz: What is your view on how much that mattered in Sandy's case? I see you've released an estimate of \$20 billion to \$25 billion, what is your view on how much of that was due to the deductibles?

Peter Nakada: I don't have a number that ties to that \$20 billion to \$25 billion. We ran some analyses using our closest track to Sandy, and we ran it with deductibles and without deductibles and the difference there came out to be between \$4 billion and \$5 billion, for everything. Residential is approximately one third of that, so somewhere between \$1 billion and \$1.5 billion of impact from those two.

Peter Nakada: Regarding global warming, I want to mention that RMS has consistently since 2006 been linking hurricane activity rates to sea surface temperatures because we believe that there's a tight link between sea surface temperatures and frequency and severity of hurricanes. So we've already had that view and then with Version 11 we've actually regionalized that so we could capture the northeast aspect of this. To the point that Barney made, we're not making any additional reactions based on this, it was actually in our view, consistent with what we've been doing since 2006.

Standard & Poor's: There is a view that growth in the natural peril cat bond market is hindered by the number of regions and perils covered. What additional regions and perils do you think may be covered in upcoming transactions, and what areas do you think are underserved? Meaning there is a significant amount of insurance written but cat issuance in nonexistent.

Paul Schultz: To put this in context, the securitization market has really been developed to help facilitate transferring of peak risks into these types of investors and these types of funds. It's done so because that is the most expensive peril for the traditional markets to be able to underwrite. It's the largest peril if you think about U.S. hurricanes and it's the most expensive from a capital perspective. Transferring the volatility from the traditional market to the capital markets, which may be more willing and able to accept the volatility, makes fundamental sense, and that's why the market was inceptioned many years ago.

The notion that we can start to transfer every risk into these types of markets is a little bit flawed. There is a need and a desire for diversification, and there is a willingness by capital to accept some of these perils. But at the end of the day the risk is going to flow to where capital is most efficient.

The market has been restricting coverage generally, following an event the natural tendency is to take a look at what happened in that event and start to exclude types of risks and types of perils from being covered, and we've been very much in an exclusion mode across the board. I think the value of the product to the primary market and to the ultimate user declines every time that you start to restrict coverage. For the market to grow we need to think about expanding coverage across the board, with reinsurers, with primary markets to derive for the ultimate buyer of these products some value that's missing from today's cover.

The market needs to think about finding a way to include these risks whether they're modeled or not because that's the value this industry sells to the client. As an industry we need to find a way to include more risks, make sure that there's

proper compensation for accepting the risk, and find a way to generally include the coverage and include the value of these products.

There's no question that we'll continue to look at peak perils around the world, and we all know by order of magnitude it's U.S. hurricane first, U.S. earthquake second, European risk third, Japan risks fourth, and then everywhere else. So we'll continue to go down that scale of peak perils and eventually bring more and more of that risk into the market.

Looking at frequency of events through aggregate coverage and other types of coverage structures, the market can expand and grow in that fashion as well. Will we move into products that are priced extremely efficiently in other markets? I think it's going to be very hard to do so just because there is leverage within an operating company's structure and there are ways of making that product more efficient in other markets. I think it's unlikely that we'll go into other categories of risk, but including more risk in the perils that we do write and looking at frequency of risks is something this market can go into.

Michael Halsband: Paul's hit many of the high points; the only one I would stress again is the question of capital and efficiency of capital. The market and the specific perils and regions that you find dominating this market are there for a reason. If it is equally efficient and complimentary to existing markets then you will see issuance in new regions and perils. If it's not and there are more efficient, cheaper, and easier to access risk protections, then you will not see participation by the cat bond market in those areas; this market is not going to compete its way to places that don't make sense.

However, the market continues to attract a considerable amount of capital that is very keen to deploy, so I think that is a complement to those other markets. Particularly with regard to the tail risks, the market may very well find itself continuing to grow both in the regions where it currently exists and beyond. I don't think that there is any particular region that is undeserved for that very reason.

Barney Schauble: We've been public about our agreement with Paul's first point, which is that the market exists to solve a problem rather than to design its own ideal portfolio. So the peak risks are the exposures that the existing insurance and reinsurance industries struggle with for good reason, and therefore that's where investor capital can be applied in a way that's useful and makes some structural return. Diversification for the sake of diversification or seeking to pry other exposures out of the existing insurance framework solely because of their diversity simply replicates one of the problems with the existing rated reinsurance company model, and we just don't believe that's going to be the route to growth of this marketplace.

However, if you look at the true scale of those peak exposures, and that includes just the risk that is as yet uninsured or unreinsured in the coastal states including California, it is massive. There's a lot of risk that needs to be transferred somewhere that is held either at the state level or is uninsured entirely (this is true in Japan as well). You see this as events unfold over time. So that universe of exposure is looking for a home.

The state of Florida, as you saw from the Everglades transaction earlier this year, is not enthusiastic about holding tens of billions of dollars of risk on its own balance sheet and is trying to be constructive and create ways to transfer that risk elsewhere, and the reinsurance market to a certain extent is full of that risk. So we do think that there's a future for this transfer of risk whether that's in the form of securities or whether that's done privately in these peak zones. There's a lot of unmet demand that is a natural place for investor capital to find a home, especially if they're looking for uncorrelated assets. That also could be extended to places where you are still developing insurance markets, as you

saw in some of the events in Chile or Turkey or China over time.

The initial piece of that risk will be handled well by the existing reinsurance market, but to the extent that the pure size of any potential event in those places starts to look like the exposure in the U.S. or Japan, those risks will naturally find their way to the capital markets investors too. But we think this emphasis on diversity--how can we get more exposures into the marketplace, more risks that investors don't already have--is a little bit misplaced. That's a solution looking for a problem as opposed to really trying to help the insurance industry digest these peaks risks, which as Paul said, was really the genesis of this market almost 20 years ago.

If you talk to most providers of capital they're not stymied by the fact that you get your risk from only the peak regions. You can assemble a very attractive diversified portfolio of exposure as it is without hunting for something that's going to be much less economically attractive just for the sake of diversity.

Peter Nakada: I'll bring up in this question the issue of terrorism, because the TRIA program, which was renewed in 2007 and became TRIPRA, is set to expire in December 2014. That's a \$100 billion federal backstop against terrorism. So one of things that we've been wondering is will TRIPRA be renewed in 2014? If it's not renewed, how much of that is going to just not be covered by insurers and how much is going to find its way into the insurance and related reinsurance markets? Then can the insurance-linked securities (ILS) market provide the tail coverage that the federal government was once providing?

From a modeling perspective we have a probabilistic model of terrorism and it's been incorporated into bonds in the form of excess mortality as a small portion of the risk in excess mortality bonds. We think that with all those question marks about what's going to happen, that could be a source of new product for the ILS market and a useful purpose that the ILS market can serve in the broader insurance markets.

Standard & Poor's: Do you believe other countries or organizations similar to the World Bank will follow the Mexican government in accessing the cat bond market?

Michael Halsband: I would love to see that happen and I wouldn't limit it only to the country of Mexico and the tremendous success they've have with their Multi-Cat program. I think that this is a very efficient means for governments and quasi-governmental insurance organizations to pass risk to the commercial market rather than holding it themselves.

As we know, ILS investors are more than happy to take on the tail risk that these governments are looking to shed. They include the joint underwriting associations of various states in the U.S. and the quasi-governmental insurance entities that they've set up that are looking to shed this risk when, frankly, the reinsurance market or the insurance market reaches its capacity. I think this is indeed a very efficient means of transferring that risk.

At the end of the day I am a little bit surprised that more of them don't access such risk protection given the success of the various programs. The California Earthquakes Embarcadero Re, as well as Florida, Massachusetts, North Carolina, and others have certainly made some success in accessing the ILS market. The challenging thing, and I want to tread extra carefully here, is that it is an area that is subject to the political environment. By that I mean it's easy for your local government official to come under pressure for shedding the risk in this commercial market. Unfairly so, given the tremendous success that we've witnessed.

But apart from that, I think that is the only frictional element keeping more governments and government-sponsored

insurance companies from entering into the space.

Barney Schauble: We agree that it's a very logical thing to pursue. We think the project work that the World Bank has done with the government in Mexico would make sense in a lot of places. There are exposures at a sovereign level in the U.S. and in other countries; transferring that in a thoughtful and constructive way ahead of time rather than just waiting for an event and then scrambling to figure out how to cover it afterwards would be valuable. It makes more sense for the populations of those countries. It's very wise for the World Bank to try to find a way to avert bad financing consequences down the road, and you can certainly see applying the same logic that was applied in Mexico in a host of other places around the world that are exposed to property catastrophe risk and need an answer.

It may not be that the traditional reinsurance market in those examples is the best answer in that it may be hard to quantify indemnity claims, it may be more important to get swift payments that can then be disbursed as the buyer sees fit. That's why in some cases these sorts of parametric transactions make sense even if that risk isn't a big risk. I think it's a good example of how capital market technology can be used to unlock what is really insurance exposure but that the insurance market doesn't deal with very well. I think that's one of the themes of this discussion, that there are many things that the insurance and reinsurance market deal with very well and there are some other things that are a little bit more challenging for them, and if you can bring investors and clever structuring and advisory type teams, like that the ones that Paul and Michael lead, to the task, then you can get to a better outcome for everybody.

So we believe there will be more, and we hope to see more. We think that there's an enthusiastic market reception for those and, again, there is a real structural reason why they exist.

Paul Schultz: I agree with what's been said already. There is a lot of retained risk around the world, and the difference between an economic loss and an insured loss is substantial and certainly has been substantial for the events we've seen recently.

Given the fiscal pressure around the world, it makes sense to put more of that into third-party capital and not sustain the impact from the economic loss to any one governmental or quasi-governmental entity. I think more and more of these programs are likely to make their way into third-party capital. We can debate which form is the most efficient, and I think that will highly depend on the circumstance. But just for educating and making aware that there is a third-party capital market, whether that's true capital markets or reinsurance markets, I think is extremely important just given the fiscal pressure that every government is under going forward.

Standard & Poor's: Do you think issuers and investors are willing to go back to the old structures where a TRS was used? While it would increase the yield to investors and lower the premium due, it would reintroduce credit risk. Are those memories still too colored by the events of Lehman?

Paul Schultz: Generally the capital behind these transactions is looking to make a return on insurance risk and not combine that with investment risk. Yields from current collateral solutions are quite low, but the attraction of capital into this is to get the benefits of diversifying returns and the opportunities that insurance risk brings to the market. It doesn't make sense to recombine that with credit risk in whatever fashion. So generally I don't see this changing much.

Barney Schauble: We would say that probably more forcefully as we are a direct investor. Introducing credit risk is a terrible idea, it was a bad idea at the time, and the original catastrophe bond structures in the late 1990s were really designed in a much better way than what ultimately caused the Lehman defaults. You saw a real degradation in underlying assets; what they turned into is certainly not what was originally envisioned. Investors really do not want to introduce the risk of contagion. Anything that destroys the purity of the non-correlation is not worth the two or five or

10 or even 50 basis points of additional yields.

Investors don't want the correlation to broader financial markets. They're very happy with the current yields that they're making, and there's no real increase that a sponsor gets in the investor base by virtue of a total return swap. There would be a marginal increase in yield (or decrease in premium cost for protection), but you're not going to change the complexion of the market at all. So even if it's tempting for sponsors because it means that they might pay less or even if it's tempting for banks because it means that they can make money on those transactions, Nephila Capital, as an investor, would not buy those types of transactions. Our underlying investors are very firm about this: they only want the natural catastrophe risk.

Michael Halsband: Barney is a leading investor in the space. Nephila manages a considerable amount of capital that is deployed here and he, as well as a number of others that we've talked to, is keen to preserve the uncorrelated nature of this product. Adding credit risk, in the form of a TRS or tri-party repurchase agreement (repo) or anything that is other than highly rated, close to cash in a box has gained no further interest.

The only thing that I would challenge Barney politely about is, at this point, does it matter? Because if you look back between 2004 and 2007, annual return on collateral was anywhere from two to five percentage points. Clearly after the crisis that return on collateral has gone down considerably and correspondingly the spreads on the cat bonds have made up a considerable amount of the difference that attracted investors into the space. It was predominantly the non-correlation, but I imagine some of it was the premium that investors were getting from this unique asset class.

Peter Nakada: No. If I understood Michael correctly, it's easy to say that doesn't matter when the TED spread is not that wide. But the question is, if the TED spread widens out a lot, are we still going to stick to it? I'm definitely supportive though, of keeping the two separate. If you want credit risk you can create it by combining pure natural catastrophe risk with credit risk.

Standard & Poor's: The next few questions relate to private cat bonds versus the typical 144A. What are the benefits? How much of the reinsurance market do you believe consists of the private cat bonds?

Barney Schauble: I would draw a slightly different distinction, which is you have the 144A bonds and everybody's familiar with the size and scope of that market. There have been private catastrophe bonds that are designed to look a lot like the 144A bonds in that they have a slightly different structure but they still follow a lot of the convention. There is some sort of security, there is some sort of disclosure that's assembled.

I would put into that same category some of these manufactured bonds where somebody writes a contract and creates a note, which we've seen in some tiny amounts in Europe and elsewhere. We think of all of that as the bond market to a certain extent, those are transactions where there's a securities dealer typically involved.

However, the other segment of the private market we think of is much broader, the direct collateralized reinsurance market, which looks very similar to the reinsurance market model. The reinsurance buyer is usually a buyer of protection who wants reinsurance form, but rather than facing just a reinsurer based on the rating, they prefer to have actual collateral in a trust. A private execution of coverage on this basis has the same credit benefit as a catastrophe bond and it allows a buyer to access the investor market without having to go through the high friction process of issuing a catastrophe bond. We think the private bond segment of the bond market as I've just described it is quite small, and I'm sure we'll see other transactions, but we don't see that becoming a big segment of the \$200 billion plus catastrophe bond market each year.

We do however, think that the collateralized reinsurance market, which in many ways augments the catastrophe bond market, is bigger than the catastrophe bond market itself and is continuing to grow. We think that more and more risk will be transferred in that form.

We obviously remain big fans of and big participants in the catastrophe bond market, but the majority of the risk that finds its way into the Nephila platform since 2004/2005 is in the collateralized reinsurance form, not in bond form. And that's been the case for at least five to seven years.

Paul Schultz: There are different types of investors that have a preference for the different types of risks--some investors prefer a more liquid tradable bond and others prefer the risk return characteristics of a more buy-and-hold mentality associated with the illiquidity of standard reinsurance contracts.

So I think you've seen some preferences develop within a different investor base for different types of risk, but generally the capital markets, broadly speaking, have increased assets under management consistently now for the last several years and really we see a tremendous amount of interest to continue that inflow of capital into the space. Most recently it's been driven by pension funds looking to get the benefits of what we all talked about thus far to come into the space, a portion of that will be in cat bonds and a portion of that will be in other types of collateralized products.

The benefit of doing something private is that you can experiment a bit more in terms of coverage and transaction structure, and you're not bringing something to the public, if you will, through a 144A deal. You can have greater interaction with the capital providers and a solution that can be a little bit more tailored to the individual client and the risk tolerance and the willingness to write the risk on behalf of capital.

Peter Nakada: I think the benefits of the typical 144A over the private cat bonds, to take it in another direction, is that it is more liquid and could appeal to a broader, more mainstream investor audience. So to the point that Paul just made, you could imagine the market getting a bit more segmented where the cat bonds become the more commodity type product and that the private becomes more tailored and more bespoke.

Standard & Poor's: In 2010 we saw the first issuance of Vitality Re. Do you foresee cat bond technology being used for other types of insurance risk that capital markets investors would want to take on? One specific issue is reserve funding requirements like the XXX/AXXX Reserve needs that the life companies are dealing with. Do you think there are other lines of business either on the property/casualty side or on the life side that could leverage cat bond technology in the future?

Michael Halsband: I think it is a tremendous tool in capital management for insurance companies. I think frankly the real driver, as it was then and as it is today, is how do the rating agencies think about capital and how much capital do they require the insurance companies to hold? If the rating agencies and the regulators do not oblige insurers to hold considerably more than the economic capital in the transaction, you're not likely to see the space expand.

Why haven't more of the health insurance companies followed the lead of Aetna? Standard & Poor's was abundantly clear with the credit it had given them for this capital management tool. I'm somewhat surprised that others have not followed suit given the efficiency of this structure. I think that it is equally applicable to any other number of low vol loss ratio lines of business that require you to hold more than the economic capital. At the end of the day, with capital right now not being as dear as it has been in the past, there's less interest in such structures. At some point however, [insurers] will begin to appreciate the capital efficiency inherent in these types of structures very much the same way that cat risk funding has picked up in the capital markets. Ultimately, the more "standard" lines of business

will find more efficient ways to hold capital in the tail, freeing such "excess" capital for deployment in the working layers.

Standard & Poor's: Barney, as an investor do you see any other lines of business you'd be considering investing in or as something you'd consider attractive in the near term?

Barney Schauble: Well we think of it in the opposite way, which is rather than saying we would like to get this certain exposure, we look for situations where there's a reason that risk needs to be transferred. We've not been active in the life markets, we don't have people within Nephila today who are experts in life risk, but we do see why that market could develop into a logical place for a lot of risk to be transferred out of the insurance market into the capital markets.

The one area that we are active in, other than catastrophe risk, is weather risks: as an example, financing a wind farm and the developer or banker wants to make sure they get a certain amount of wind to blow to generate power or to buy protection against a shortfall. Agriculture and energy are other sectors that are exposed to variation in weather; the market is very small compared with the size of the natural catastrophe market, and it's relatively new. But again, there's no natural counterparty to that risk, there's a reason why people need to transfer it, especially given their concern about greater volatility nowadays.

So to the extent that there are other markets that emerge, there are reasons why the longevity, mortality, auto, or other insurance markets might see a similar shift in risk transfer patterns, as long as there's a real problem to be solved and as long as we feel with some confidence that we can quantify that exposure, then we're obviously open minded as to what other risk needs to find a home. But we don't really have a list here that says "here are exposures to which investors really like to access."

Standard & Poor's: Paul, do you have any lines that you think could avail themselves of cat bond technologies?

Paul Schultz: We really don't. I do think many of the comments have been made already so I don't want to repeat that. I think if you look at mortality risk and longevity risk, just the size of those risks compared with other types of risks, these are major peak risks. So I think it's likely that there is going to be more third-party capital brought in to support these types of risks and the aggregation of these risks going forward. It's unlikely that a collateralized solution can provide the ultimate benefit, but I think it is extremely likely that third-party capital will take a much larger role in managing these risks over time.

Standard & Poor's: Peter, as far as the modeling's concerned, I know you mentioned terrorism, is there anything else that you think the RMS models could apply themselves to? Any other lines of business?

Peter Nakada: Sure, we think that the biggest one is longevity risk and we've just last year launched our longevity model and have been involved in a couple of significant capital markets transactions. The most recent one being AEGON transferring a significant portion of its longevity risk to the capital markets. So just to give you a ranging estimate, our modeling suggests that there's a chance in 100 of the average western pensioner living five years longer than projected by the actuarial tables, which would cause a \$1 trillion loss in the pension and life insurance industries. So it's a big, big risk.

The other we've seen rather recently in the press is Prudential U.S. being involved in some major de-risking transactions with both General Motors and Verizon. So the end holders of the risk are waking up to the need to transfer it, and the participants are waking up to the need to manage the tail of that and the capital associated with it more efficiently. So we think that this is actually the start of something big.

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