

The 'Changing Shape' of Risk

Insurers protect against the unforeseeable. But according to Mary Trussell, global head of insurance advisory services at KPMG, it's the insurance companies themselves that are now facing enormous unknowns -- everything from rapidly shifting demographics to global climate change to the ways that consumers shop for insurance products. These factors and more are changing the way insurers do business, although often -- as in the case of recent flooding on the East coast of the U.S. -- it isn't clear what insurers can or should cover, or what the government's role should be in bearing part of the risk. In an interview, Neil A. Doherty, Wharton emeritus professor of business economics and public policy, spoke with Trussell about insurance in a world where the only "certainty is that there's a lot of uncertainty." Doherty is faculty director of the KPMG Global Insurance Institute, held annually at Wharton.

And edited transcript of the conversation follows:

Neil A. Doherty: One of the interesting things about the [economic] crisis, and the putative recovery from the crisis, is that we're left with a lot of uncertainty about the future. Maybe the only thing we can predict with certainty is that there's a lot of uncertainty. But your team at KPMG has been looking at potential trends which might shine through this, and important trends which might help shape the future of the insurance industry. Would you like to talk a little bit about some of these trends, and how you see them affecting the challenges and opportunities for insurance companies?

Mary Trussell: That uncertainty is exactly why we focused [this year's Global Insurance Institute] on some of the big issues facing insurers. As you can tell from my accent, I come from the U.K., and it feels at the moment as though we don't know what direction our economy is going in. Most recently, our economic forecaster was [asking]: "Is the economy zigging or is it zagging?" And the one certainty it seemed that insurers were having to face was an increased burden of regulation.

With that uncertain outlook, we felt that it was timely to focus on what we've described as some of the mega trends potentially driving demand for insurance -- things like the changes in population demographics. People are living longer.... Particularly with some medical advances, detecting more cancers [and treating] heart disease, we're now seeing much broader cohorts living into their 70s, 80s and 90s.

The other big trend -- if I think about Southeast Asia, where I've been based the last three years -- is big changes in the instance of child birth and the role of women in the economy. That's also having a really significant impact on the demand for insurance. For example, if you look at Korea, the rate of childbirth in

the population has dropped almost by half in ten years, as the population has become more educated and more women are entering the workforce. And as populations [grow smaller], people can see that they need to save for retirement. That really creates an environment that has a lot of potential for insurance. So that's one piece of the equation.

[As for] other things that have a less positive potential, just think about some of the changes in the environment. Relatively few people now question climate change. But the other big impact is not only what's actually going on in the environment, but really as populations are getting wealthier, and as we're getting more urbanized, that's actually creating greater exposure to risk. We sometimes talk about the shape of risk changing, so clearly that's something that insurers need to be very alive to. And that poses really significant issues.

...What else is going on? Well, lots of technological change. That can feel like both a blessing and a burden. Everybody these days wants everything to be on 24/7. We've gone from wanting to deal with things online to wanting to deal with things through smartphones and tablets. What are insurers doing to actually make sure their products are front of mind for their consumers? But also importantly, as customers are interacting with them in the digital world rather than face to face, that [creates] a vast array of data, and a lot of the more forward-looking insurers are starting to mine that data, starting to use it to predict not only how to price their products, but also how to design them and actually tailor products to customers' needs.

And there's also a huge change in individuals' preferences, and a really significant loss of trust [following the] global financial crisis. There was a short piece in the comment column [of today's paper] by the co-chief executive of Deutsche Bank, saying how unfortunate it was that at social events, nobody wanted to talk to him because he was a banker. Well, the bad news for insurers is that if you look, for example, at the Edelman Trust Barometer, which measures the public's trust in institutions, I'm afraid to say that insurers are grouped with the broader financial services institutions; they are even less trusted than banks.

So, that's a very rapid tour around some of these issues....

Doherty: You identified some of the major trends, such as [change] in population, which is obviously not only going to generate demand in the near future, but also is going to affect the age distribution in the long term and maybe exacerbate some of the aging population issues which we've got in the U.S. Global climate change is another one which has some interesting implications about how risk is transferred between people and what's the government's role in bearing part of this risk. For example, we can imagine that climate change will alter the values of properties in different locations. It might make some locations uninhabitable. And there are risks which are of a mega-duration.

Trussell: These are really difficult risks [to figure out how to address]. It involves dealing with governments, dealing with corporates, dealing with individuals. And what the [right] forum is to resolve some of those issues, I think, is actually very hard to see. Thinking about some of the flooding that took place [recently] -- well, clearly there are lots of issues close to home here on the northeastern seaboard, but also in Australia last year. There are a number of government commissions looking at those. The thing that was quite extraordinary is that some insurers were fighting flood coverage for their customers and others weren't. And [there were not] any very clear answers as to how some of those really difficult issues were going to be addressed.

One thing that we can see is that there is the potential that [these issues] are only going to become more significant. That's not only because of some of these trends in the environment, but also because of the pace at which populations are urbanizing. That means that the concentrations of risk are really building up very, very significantly. And one of the very interesting examples of that is the floods in Thailand last year. A lot of people think of Thailand as a holiday destination. They think of it as having very beautiful beaches. Likely, they probably think of it as still a very largely agricultural country in the middle.

Well, actually there's a huge amount of consumer electronics assembly and manufacturing that takes place there. And the thing that was particularly critical was that in the early part of the year, there was the terrible tsunami in Japan. So a lot of those Japanese light electronics, even hard disk manufacturers, were able to shift their supply chains out of Japan into Thailand. And Thailand had significantly greater exposure to flooding than I think perhaps any insurer had expected. I mean, it's actually a great success story for the insurance industry.

Doherty: That's a good example of how when we think about these potential trends, we can make strategic decisions now to anticipate what might happen and protect ourselves, to manage that risk. Can you give some other examples of opportunities which might be available to insurance companies, given the distress in the insurance industry these days? Or maybe things they can do proactively to address population change, either to defend against it or find opportunities in it?

Trussell: One thing that I think is very interesting is some of the trends around micro insurance. Some insurers have historically had some very significant questions around what does this mean for us? Is this real insurance? Is it something that actually fits our business model?

Insurance has huge social value. If you think about it, part of the role of insurance is to buffer risk and to transfer risk. It's got very significant practical implications for populations [in developing countries]. And there are some very, very interesting practical examples. For example, in Kenya we've seen the development of crop insurance. It's a very smart product. It's a smart product that actually is paying out on an index. If your crop is subject to frost and it's going to be damaged, you don't

actually have to prove loss because there are statistics out there. Now, a lot of this is actually transacted through mobile phones. So it's a great example of insurers being forced to be very lean and nimble. And one of the things I think is very interesting is whether there are applications for that [kind of product] in the more developed parts of the world.

Doherty: That is really interesting. I was recently looking at World Bank's vulnerability index across various countries. People in some of the African states, and some of the poorer Asian states, are very, very high on this vulnerability index. It seems to me that the capacity of the insurance industry is going to be stretched when it comes to talking about some of these mega climate risks. But that same capacity could add immense social value for a lot of the micro insurance programs you're talking about. But is this a viable economic model? Are the numbers there? Does it have to be driven by profit, or are there some other models by which the insurance industry can participate here?

Trussell: I think a lot of these programs are initially being catalyzed through NGOs. I personally think there is a role for insurers, and for insurers to make profit from this. But it does force them to live within very slender means. And that's something that is going to become increasingly important. There's a huge focus on more customer-focused products, products that are focused around customer needs. And I think insurers that can take cost out of their business model are some of the ones who are going to be best positioned for the future.

Doherty: Yes, because for some of these products, the [premiums are] tiny.... It's maybe a \$10 premium, or perhaps less than that.

Trussell: Yes.

Doherty: And with that, you've got to provide coverage and the distribution as well, and the claim settlement -- everything involved in that.

Trussell: But there are really smart things that you can do through mobile payments, through a mobile phone. There's a great example of using the camera on the back of a smartphone to swipe the barcode on things like your bags of fertilizer or your bags of seeds. What a great application of technology. If you think about how lean that is, it's taking a lot of the intermediaries out of the process. And so it's taking cost out of the process.

Doherty: Are there lessons there which we can bring back to Europe or to the United States?

Trussell: Well, that is one of the most interesting examples that I've come across. I really think there is more that can be done. I've spent the last three years living in China, and there's much, much greater willingness and propensity to want to [perform transactions], such as payments, using your mobile. Here in the U.S., or



certainly in Europe where I come from, there's a little bit more reluctance to do that. But we might find that in future there isn't that much choice -- particularly given some of the economic uncertainties that are out there.

One of the questions we [also] posed [during the Institute] was: Is insurance investable? I think a lot of investors have some really hard questions for the industry. And in order to achieve attractive returns, insurers are going to have to become much more nimble, much more agile.