

# Center for American Progress



## **SPECIAL PRESENTATION**

**“MANAGING ECONOMIC RISK IN THE AGE OF  
TERROR: THE ROLE OF GOVERNMENT IN THE  
PRIVATE INSURANCE MARKET.”**

**MODERATED BY:**

**P.J. CROWLEY,  
SENIOR FELLOW AND DIRECTOR OF HOMELAND  
SECURITY, CENTER FOR AMERICAN PROGRESS**

**AND**

**DR. CHRISTIAN WELLER,  
SENIOR FELLOW AND SENIOR ECONOMIST,  
CENTER FOR AMERICAN PROGRESS**

**9:00 AM – 12:00 PM  
MONDAY, MAY 21, 2007**

**TRANSCRIPT PROVIDED BY  
DC TRANSCRIPTION & MEDIA REPURPOSING**

**FEATURED PANELISTS:**

**JANICE M. ABRAHAM,  
PRESIDENT AND CEO,  
UNITED EDUCATORS INSURANCE**

**FRANK J. CILLUFFO,  
ASSOCIATE VICE PRESIDENT FOR HOMELAND  
SECURITY, THE GEORGE WASHINGTON UNIVERSITY**

**DR. LLOYD DIXON,  
SENIOR ECONOMIST, RAND**

**MICHAEL T. GRAY,  
PRESIDENT AND DIRECTOR,  
GRAY INSURANCE COMPANY**

**DR. ERWANN MICHEL-KERJAN,  
MANAGING DIRECTOR, RISK MANAGEMENT AND  
DECISION PROCESSES CENTER, THE WHARTON  
SCHOOL, UNIVERSITY OF PENNSYLVANIA**

**CLIFTON E. (CHIP) RODGERS, JR.,  
SENIOR VICE PRESIDENT,  
REAL ESTATE ROUNDTABLE**

**BRADLEY WOOD,  
SENIOR VICE PRESIDENT OF RISK  
MANAGEMENT, MARRIOTT INTERNATIONAL, INC**

MR. P.J. CROWLEY: Obviously, as a broad policy objective, one of the central Homeland Security missions is to minimize the impact of potential disaster and to effect recovery as quickly and as efficiently as possible. In terms of terrorism, the conflict that we confront today is being waged in cities around the world and among civilian populations, and controlling the impact of a terrorism attack can determine which side can credibly declare victory.

As a corollary, any definition of national preparedness has to incorporate business continuity as one of its central elements. At the same time, we can see in a different context – Hurricane Katrina – that recovery is extremely complex and involves difficult decisions across various levels of government and involves the cumulative impact of calculations and decisions by individual people and businesses. But there is a challenge for the United States almost six years after 9/11, and that is there is still fundamental disagreement regarding the responsibilities of government and the private sector in what has been termed the War on Terror. Actually, there's disagreement on that as well. There is no consensus here in Washington for example as to what exactly to call this challenge that we confront. Terrorism risk insurance follows this policy fault line and we are going to spend the next three hours discussing the issue.

In late 2002, Congress passed TRIA, the Terrorism Risk Insurance Act. It was extended two years ago and expires at the end of this year. Congress is expected to take up the issue in the coming weeks.

TRIA established a system of shared responsibility between the government and the private sector subject to a series of conditions regarding the level of loss before government support is triggered and the percentage of loss that is retained by individual insurance companies. Inherent in the conditions that TRIA establish is a fundamental and unresolved question. Should the government have a role in the private insurance market? Does government involvement create or inhibit such a market? Is the relationship that currently exists between the government and the private sector temporary or permanent? And if so, if it is permanent, how should it work?

Four years ago, there was a bit of a debate as to whether this was needed at all, although now four years later, by most reasonable metrics TRIA has worked. It has brought stability to private markets, if not certainty. It's possible to conclude, however, from the way in which TRIA extension was structured two years ago that the presumption behind the law is that the government role is temporary. This is at odds with the manner in which the threat of terrorism is characterized more broadly by our national leaders. The president stresses, and rightfully so, that this is a generational struggle and terrorism is now a permanent part of our security environment. And yet the law as structured may not reflect the ability or the willingness of insurance industry to cope with

the risk of terrorism, particularly across different lines of insurance in different parts of the country or insurance for different types of clients.

So we have two panels for you this morning that have complementary points of view. In the first, we have assembled experts to analyze risk management and security, to determine what has happened with insurance markets in the private sector since 9/11. They will compare the experience in the United States with other industrialized countries that have used different mechanisms to achieve the same policy purpose.

We'll discuss a variety of issues associated with the prospective renewal of TRIA as well. If Congress supports renewal, for how long? How will the market respond if risks such as chemical, biological, nuclear, and radiological risks are explicitly included? What should the government expect in return for the support provided to insurance and business markets? What should be done now and over the long term? What is the impact of various conditions on market behavior? Should a different approach be considered over the long term, perhaps shifting from a purely legislative approach to long term institutional approach?

We'll address those same questions in the second panel with representatives from the insurance industry and the real estate and services industries and reflect on the same issue from their unique vantage point.

With that, it is my pleasure to introduce the first panel. To my right is Dr. Lloyd Dixon. He is a senior economist at the RAND Corporation recently named one of the Institute for Civil Justice, or ICJ, Distinguished Scholars for 2006-2007, and is recognized for his leadership in developing an agenda on insurance, liability, and compensation for catastrophic events.

To his right is Dr. Erwann O. Michel-Kerjan. He is managing director of the Wharton School of Risk Management and Decision Processes Center, a center with over 20 years of experience in the development of strategies and policies for dealing with extreme events. I was joking with Erwann earlier that if you're in the homeland security business – Erwann has a new book out called *Seeds of Disaster, Roots of Response* – most every book on homeland security has disaster very prominently featured in its title.

And finally, the anchor of our panel is Frank J. Cilluffo. He is the associate vice president for homeland security and director of the Homeland Security Policy Institute at the George Washington University. He leads the University's homeland security efforts on policy, research, education, and training and directs the multi-disciplinary Homeland Security Policy Institute which is unique and nonpartisan "think and do tank" that builds bridges for homeland security theory and practice. And with that, we'll start with Erwann.

MR. ERWANN MICHEL-KERJAN: Thanks a lot. Thanks P.J. for the invitation and to PCIA also. We've working with the Association for close to 10 years now as a Center. As P.J. mentioned, I'm the managing director Center for Risk Management and

Decision Processes. How do you end up making decisions at the end of the day? Just for you to know, the Center's been created about 25 years ago and from day one – I was not there at that time – from day one, Harry Kunreuther and a few others said: well, these large scale disasters are really going to be quite important in the business and public policy debate in the coming years, so we don't do small accidents, we do catastrophic risks, natural disasters, 9/11 – everything really big. If you think of a something big, we are working on it, okay?

I was – I work on these issues for about 10 years now, originally in France and for about five years now, here in the U.S. When we were talking in preparation of the panel I thought will share with you for five or seven minutes the results of two studies we published recently, one with Morgan Stanley which is called *Puzzling Evidence from Terrorism Insurance Markets* in the U.S. and in Europe and another one which is called – with my colleague Howard Kunreuther – *Looking Beyond TRIA* where we put together quite substantive data analysis, and I think that's really what is missing today in the debate, in the political debate in the how TRIA should be extended or not. It will good to have some data to back that up.

So I'm a market believer. I'm at the Wharton School. So I will try to explain why a market operates or fail to operate, depending on what type of relationship they have with politics and, at the end of the day, it's really improving both security and competitiveness of the U.S. economy.

When it comes to homeland security, really you have two what I think of as national security paradoxes in a sense. You really have two worlds that rarely talk to each other and I'm glad that today we're going to talk each other. The first one is a team of people who are supposed to prevent the next terrorist attack to happen – homeland security, intel people, national security – but really their job is to prevent the next one. And then you have people in charge of – “Oh, yes, Mr. President, what's going to happen if we fail to prevent that, who's going to pay for that?” – what people call the recovery aspect, most of it on insurance, reinsurance, public funding. And these two worlds rarely talk to each other. You have the Homeland Security Department in charge of homeland security; the Treasury Department in charge of TRIA; you have different committees in Congress, most of it that don't want to talk to each other because that's different jurisdictions. Even within companies you have a chief risk officer, who's supposed to take care of the risk management, and the chief financial officer, who's going to sign the bill for the insurance coverage. These guys don't talk to each other. It's quite interesting.

So the question for you today is very simple. Imagine we just suffered a large scale attack yesterday morning, who's going to pay for that? Very, very trivial but quite critical question. You cannot understand TRIA or terrorism insurance markets in the U.S. or in Europe if you don't understand the large spectrum of different stakeholders who have something to say and to act upon, whether it's public or private sector policies.

Insurance is only one tool you can use to deal with the economic consequence of large scale disasters. You can decide to go to the financial market and spread the cost of these attacks against your shareholders if you're a public company. You can even go to financial market to try to securitize the risk. I mean, there are different instruments that can be used.

So really TRIA is just one answer. I believe that's a partially good answer, partially not a good answer, but that's just one answer.

Two years ago – I brought the copies of the public document here – we had a quite substantive study at Wharton working with a first circle of about 25 companies and think tanks, including PCIA and RAND and others, trying to really go into details of this TRIA market, better understand the threats. What are the threats today? How terrorism is evolving? How the architecture of al Qaeda today is totally different than it used to be five years ago for instance. If you don't understand, you're not going to understand this market. So we work with many organizations beyond that first circle, about 100 different organizations, and I think that was a quite important document for Congress. And I guess as you can see we have some friends at the *Economist* saying it was a pretty good study.

The reason why I'm talking about this study now before I turn to a comparison of different markets is because while, as P.J. mentioned, while TRIA was basically renewed in the same design that it had been created three years earlier, we increase the portion of the private sector, but basically that's the same one. So I guess some of our conclusions remain true today. Pros and cons of TRIA, well there are a lot of pros and a lot of cons. I'm just listing a few of them. Several limitations: first of all equity issues. There are major equity issues in TRIA. Think about the recoupment, mandatory recoupment, which means that for those of you are not familiar with TRIA is that the Fed will pay upfront some part of the losses that will be reimbursed afterwards.

So that's what they call mandatory recoupment, but that recoupment is recouped against all commercial policy holders whether or not you decide to go for terrorism coverage. So you may end up deciding not to be covered but paying for others who suffered the loss – Part 1. Part 2: partial coverage. Why is it that that domestic terrorism is not included in TRIA? I don't get the point here. I want to be the President facing family of victims trying to explain that because, as the terrorist attack was perpetrated by a U.S. citizen or a group of U.S. citizens, they're not being covered. So I would urge the inclusion of domestic terrorism.

CBRN, that's included but at a very low take-up rate, so I'm sure we will talk about later on today. Free reinsurance by the Fed: well, that's nice, but why is that? Well, it might be the only country that gives free reinsurance here. No link to mitigation and security measure in place, and I'm sure I will hear from Frank about that. The price is totally independent of every security measure you put in place. And something that people haven't thought about that but since we're talking but potentially extended TRIA for a long term, not just two or three years, perhaps 10 years, there is a question – policy question: okay, what will happen to this market if we extend TRIA indefinitely? And in

another study looking beyond TRIA what you have is we got data on the top 400 insurance companies. I'm trying to guess what will happen if TRIA was extended to 2025 for instance. In that case I'm quite sure that large insurance companies with very small deductible will start gaming TRIA, and we've a section on that in the study. How can you game the system here? So we'll try to do that.

Some of the limitations here, but there are a lot of pros as a matter of fact. Reduced uncertainty: you know you're covered or not. Taxpayer won't pay a penny under TRIA today, up to 25 – 27.5 billion, which is with the current take-up rate, about the size of 9/11 attack. Some say that the private market is bailed out here. Well, it isn't quite clear. It will be for very large scale disasters, but not in the size of 9/11.

I will talk in a minute about take-up rate – it went up and has stabilized. I think we have reached a plateau now and prices went down.

One thing that I would like to bring to you as an open question for discussion after is: well today, we don't really understand who is covered and who is not in the U.S. or in many countries actually. There is no systematic data collection by any government body of who is covered and who is not. The only data we got are from surveys or from our friends Marsh & McLennan and the two large brokers about their clients, but not about the clients of others. So I think we can do a better job.

So let me turn to the topic before I turn to Lloyd. Two points: take-up rates, how many companies are covered, how many are not. And can you see that or – I guess if you're in the back you have – yes, a close-up screen. Well, the bottom line here is that huge increase in take-up rates. I'm talking here only about the Marsh & McLennan clients. I'm talking about data on 1,600 large companies, large companies – several hundred million dollars of total insured value. And what you see over time is a huge increase in many different industry sectors and that's from 2003, '04 and '05 and we just got the data for 2006 a few weeks ago. That's about the same, slightly higher.

When I turned to Congress with these data, I asked them: is that good or bad? Compared to what? Well, compared to France and Spain, two countries that suffered many terrorist attacks in the past few decades, that's low. In these two countries, terrorism insurance is mandatory. You have to be covered as a company, so 100 percent, including CBRN in France, actually. France is today the largest – the country that provides the largest coverage for terrorist attack, including CBRN. Compared to the UK – well, we don't know. There is no data collection in the UK. We're talking now to Steve Atkins, who's the chairman of Pool Re, to push the British government to establish a data collection, the same way we try to put the U.S. government to do that.

Compared to Germany – well interesting here is the German program. There are two tiers. The first one is for low. I mean, low accounts – small accounts. If you're a company with total insured valued lower than 25 million Euros, a decent company but small company at the same time, 100 percent covered. Terrorism is included in fire policy. But the interesting finding is for larger accounts, so companies with total insured

value higher than \$25 million we found very, very low take-up rate – 3 percent. It's quite low, okay? So it's about 1,000 companies covered against terrorism out of 40,000 companies eligible for Extremus in Germany, okay?

So part number one, take-up rate, you have to compare that with other industry or other countries if you want to have something to say. Second point and we'll hang on that, what about the pricing here? Well, in the same spirit, is that high or low – actually you have – I think you have, in your handouts, you have the studies, so you don't have to look at the data here. You have everything in the Morgan Stanley study. Huge decrease in pricing, except for financial institutions, most of them in New York City.

Well, basically what does that mean? I mean, the measure everybody's using is percentage of premium over total insured value. They give you some figures – you cannot read on the left part, so I'll just translate it for you. Basically, you're paying \$11,000 if you are a company with \$100 million total insured value. Is that a good deal or bargain? I don't know with the reference point here. Honestly, we don't have a clue of the likelihood of the next terrorist attack on U.S. soil. So if you don't have a likelihood or a distribution of probabilities, it's quite hard to price with coverage. But what we've done is the same exercise, getting access to different European countries.

We worked with Bruno Gas, the chairman of the German Pool, who was kind enough after a few years of negotiation to give us his entire portfolio, so we know everything about Extremus now. We work with the UK as well. And we work with Marsh & McLennan, who run civil studies for us. And when we started this study, we said, well, it would be good to know how many times more expensive is terrorism insurance in the U.S. compared to European countries. Could you guess how many times higher it is in the U.S. versus Germany, for instance? One time, two times, three times? What we found is that the terrorism insurance prices in the U.S. are up to four times lower than in Germany, and as a matter of fact lower than it is in the UK today.

I'm not going to go over all the details of that chart, but just for you to understand on the difference, depending on the size of the company and also depending on the measure of price, and we were talking about that, today's measure of price – everybody in the U.S. is using is the wrong one. The measure of price we are using today is premium over total insured value. Well, I'm sorry, the real price measure is premium over a quantity of insurance you're buying. The real measure of price should be premium over the difference between your limits on your policy and your deductible.

If you do agree with that, well you will appreciate this comparison because we got access to the 1,600 companies of the Marsh & McLennan portfolio, and for each of them we've done the comparison between two measures of price. And, obviously, you see quite an interesting difference, up to three times higher, which makes sense. If you're a broker, you will pick up the price measure that would give you the lowest price and you can sell more terrorism insurance. And so that's the differentiation here. And on the right side, you see the difference between the U.S. and Germany, depending on the size,

depending on the industry. And, in the study, you will have that for different industries, including financial institutions.

So I'll end on that. Two questions, it will be a segue for Lloyd. First one is very simple: is terrorism coverage under TRIA in 2007 drastically underpriced? And because I'm a market believer, I think that's a quite interesting question.

The next one is: well, okay but if we don't suffer any terrorist attack, we don't really care because at the end of the day, the old debate has been how insurance companies have reacted to TRIA in place, which is not the right question. I believe and we believe at Wharton, I think, that the right question is what's going to happen after the next terrorist attack. And that's the real test. And unless you simulate, as RAND and Wharton have done, many scenarios to understand who's going to pay what at the end of the day, well, you have a nice design of program but really you don't know anything about it. It has not been stressed. And what will happen, as Congress is now pushing for the future of TRIA, I would say, what will happen with TRIA in the current design? What will happen if TRIA is modified and modified for how long, as P.J. mentioned? And as I mentioned, if it's extended for 10 years, it's quite different than just an extension for two years and what would happen with TRIA.

Again, people are talking about the terrorism insurance market. I believe is a national security issue, much more than an insurance issue. Thank you.

MR. LLOYD DIXON: Okay. Good morning. So again, I'm Lloyd Dixon from RAND Corporation. I'm in Santa Monica. And I'm going to talk a little bit about a study that's coming out in the next few weeks from the Center for Terrorism Risk Management Policy at RAND which was started soon after 9/11 and was formed to combine RAND's expertise on terrorism and security issues that it had been building up for many decades with expertise on insurance liability and compensation issues which preexisted at RAND. So I'm currently the research director of that organization and we have a number of studies underway that will provide some insight into TRIA, as well as other issues related to terrorism.

So I'm going to talk about TRIA today and the idea of the topic of assessing the policy options for renewing the Terrorism Risk Insurance Act. And let me start by just saying that the appropriate government role in the market for terrorism insurance is hard to assess because of many very difficult-to-estimate uncertainties in the markets. And I hope you can see the slide and, on the left column there, it gives you some examples of areas of uncertainty attack type. What kind of attack: conventional or CBRN. How frequent attacks will be, or might be. How big they might be? What the attack scaling is. There is also a lot of uncertainty about different aspects of the insurance industry, of what kind of surplus will be available to the industry to pay claims. Of what the take-up rates are for conventional terrorism coverage, as well as CBRN terrorism coverage. Also uncertainties in the current TRIA program about liability for claims over the \$100 billion TRIA cap. What will happen, what will be the resolution of those claims? And so our approach has been to – from the point of view of policymaker – when there's that kind of

uncertainty, policies that are robust perform well over a broad range of different future scenarios or different possible futures are desirable. And we've been using what we've called our robust decision making tools to assess the performance of alternative government interventions in terrorism insurance markets over a wide range of these plausible future outcomes, plausible futures.

Now, what I'm going to talk to you today is some of the initial findings we have for outcomes with TRIA versus what would happen if TRIA were to expire versus what would happen if the federal government decided to extend TRIA to cover mandatory – to cover CBRN attacks in a very straightforward way and talk to you a little bit about what we are projecting as the effects of these three different policies.

So what we do, as on the right hand column, that just gives you an idea of the range of scenarios we look at. So we look at different types of conventional attacks, four different types of CBRN attacks, different scaling. That's how much loss they are and they range from up to \$1.8 trillion, I think, for our largest attack. We look at the uncertainty over what take-up rates currently are. So we look at ranges for conventional take-up rates on property policies for conventional attacks between 55 and 65 percent, consistent with what Erwann was just saying. And then based on the existing literature on what would happen to take-up rates without TRIA, we see them dropping anywhere down something like 15 to 50 percent. And that's a wide range, but that tells you something about the uncertainty of what would happen to take-up rates if TRIA expired. So we look at future scenarios where the take-up rate without TRIA falls anywhere in that range.

Now, also one of the key issues with TRIA now is that the take-up rate for CBRN coverage on property policies is very low, somewhere in that 3 to 10 percent range. And just as an aside, workers comp covers losses regardless of the cause. So that's about the property take-up rate.

So what we do is – given these ranges of parameters, we come up with thousands of different scenarios and this next chart is the way we have of summarizing the results, so each of those dots represents a different scenario. And on the horizontal axis you see the cost to taxpayers in that scenario, and those are cost both for payments made through the TRIA program, as well as taxpayer or government payments for uninsured losses. And we have assumptions over a wide range of what the government will come in and pay for uninsured losses. So that ranges from \$0 to \$50 billion.

And then the vertical axis shows the fraction of losses that are uncompensated, either by insurance, or by government payments for uninsured losses. And then the color of the dot shows the percent of the industry surplus – the insurance industry surplus that's used to pay the claims, so green meaning less than 10 percent and the other colors for higher proportions. And we use that 10 percent cutoff in part because the credit rating agencies – Standard & Poor's, A.M. Best, for example – think if you have losses that use more than 10 percent of the industry surplus, it is creating some rating and problems for the industry or for the particular firm affected. So what this graph shows is that you can

see for a large number of events with TRIA, the costs to taxpayers are on the low side, and the proportion of losses, the fraction of losses that are compensated are down, lower than 20 percent for the most part.

Okay, so then now, this a chart that compares those same scenarios with TRIA, which is the same chart you saw on the left, and then without TRIA if TRIA were allowed to expire. And this is for conventional attacks. And you can see that what happens is – you move to the right chart there – is that the fraction of losses uncompensated rises a great deal in a large number of scenarios. And so what the headline of that chart is what if TRIA is allowed to expire, for some scenarios, you'll see a shift of risk from taxpayers to victims – and again, these are businesses. TRIA is about business and commercial insurance. And what's driving these results is the take-up rate falls which leaves more businesses unprotected and drives up that fraction of losses uncompensated.

Now, also in what's driving the cost to taxpayers, what happens to taxpayers depends first on the change of outlays to the program that are the government payments through TRIA, as well as change in government compensated for – compensation for uninsured losses. And so without TRIA, what happens is the government no longer pays to the program, but you'd expect that the government payments for uninsured losses will go up because there are fewer firms with terrorism insurance, more uninsured losses, higher government payments for uninsured losses.

So this is one of our principal findings of this first part of the study – the intuition or what you'll often hear is that TRIA costs taxpayers money, but what we find is the opposite – is that if TRIA is allowed to expire, the costs to taxpayers will be higher for the majority of conventional attacks scenarios. So what this chart shows is for each of those scenarios, again, on the horizontal axis the cost to taxpayers with TRIA, on the vertical axis the cost to taxpayers without TRIA. And so if you're in – if you're below that red line, that 45 degree line – those are scenarios where TRIA costs more. The scenario costs more and if you're above the vertical – the red line there, TRIA costs less. It costs the taxpayers less. In the majority of scenarios, 76 percent of the scenarios we look at, TRIA actually costs less than allowing it to expire.

Then we extend this analysis to look at the expected cost to taxpayers over – considering the probabilities of different attacks – we partner the firm Risk Management Solutions to look at the terrorism attacks probabilities and terrorism loss models. And we find the expected cost to taxpayers is lower over a wide range of assumptions anchored around existing estimates of the probability of large attacks. I think one of the contributions of our study is to address the issue that TRIA is actually costing taxpayers more when, over a wide range of assumptions, the expected cost to taxpayers is less with TRIA than without TRIA.

Okay, so that was for conventional attacks. Now let's look at CBRN attacks, and what we find is that TRIA has major consequences for insurers or benefits for insurers, but really less impact on victims, businesses affected by the attacks and taxpayers.

Okay, so now what these two charts are are scenarios for CBRN attacks. So there are thousands of dots on there for different scenarios that we're looking at – different plausible futures. On the left is TRIA. On the right is no government program, allowing TRIA to expire. The same axis, although the – both of them extend out further because the CBRN attacks are much larger. So you can have cost to taxpayers up to over a trillion dollars in these scenarios. So what you see just looking at the shape of those is that for both taxpayers and the fraction of losses uncompensated or the businesses that are affected, looks kind of comparable.

So that gives you the result that TRIA is really not doing much for CBRN attacks which is I think to be expected. When TRIA was designed, I don't think it was designed with CBRN in mind particularly, and TRIA comes up short in dealing with CBRN attacks. It does – you do see the difference in colors on those two charts and the bottom line there is that the TRIA cap, the \$100 billion cap, whether it's soft or hard and we can go into that later – it does protect the insurance industry to some extent.

So given TRIA's mixed performance for CBRN attacks, Congress is considering different extensions that might be added to TRIA to deal with CBRN attacks. And so what we did for this study is look at a very simple one and that is just to keep the existing structure of TRIA in place, same deductible, same co-pay, but now require insurers to have a mandatory offer of both CBRN coverage and conventional coverage. So when insurers offer terrorism coverage, it covers both CBRN and conventional. Everything else is the same in TRIA.

So what we find for that is that the results are not very appealing overall for a simple or sometimes what we call a naïve extension of TRIA to cover CBRN. And what we find is that – this slide shows what we find for CBRN attacks – so, for a CBRN attack – and you have this new TRIA with the mandatory CBRN offer – I've got three charts here. One is the one with TRIA. The bottom one was no government and those reproduce the previous ones we saw. And now we have the one on the right there which is TRIA with the mandatory CBRN offer, and you can see, without going into the details, that the results are pretty much the same. That, basically, requiring insurers to offer mandatory CBRN, doesn't end up increasing the take-up rate for CBRN coverage very much. The bottom line is driving that, and the reason is that there's a significant increase in the price of insurance to provide this coverage and so you don't get high take-up rates in many of the scenarios we examine.

So we conclude for now that that extension of TRIA will not do much for CBRN attacks and then we also find that for conventional attacks that that kind of extension of TRIA can actually produce unintended and undesirable consequences. So what this chart shows is same set of graphs as the previous one, but now for conventional attacks. What happens if – for conventional attacks with this new TRIA. And what we find is that in doing this, the take-up rates for conventional coverage will go down, and so if you extend TRIA in this way, you'll end up with outcomes that kind of look almost as though you let the program expire.

So what you see there is the – on the two left charts are the scenarios with TRIA and no government programs, same ones you saw before. And now what the outcomes look like with this mandatory CBRN offer. And they're looking – you can just see that how high up on the vertical axis those dots go – those outcomes are looking a lot more like there's not a government program. So the intuition there is that this kind of extension ends up producing take-up rates for conventional coverage from the 60 percent that we start with with TRIA, enough that you almost looks like you just let TRIA expire.

So the implications – so the bottom line – and this is my last slide – bottom line from our current interim study is – the interim findings for our study is that TRIA has important positive effects on the market for terrorism insurance for conventional attacks and the expected losses, the expected payments by taxpayers, are lower under TRIA than without TRIA.

Second point is that TRIA does not perform much better for businesses and taxpayers than having no program at all. So I think, as everybody knows, TRIA is very limited when it comes to CBRN. And that, when amending TRIA to require a mandatory CBRN offer without other changes in the program, there's little upside and may have major unintended disadvantages, and so Congress needs to be very careful in considering how to extend TRIA to cover CBRN. And what we're doing in our report that will out by the end of the summer is looking at various other ways to extend the program or modify the program to deal with CBRN, in particular, looking at different deductibles, different co-pays, and different caps.

Currently, the \$100 billion cap is thought by many in the industry to be soft, meaning that the insurance industry will still be responsible for some insured losses over \$100 billion, and so we're looking at the effects of what if you tried – you make that cap hard. One way to make that hard is to have the government actually pay claims over \$100 billion to a certain limit. So we're looking at having the governments take up claims over insured losses over \$100 billion up to some limit. Okay. Thank you.

MR. CROWLEY: Frank?

MR. FRANK CILLUFFO: Thank you P.J. and I'll try to be brief, not my strong suit. As anyone who knows me knows, I've rarely had an unspoken thought, but I think my colleagues here on the panel have addressed the issues exceedingly well. And I might note that it has been a couple of years that I've looked at these issues in any sort of heavy, earnest way, and these were the two people I actually turned to when I was looking at it in a substantive way. But, sadly, I come to notice that many of the same questions we were asking two years ago are the same questions facing decision makers today, which I don't find to be all that positive.

Secondly, let me also, just for the purposes of this, we're not in the business necessarily of making friends – more to spark discussions – so please take my comments in that spirit.

If I were to have to sum where we are today in a lot of these issues, and I think TRIA is merely a microcosm of a much broader set of issues, we've all heard the public-private partnership and the need for that. I'd have to say long on nouns, short on verbs – awful lot of talk, not necessarily a whole lot of action.

Let me also note that to me TRIA should be about much more than the insurance sector. Quite honestly, it should be about enhancing security for the American people, the owners and operators of the critical infrastructures that underpin our economy and ultimately that should be the enabler that we're all looking to, not simply to protect the insurance sector from catastrophic attacks.

Let me also remind people – and I think that Erwann highlighted this very well – you've got to put the tee back in TRIA. It's the Terrorism Risk Insurance Act. Yet the reality is as anyone addressing the issues – and no, I don't mean to denigrate my very thoughtful economists next to me – but the reality is the security community needs to have a bite of the apple, and, quite simply, they have not. At the federal level, it's driven by the Department of Treasury; in Congress, the banking committees.

When I've discussed this with the Homeland Security leadership in Congress, they're at best aware of the act, not much more. And at the executive branch you have some of the same challenges. And I'm not suggesting that none of the crosswalk has occurred, but certainly not as much as we would all like. We actually did a report a while ago that suggests that giving – always easy to tell Congress what to do, but suggesting that jurisdiction be opened to include the departments – the homeland security committees and judiciary committees and also recommended creating a deputy assistant to the president that could crosswalk HSC as well as the National Economic Council. Sadly, I don't think any of that has occurred.

To me, and I'll try to broaden the set discussion a little further, I think we need to look at a more fundamental set of questions and that is how far does the marketplace take security? From there, how far do we need to be? The delta between where the marketplace takes, and clearly it doesn't take it far enough, and the delta to where we want to be is where we have a very important space that I think we need to define what incentives and or disincentives are to get us from where we are to where we need to be. And I think that it's somewhat negligent that we haven't asked how much is enough.

And I'm not suggesting all the onus lay on one sector, whether it's the public sector or the private sector. Quite honestly, it has to be done in conjunction. But I think Uncle Sam needs to lead by example, get its own house in order, recognize that the bar is high and the same could be suggested to the private sector. I think what we're really talking about is a need for standards. I'd like to see incentives be a big part of that. I'd like to see the private sector drive those standards for best practices, but quite honestly, it hasn't happened yet. Until you can ask the question of how much is enough, a lot of what we're discussing here is, quite honestly, academic and then to look at how we can induce changes in behavior.

I don't want a guards-guns-gates approach. Quite honestly, we need to look to a return on investment that goes beyond guards-guns-gates that actually looks at resiliency and baking that into our overall structures. But I think we've looked at it sector by sector by sector by sector. And to me that's actually making TRIA smart. I support TRIA, but I think we actually need to look at how to make it smarter. And by that I mean, if you do raise the bar and you raise security level on all the infrastructures to a certain level, anything above and beyond that should be the domain of Uncle Sam, wherein Uncle Sam becomes the insurer of last resort.

And maybe we even have to get a little innovative than this and start looking at Exxon Valdez-like funds and in other sectors, whether it's in the green sector or whether it's in the health sector and others, to be able to look at how you can pull resources. But the bottom line is, I don't see a lot of change. I don't see a lot of incentive, and, as far as I see it, the insurance sector could be one of the greatest enablers to enhance security. They always have to induce changes in behavior, whether it's the fire code, whether it's – unfortunately it doesn't work for me – but no smoking, whether it's seatbelts. They have always been a much greater enabler to induce changes in behavior, but you have to have the incentive mix and I'm not sure the incentive mix is there.

And I think we're asking the wrong questions. I think the question is, how do we enhance security for the American people, and to do that I think we've got to get more discussion, just as P.J. is hosting here, to get people from disparate backgrounds and perspectives around the table. And quite honestly, let's take the nouns and turn them into verbs, and I think we need to look at that internationally.

So I'll leave it to that, P.J., but – can delve in further in any Q&A.

MR. CROWLEY: I'll take the chairman's prerogative here with the first question or two and then we'll open up to the floor for some follow on discussion. Philosophically, for the whole panel, when you look at what insurance should do, is it to cover the normal risks – the issue of conventional versus CBRN and it crosses over into question of national preparedness because particularly the nuclear issue is what's termed low probability, high consequence. So do you tailor an approach to cover what is most likely to happen most often or do you tailor the approach to cover the highest possible risk, getting into the issue of cost? When you look at this from a public policy standpoint, where does the weight fall?

MR. DIXON: I mean, thinking it from an insurer's perspective, that they have to issue policies and project the expected cost of those, and, when they do, that includes both the more common lesser cost events, as well as the low probability-high cost events. And so I think that you have to think about the risk and the product overall and think about whether insurers are going to be willing to enter the market. A policy where the insurance industry can – it seems to be working with TRIA – what the worry for the insurance industry is, mainly, is that the long tail, the very large losses, the very large big ones, and, for many of the insurers that we've talked to, the real benefit of TRIA is

cutting that tail at their deductible, roughly close to some co-payment. But that's really an effective way of dealing with the risk.

The answer to your question, I think that from insurer's point of view, they have to think about both of those events together. But what really causes them to want to get out of the market, or have very high rates, is that potentially catastrophic pay up.

MR. CROWLEY: Erwann, you talked about the relative low cost of coverage in the United States right now. In your mind, is that primarily because there's just been one event, and so it's hard for the insurance industry to get its arms around the potential impacts – because they have just the one experience as opposed to say hurricanes or tornadoes where there's experience going back decades or centuries. Or is it a matter that people are discounting the threat because the government is involved and the government has put ostensibly some sort of caps in place? Or is it the combination of the two?

MR. MICHEL-KERJAN: Well, I think that's the combination of the two. You have free reinsurance in the sense up front at least, which means that you don't have to pay that extra cost in either country you will have. Also because you just had one event so you don't have anything to refer to. Also, the fact that, honestly, we don't have a clue what the right price is supposed to be. So it's quite hard to qualify that.

The purpose of the study was not to say whether it's good or bad. It was much more to say, well, how others are doing elsewhere – what does that mean? And if you believe that the price is reflecting the level of threat – and if you agree that the U.S. is number one target in the world, well, you should see higher prices. The fact that you don't have higher prices is also due to the fact that you have – you're talking about a very regulated market in the U.S. The insurance market is one of the most regulated markets on Earth, in the U.S. and European countries. So we have seen a number of places where insurance companies come up with higher prices, but they are stopped by the regulator saying, well, no, no, this is too expensive – Washington, D.C. being one example.

So that's basically where we are today. The question, obviously, is what will happen after the next terrorist attack? The same one that – what happened after Katrina when we saw insurance companies say, well, we have to reevaluate the level of exposure we had. We have been under-priced against that threat for a long time.

I would just – I mean, one point on the very good comments that Frank gave. In 1973, the Securities and Exchange Commission created the Financial Accounting Standards Board and it was like 30 years ago. And really the purpose of that was to – well, we don't know anything about accounting here and we'd like to have better understanding if I'm an investor, whether I'm investing in a safe company or not. And, for that, we need standards and we need an entity that will create these standards.

And today we don't have these standards for risk management. What I will say is that five or 10 years from now, I wouldn't be surprised – 20 years ago, the safety of your cars was definitely not a marketing tool. You don't really care about that. Well, now you

see ads everywhere: five-star crash test, et cetera. And today, as a customer, you're willing to pay much more for the security of your children in your car. Can we go in that direction 5, 10, 15 years from now, where you will be willing to pay an extra cost as a customer for extra security? And for extra security you need some measurement of that, and if we had like a financial risk management and security standard board put in place, that would be quite, quite interesting.

I'm working with Deborah Decker who's at the Kennedy School of Harvard on these issues now in the nuclear field and I think there is a lot to be done. Honestly, I mean whether it's the White House, the Congress, or private sector, everybody is leaving out some reference point here. We don't know what works, and, if someone can come and say, well, we'll put some minimum standards, try to apply that, then you can qualify the effectiveness of these measures.

MR. CROWLEY: Frank, you've talked about the insurance industry being an enabler to try to promote higher security standards, because when you look at the critical infrastructure of the United States, 85 percent of it is owned and operated by the private sector.

But when you look at maybe the discrete example of the chemical industry for example, it does not necessarily appear, because now the federal government is stepping into a regulatory role that has not previously existed. Would you draw from that conclusion that one way or the other, you have not gotten the push from the private sector – in some sectors perhaps so – but is chemical an example of where you would have expected the private sector to push harder through a combination of things, perhaps led by the insurance industry to get an industry that has not previously been regulated to do more to strengthen its security?

MR. CILLUFFO: That is a good question, and that is the sector that does stick out to a large extent, simply because the potential consequences of the successful attack on the chemical sector are massive. Quite honestly, though, I think that the sets of issues pertain to all infrastructures and all sectors of the economy. If the private sector isn't going to drive standards that are significant, Uncle Sam is going to have to step into the rift and I've always been a mitigate before litigate or regulate kind of guy. I don't think we want a cigarette wrapped in asbestos where we have a certain sector of the economy driving our security measures, because that rarely addresses pro-active issues. It's reactive into a large extent. But if the private sector doesn't fill that breach, I think there's no option but the federal government to look much more carefully at regulatory steps.

And clearly I think the chemical sector is one where the federal government did have to step in, and rightfully so. I'm just not sure that the federal government, in general, is going to be in the best position to understand single point failures, to understand vulnerabilities, to understand how to factor in resilience into our supply chains. But if not – if you don't see the sector itself at least driving those standards and then getting it blessed – I'd like to see a good housekeeping seal of approval. And by

that I mean you raise the bar, you raise it high – best practices, some of the standards, then you get that good housekeeping seal of approval. If you meet that bar, both from the sector itself and then the owners and operators of it, they should be indemnified from acts above and beyond. But we're not there yet because we haven't even defined the basic question of how much is enough.

MR. CROWLEY: One last question for the panel quickly and then we'll open it up. So far, the government has taken a legislative approach with the framework, with particular caps and terms. If you look at, like the UK with Pool Re, it has taken over time a more institutional approach by creating a permanent pool of capital that can be applied to this. I understand that perhaps on the Hill there is some thinking regarding trust fund, but is there a role for some sort of permanent mechanism? If we do see this as a long term challenge, is there something that can be done institutionally to be build capital over time against terrorism risk?

MR. DIXON: Yes. There are a number of different models. Israel, for example: they have more of a – instead of a pool reinsurance approach it's more of a compensation program. It's more like a social security program for losses and then also direct government payments for property damage. So there's very different models that we can take for this.

As far as the permanence of the program, it's not an issue that we've looked at. When I looked at this initially, there's value in not putting in place a permanent program for a number of reasons. I think you want Congress to come back and reevaluate programs periodically, and if programs are permanent that may not happen. What the appropriate length of a TRIA extension is, it's just not an issue that we've looked at. So I don't have an opinion on that at this point.

MR. MICHEL-KERJAN: Two points. When you read different reports on what should be the best solution for the U.S., you have to be extra careful going to other countries, whether it's Pool Re and Pool Re has been mentioned several times even in Congressional reports. Pool Re was put in place for the IRA. Pool Re was not put in place for al Qaeda. That's point number one. The Pool Re operation was put in place for a small size attack and it worked pretty well. It worked pretty well because the UK suffered, sadly, several small scale attacks from IRA, and the London bombing in 2005 being the last one. But you're talking with a quite different size of attack here. So that's point number one.

Point number two, what works in Britain won't work in the U.S. What works in France or Germany and Israel won't work in the UK and the U.S., and et cetera, et cetera. So you have to be very, very careful to understand what's going on and, obviously, your point is well taken. We had one event hopefully and hope we won't have any further events ever.

One thing – so you mentioned the fact, as a lot of people do – well, the probability of getting a large scale attack is much lower, hopefully, than getting a middle-sized

attack. I don't agree with that. I think nothing happened in this country for close to six years now. I'm pretty sure that the next terrorist attack will be quite large. And the fact that nothing happened – I mean honestly, you can always go to a mall and explode a bomb there – so the fact that nothing happened means something. And one takeaway is that perhaps the next terrorist attack would be a quite large one. So you have to prepare for that.

On the permanent aspect, I definitely agree with Lloyd here. If we decide to go for a permanent extension, or 10 years, 15 years, well that's good, but I will be happy to work with Congress, and I think RAND and others, to try to evaluate exactly what would be the implication of making that program the way it is, long term. Unless you do that, you just don't know. You just expand – a program may be in place for five years to 10 or 15 years. You have to be extra careful here what you want to do.

MR. CILLUFFO: Just to pick up on that – and the UK model is a legislated model. And it's very much focused on business continuity and, to some extent, an important factor of resilience, which is to be able to absorb and minimize the consequences of a successful attack. But it came out of the Baltic Exchange attacks – the IRA attack on the Baltic Exchange, which is different than some of the adversaries we're potentially looking at here. But let me say – I mean, this is very hotly debated – this is getting into what I have been working on – radicalization and a lot of the counterterrorism issues.

I'm reminded of the old Far Side cartoon: there is a picture of a bunch of dinosaurs. Underneath was 'one really bad day' and there was a picture of a comet streaming by. Are we looking at those sorts of mega-catastrophic attacks – and clearly that is the intention of al Qaeda classic – or are we going to face more of what we saw in terms of 7/7 where you've got franchising of terrorism groups that think globally but act locally? They have their own indigenous objectives but they tap in to a larger subset of issues. Or what we're seeing most significantly is a third trend and that is the leaderless movement. Think of Fort Dix – those inspired but not necessarily having any direct connection. In fact, they normally get caught when they're looking to reach out to al Qaeda of some sort, but clearly you've got a whole new set of issues.

So all that aside, I get back to standards and by standards I mean performance measures as Erwann said, whether it's in the risk management sense or whether it's across the board. The old adage: what gets measured gets done, but I think we have to actually spend most of the time on asking ourselves if we're measuring what matters, and what are the things that matter across a full spectrum of crisis and consequences that can ameliorate the risk, that can enhance our resiliency. And by that, we need to look at, in my eyes, from an all hazards perspective. And I think the flight to quality argument is important. Not only the owner and operator, but what is the individual willing to pay for. And I think you'll find that they would be willing, in many cases, as long as you can make the case that you're maximizing not just security, you're also getting other returns on investments such as efficiency and the like. And I think you'll find that there's a bigger market there than most think.

MR. CROWLEY: We'll open it up for questions from the floor at this point. I know there are a couple of news organizations here, and we normally defer to news organizations to ask the first question, just as Paige is getting the microphone. And please pause until you have that available. The last point that Frank made is also, if you look at the 7/7 attack which involved British citizens and British subjects, by the same token there were links back to terrorist training camps in Pakistan. So the question of whether that would be considered in a parallel circumstance a domestic act of terror or a foreign inspired act of terror and what that would mean – that would probably keep a lot of lawyers busy for a numbers of years. (Laughter.) Anyway, questions from the audience

Q: Hi. Bill Swindell with Congress Daily. One of the ideas that been put out in Congress comes from actually a consumer group, the Consumer Federation of America, and they suggested just having TRIA and have the government responsible for any attack over a \$100 billion and let the marketplace cover everything less than that. Watch out for basically the taxpayers. Could you guys respond to that idea?

MR. DIXON: The analysis we've been doing could address the effect of that kind of proposal. We haven't done that analysis yet. My projection would be that, if that were the case, the take-up rates for a conventional coverage would drop a fair amount and so that what you'd see as higher – thinking of those charts I was showing you – you'd show many more situations where a high fraction of losses were uncompensated. So I see that kind of proposal would increase the exposure of the insurance industry quite a bit, going all the way up to a \$100 billion. And so you have to think about what that would do to pricing and then the subsequent take up rate. And I see some significant effects there.

MR. MICHEL-KERJAN: Quick point in that. As Frank mentioned everybody is talking public-private partnership, and everybody's claiming that TRIA is a partnership. Well, TRIA is not a partnership. TRIA obliges insurance companies to offer that coverage, whether you like it or not. So to respond to your question, I mean the second question, well, is that a free market in the sense that if you want, okay, the federal government will pay up – I mean, something above that \$100 billion, and that's a number – that's a figure. Why not 75? Why not 150, 125? So it's hard to say. Why not?

The second question is whether you're still required with insurance companies to provide that coverage below and that's a real policy question. And I'm quite sure some of them will be happy to stop covering terrorism if they could.

MR. CILLUFFO: Could I just suggest that from my perspective that's the wrong question to ask for a number of different reasons. Firstly, it should be about ameliorating risk, and loss of life, and help and safety as well as other sorts of questions. So do you base that on the perpetrator? Do you base that on the attack? What if you've got a cyber attack? Who's behind the clickity-clack at the keyboard that could cause billions of dollars of economic damage? But it's a kid in a shanty hut, as was the case with the Love

Bug, or you can't even necessarily delineate a state actor, non-state actor. So do you look at it from the consequences? Maybe. But is that the right question to ask? Probably no. What we should be looking at is how to make our systems more resilient and more safe and secure.

Q: This is Ray Lyman from A.M. Best. I have two questions, both primarily for Dr. Dixon, but anyone could answer. Your calculation would be that with TRIA, taxpayer liability would be less than without. Is that somewhat based upon the assumption that TRIA payments would displace ad hoc extraordinary government assistance, and is that an appropriate assumption? Is Congress more likely to make appropriations based on the political calculation rather than a rational assessment of the need? And then the second question is, in terms of longer term counterfactual, is subsidized terrorism insurance sort of a disincentive to invest in risk mitigation?

MR. DIXON: Right. Well, two good questions. Yes, in the context of our study we – the key assumption is that the government will end up compensating – providing compensation for a certain fraction of losses that are uninsured. I mean, that's sort of underlining that and, again, you got to think these are businesses, so this is not someone who's forced out of their home. And there's just – there's very little data on what that fraction would be. So what we do is simulate our analysis over a very wide – from 0 to 75 percent, so over a very wide range. And so we're looking at – if you think it's zero, for example, you can look at those scenarios and say you're down in this range, but if you think it's 75, it's up there.

So what we found was surprisingly – as long as you're a little bit above zero, you think the government's going to provide some compensation for uninsured losses. It turns out that the expected losses to taxpayers overall will still be less with TRIA, and what's really driving that is the fact that the large losses in the RMS model have very low probability. And so in those large losses is where the taxpayer really gets stuck, so given that they have such low probability that you're just not in that world. So that's what's really driving there and I think the debate would benefit from a kind of analysis of more past information on what the government's done as far as compensating uninsured losses. We have the results of 9/11, and we can look at all the programs that were set up there to provide, in effect, insurance for firms that didn't have insurance in Manhattan and there were many examples of those programs. But I think at better sense of that would look like would improve the debate. Now, let's see the longer term counterfactual – what was that again? The –

Q: Whether having subsidized terrorism insurance sort –

MR. DIXON: So yes, that's a big question, and so that's the issue that the CBO has been bringing up for a long time and is still talking about. I think, conceptually, there is something there to that argument, but the question is – so from a theoretical point of view, from a conceptual point of view, that argument make sense, and that TRIA now makes terrorism coverage available for less money and for a lower premium than it would otherwise. I think that's true.

So then the question is, well, what kind of inappropriate outcomes does that generate in terms of firms not taking enough mitigation measures or not having the right incentives to take mitigation measures? That's a very difficult question and I think that translates – what I think the CBO does a little too much is take the conceptual theoretical argument and apply it immediately without considering all the empirical problems or the making that really what would happen.

And so I don't really have an answer to that other than that since terrorism is a dynamic force – hardening one building here displaces risk over there – so it's just really not clear how the insurance mechanism would work as far as creating those correct incentives. And I just think, as Frank has pointed out, that's a difficult issue that I'm a full – I'll just say one more thing – I'm a full believer in that line of argument for natural catastrophe risk, hurricane risk, flood risk, earthquake risk, where you have a natural kind of a threat. And I feel very strongly that you need the appropriate insurance incentives, and people to consider the true cost of the risk. It's just much more blurry on the context of terrorism and how those incentives work for mitigation measures.

MR. MICHEL-KERJAN: Let me add one think since we've worked with A. M. Best quite closely. You have that report that's an update of the study we've done, working with A.M. Best data on 450 companies. One thing that really has escaped from the debate is what exposure insurance companies have today. And what rating agencies like to use as a measure of good or bad exposure or bad management or good management for insurance companies is a ratio exposure over surplus. What we've done here is to measure, in 2005, the latest data, what is the ratio deductible in the TRIA. It's not exposure, just deductible over surplus for these 450 companies.

If you talk to A.M. Best, Moody's, S&P's and others, they will tell you that, well, bottom-line 10 percent is an okay ratio. What we've found is that many, many companies go at like 25, 30, 40 percent ratio today for terrorism exposure. That's quite a lot. Knowing that, the following question which is your question, well, do you really think that insurance companies will agree to give up some rebate under a premium knowing that they're highly exposed, and at the same time – because of regulation, because of market pressure, because of the fact you just don't how to qualify that – prices are quite low.

You don't have this delta where you can really say, well, you know, you invest in type of mitigation measures, and I will lower your premium, although there is not a single thing that any of the companies in the World Trade Center Towers could have done to prevent a commercial aircraft to crush against the building – nothing, except to talk to the Logan Airport authorities saying, oh, you better do a better job here. Well, that's kind of a hard, so –

MR. CILLUFFO: Just to build on that very quickly – and it's more the strategic question – risk displacement, that is what we're really talking about here, and to some extent is a cat-and-mouse sort of issue. You're never going to obviously mitigate and

minimize all risk, but what you do want to be able to do is take it off the high top priority based on loss of life, and/or catastrophic economic implications that a successful attack could cause. So if we do have that slope approach, I actually would be pretty confident where we're would be going in the right direction. I'm just not sure we've identify what those single point failures are.

And, I mean, our adversary – you can even look back to the '80s, and the late '70s early '80s hostage-taking of plane was the terrorist tactic a choice. Then you had two very successful counterterrorism raids in Entebbe and in Mogadishu; German GSG-9, an Israeli raid that almost instantaneously – you didn't see the adversary stop targeting planes, you just saw them change their modus operandi, and they put bombs on planes.

So what we're really talking about is risk mitigation. Because they often take the path of least resistance, striking when and where you at least expect them to, identify softer targets, or change their modality or means of attack. But if we are taking the big priority ones off the table, we're actually moving in the right direction. I'm just not sure whether we're there yet.

MR. CROWLEY: Last question before we break – I'll ask a very quick last question. When we talk about risk mitigation – this will segue into the second panel here – obviously a lot depends on what type of insurance we're talking about. Someone who insures tall buildings has the ability to do that where somebody who insures workers and workers compensation, which is a mandatory coverage – less able to do that. How does that weigh into factors in terms of what Congress may or may not decide later this year?

MR. MICHEL-KERJAN: If you're in the real estate business you're in trouble if TRIA is not renewed. I mean, that's common sense. Well, I don't think you should go for differentiation between different industry sectors. Is that what you have in mind? It would be too hard just to say well, you know, we're going to cover industry sectors, but not the other and I think you go for a national plan. I mean, otherwise you're dead when you start, but that's my perspective on that, so I don't think you need to differentiate by industry sector.

MR. CROWLEY: Or by line of insurance?

MR. MICHEL-KERJAN: Well, it is. Whether you like it or not, it's already here. I mean, you have, as I mentioned workers' comp versus property and casualty, which by the way include business interruption. One-third of 9/11 attack was for business interruption – about \$10 billion. That's quite significant here. Well, it is already as a law of 50 different states, including many states for workers' comp, so –

MR. DIXON: Yes, I think there are differences in the implications of the policy. So for workers' comp, there's a 100-percent take-up, because workers' comp policies cover terrorism – cover loss regardless of cause. So insurers have to include terrorism coverage in the workers' comp package. Well, so what's their option? Their option is

not to exclude terrorism coverage. Their option is to get to stop offering workers' comp coverage if they want to control their risk. So then what's happens?

Well, then we get a growth of the residual markets in the state, the residual insurance markets, or a further push to increase those. In California, the workers' comp state fund is 50 percent – over 50 percent of the market right now. So there are different implications of TRIA or the expiration of TRIA for workers' comp as far as property, because those two markets would adjust differently. And property, you can reduce your take up rate. In workers' comp, you've got to stop offering the coverage, so I think that needs to be thought through.

MR. CROWLEY: Join me in thanking the panel for an excellent discussion.

(Applause.)

We will take a 10-minute break, and then we'll reconvene with our second panel.

(Break.)

MR. CHRISTIAN WELLER: Thank you very much. This is the second panel of our event this morning. My name is Christian Weller. I'm a senior fellow here at the Center for American Progress.

I've worked on many economic issues in my career, which is one of the benefits and drawbacks of working in a think tank, but there has always been one mainstay theme of those: I've always been focused on economic risks. And this interest stems largely from the understanding, at least my understanding, that one of the roles – fundamental roles of the government is to operate as an insurer of last resort. The government often steps in when there are market failures and insurers do not or cannot offer the insurance coverage that is socially desirable.

The federal government can take on this role as insurer of last resort by providing subsidies, startup financing and regulations, among other means. If the government's involvement is permanent or temporary has to be decided on a case-by-case basis. There are, however, many examples of insurance where government involvement is permanent. One example in my own research is Social Security. While there's a discussion over part of the financing of Social Security, there's no disagreement that the government will continue to mandate this type of retirement, disability and life insurance for all workers.

Now we are faced with a new threat, a new economic risk, called terrorism. We are unfortunately beginning to understand some aspects and consequences of conventional terrorist attacks, but large-scale uncertainty remains when the prospect of an attack using a chemical, biological, radiological or nuclear weapon is considered.

This uncertainty has two important consequences. Businesses need insurance and insurers are unlikely to write policies for all of these contingencies. To bridge this divide

in the past, the government has enacted the Terrorism Risk Insurance Act. It appears that the proper working of the U.S. economy will require some form of government involvement in this insurance market for the longer term, especially since the fight against global terrorism is already called a generational fight or a long war.

As the longer term future of the terrorism insurance is considered, it seems paramount to get a better understanding of the business end of things. What do businesses need? What will happen if they cannot get insurance coverage? What do insurers worry about? How can insurers offer additional coverage? To get at these and other questions, we are joined today by an outstanding panel of experts. I will introduce them in the order that they're speaking in, and I'll hand it over. I'll make this very brief since all the bios are in your package.

Chip Rodgers to my very right, a senior vice president of the Real Estate Roundtable, America's leading advocacy group for the commercial real estate industry in national policy issues of Washington.

Brad Wood, a senior vice president of risk management for Marriott International, having enterprise responsibilities for Marriott's risk management organization.

To my left is Janice Abraham, president and CEO of United Educators Insurance. She holds an MBA from the Wharton School of Business at the University of Pennsylvania and a bachelor's degree in international studies from American University.

And finally, we have Michael Gray. He's the president and director since 1996 of the Gray Insurance Company, a Louisiana-based property and casual company.

With that, let me hand it over to Chip Rodgers.

MR. CHIP RODGERS: Thank you very much. It's a pleasure to be here today, and I want to thank both PCIA and CAP for hosting this event today on a topic that is, I think, of vital importance to our country and to certainly the business community.

I want to talk a little bit about kind of the policyholder perspective here today. My organization is the Real Estate Roundtable and we represent the CEOs of the major commercial property owners in the U.S. – department, office, retail, industrial retail, hotels. So a lot of the iconic real estate that's discussed in the news regularly as potential targets, including the former World Trade Center, are people that we represent. We also represent a lot of the people who finance it or invest in it, as well as the 16 real estate trade associations are all part of our group, and we work on national policy issues affecting the industry here in D.C.

We also are the I guess founding members of the Coalition to Insure Against Terrorism, which is a coalition representing the true consumers of terrorism risk coverage representing a broad cross-section of the business community from the U.S. Chamber to the florists to the NFL to just about every aspect of the GDP that you can imagine that are

in the market for this risk and need to buy this risk in order to do their businesses.

Let me just step back and kind of give you the broader overview here on I guess where we're coming from on this issue. In our view, economic security is central to an effective homeland security strategy. With terrorists continuing to target American interests, particularly our economic interests, it's appropriate for the federal government to play a role in maintaining our economic security. American businesses have to have adequate insurance coverage to effectively manage economic risks and protect the economic value of their underlying assets. Without terrorism risk insurance coverage America's economic infrastructure is totally exposed, and terrorism risk is shifted to businesses, lenders, shareholders, pensioners and bondholders. America's businesses should not be forced to bear the brunt of this risk.

A meaningful private market for terrorism risk insurance has never really existed. Even after the 1993 attack on the World Trade Center, insurers did not exclude this risk from policies. It was implicitly included. The devastation of September 11<sup>th</sup> and the recognition that terrorism risk will be with us for the foreseeable future forced insurers to exclude this coverage. Fourteen other nations recognize that markets are unable to effectively manage this risk and have enacted permanent federal programs to address the problem. Terrorism risk is a national problem that requires a federal solution.

The Terrorism Risk Insurance Act of 2002, TRIA, and the Terrorism Risk Extension Act of 2005 were part of a series of measures including the U.S.A. Patriot Act to protect the U.S. economy and help it recover in the wake of a terrorist attack. Without congressional action, as most of you know, TRIA will sunset on December 31, 2007. It's essential that Congress act immediately to enact an effective long-term federal terrorism insurance program. Such a program must provide adequate market capacity for policyholders and the U.S. economy and help facilitate recovery after another terrorist attack.

A modernized program should also reduce the federal and conventional terrorism markets and maximize long-term private capacity by facilitating the entry of new capital. It's important for the program to also focus on the federal role on private markets in what private markets have been unwilling and unable to do – enable policyholders to purchase insurance for nuclear, biological, chemical and radiological risks. Even though the program does backstop NBCR coverage, it's not commercially available in the country except where it's mandatory on workers comp policies.

To enhance financial market stability, a modernized program should also be permanent, or at least be in place until Congress declares that terrorism is no longer a risk. It should also remove the problematic distinction found in the current statute's definition of "active terrorism," that forces the treasury secretary to make a determination which may not serve national security needs. The recent bombings in London demonstrate the difficulties in distinguishing between domestic and foreign acts of terrorism, so this needs to be corrected.

Businesses now in the market for terrorism risk insurance coverage are increasingly being told that there will be none at year's end. And existing policies contain exclusions that void terrorism coverage after TRIA's sunset date. Such developments raise concerns about the potential for large-scale business disruptions and the very real threat of exposing our economy to unnecessary catastrophic risk results sought by terrorists. Fortunately, finding a long-term solution to this economic security risk is a high priority for both the House Financial Services Committee and the Senate Banking Committee. We applaud the efforts of these committees and their action as swiftly as possible.

A number of references earlier in the first panel – I just wanted to touch on a couple things to some of the things being discussed with regard to risk mitigation. The primary focus of this discussion today is on risk management and insurance products and insurance regimes and concepts, but I think it's important to note that unlike some of the critics of the program that suggest that by having terrorism risk insurance offered by a federal program for terrorism risk insurance, that policyholders or businesses are disincentivized to conduct responsible a risk mitigation regime is ludicrous.

Our industry spent millions of dollars both in hardening targets, setting up what is called an information sharing analysis center for real estate that's partnered with the Department of Homeland Security and the FBI. We spend many hours comparing notes with international groups, both law enforcement officials, military, think tanks and the like, in terms of trying to determine ways of protecting public buildings, protecting private buildings, office, retail, all of the potential targets that are out there, and trying to share this information and create, if you will, an information network that would share both best practices ideas as well as specific threat information. So there's a lot being done on that front, and I just think it's important to note.

With that, I guess I'll turn it back over to Brad.

MR. BRAD WOOD: Thank you very much. I guess one of the questions is why is a company like Marriott here today to talk about these issues; and actually, because it's very near and dear and unfortunately personal to our organization. On 9/11 we were a victim of the World Trade Center attack when the Marriott hotel there was tragically destroyed. And we had one other hotel that was one block away that suffered severe damage. Obviously a horrific day for our nation as well our company.

The events were far-reaching. The impact on business went well beyond New York City. It went to the housekeeper in Seattle. It went to the taxicab driver in Los Angeles. It went throughout our entire nation. It really impacted our industry out there. So it's a big focus for our company. Happens to be one of our top legislative issues that we face in our company as the issues around TRIA on how to solve the issues of risk that we have.

We experienced in real time how one event impacted several insurance products simultaneously. We had physical damage to our properties. We had business

interruption. We had workers compensation claims. We unfortunately had group life claims. We saw liability claims. We saw it all cutting across a number of different products simultaneously, which is one of the issues that we all face out there, is how do we deal with some of the aggregation issues that both insurers and policyholders face.

We saw firsthand how the global insurance markets responded before 9/11, the days in which there was no cost for terrorism insurance, to suddenly no coverage being available, and then having to go back into the market and pay millions of dollars for the cost of very limited coverage with very high deductibles. Along came TRIA. We saw the benefits of TRIA where coverage went expanded at the same time price came down. So we're a firsthand believer in how the program, the government program, stepped in and made a real difference for us at the end of the day as policyholders.

Our focus is really on three primary areas. It's around capacity or the availability of coverage. We saw before 9/11 all sorts of coverage available; right after 9/11 it shrunk down to where it was at unacceptable levels for our company, for our ability to grow as an organization, for our ability to protect our balance sheet. Along came TRIA. That coverage came back through the mandatory make-available provision, and as such, it served a real purpose.

The next being price. We saw pricing go from millions of dollars down to something that was much more reasonable; in essence, almost an 80 percent reduction in price from comparison of the pre-act to the existing act out there. And I think something that people tend to lose focus on is the stability of the insurance market. It's really important for policyholders to keep focused on the need for a strong insurance market. And what we don't want to have happen is all that capacity being made available out there and end up with insurers that have over-leveraged themselves, have found themselves potentially in jeopardy under the right situations. And as such, we as policyholders need to have strong insurers out there that are going to day-to-day deal with these issues. It's important for our board of directors. It's important for the board of directors of any publicly-traded company or even a private organization out there to be partnered with sound insurance companies that are going to pay the claims when the time comes. So we think long and hard about this balance that is in TRIA in terms of where the retentions are, deductibles, what kind of risks are being taken aggregately, what's in, what's out, so that we assure that we've got a strong and healthy insurance industry to continue to partner with going forward.

I guess government is arguably much better off with an orderly program in which private insurers are acting as the buffer for the taxpayer than face the option of becoming the first dollar government assistance immediately after the event. TRIA acts as that important pre-event planning mechanism to our nation's economic business continuity planning. We're a big proponent of business continuity planning on the private sector. We think there is a strong role as well on the government side, and I think our government understands that, and TRIA is an important ingredient towards the success of an economic business continuity program out there.

Yet, when you compare to Hurricane Katrina and what we experienced there, we learned firsthand the whole notion that preparedness wins the day. And we as an organization feel strongly that we need to find solutions that are for the long term for TRIA.

Frankly, I don't find real joy of coming down here every couple years and dealing with the issues around TRIA. It's very exhaustive. It's very expensive for our organization to deal with those matters. We would like to find some longer-term solutions to this rather than be down here every couple years. In fact, it's more than that. Once one bill is done, we're on to the next one and the like. Do have some thoughts as Chip has noted into the whole risk mitigation side of it but I thought I'd pass the baton to others, and we can get that as a subsequent discussion later.

MR. WELLER: Thank you. Next we hear from Janice.

MS. JANICE ABRAHAM: Thank you. I'm Janice Abraham and I'm president and CEO of United Educators. We are a risk retention group, and I'll get into what that is, what kind of company we are. But we are owned by about 1,200 schools, colleges and universities throughout this country, from the very largest University of Michigan, Harvard, Stanford, Yale, Amherst, Hampshire, public school districts. A wide range of educational institutions own United Educators.

We have put with our educational institution significant investment in risk management for terrorism issues, for major crisis planning, everything from evacuation of a major football stadium to notification systems to crisis planning, business continuity planning. There's been a significant investment in risk management issues for educational institutions.

But the reality is, colleges and universities, schools, are considered by the experts to be soft targets, and it really is the nature of the educational institutions. They are in fact open. We like it that way. We all want the free exchange of ideas. They are critical places where people gather, whether or not it's a football game, presidential debate, or a famous person speaking at a commencement ceremony. Our institutions are major worldwide symbols of what's great about this country and considered by experts to be soft targets.

I would also add that this is not just a New York City or Washington, D.C. concern. The numbers of educational institutions in Boston, in Seattle, in Detroit with Ann Arbor as a neighbor, are significant, so the exposure that we look at from a provider of insurance and risk management to educational institutions greatly transcends the traditional New York and Washington, D.C focus.

As a public policy goal, I think our overall objective should be twofold, and that is to have the private sector as involved as possible and yet support a speedy recovery, and I see three things supporting that. The first is, we want a lot of skin in the game by business, or in my case educational institutions. They carry very large deductibles on

their coverage and they also have significant investments in risk management, as I mentioned. So we have skin in the game from the businesses or the consumers of this commercial insurance. We want, number two, risk spread out broadly amongst a wide range of insurance companies. A little bit of United Educators and huge multinational commercial insurance companies. We want all of our deductibles as part of a federal public-private partnership. And finally, we want to bring businesses up and running as quickly as possible. We want educational institutions to reopen. We want hospitals to care of the sick. We want businesses up and going, hotels working, amusement parks, all of America's businesses up and going and quickly as possible.

So with those three goals in mind as we structure this public/private partnership, several things come to mind for me. The first is we need to create structure that encourages small and mid-size companies to be part of TRIA. We can't have a program that excludes or makes it cost prohibitive or solvency threatening for small and mid-size companies to be part of this public-partner partnership. If this only works for big multinational commercial insurance companies, we as citizens, as taxpayers and businesspeople lose by part of that.

So how do we make that work? What do we think about? And I think the first issue is the deductibles that are part of the TRIA program. We won't get into too many details now, but currently the deductible for an insurance company is 20 percent of their premiums. They would be responsible first. We would be responsible first. If there's a major attack for United Educators, that would be \$25 million we would pay out initially without even thinking about a 15 percent coinsurance up the side of any mega-loss. And when I think of the number of universities and schools and colleges in Boston, and when I think of what the experts and reports I read over the weekend that would lead us to think of these kind of mega-losses, it's not out of the realm of possibility. And those kinds of numbers clearly threaten the solvency of many small to mid-size companies.

I should also point out that it's very difficult for small and mid-size companies, many of whom are mutual in corporate structure, to raise capital. I can't go to the market and issue stock. We are a mutual type of company; therefore, the amount of capital we get has to come from our policyholders. So we are limited in how we go about recovering, and that's what we all want. We want us to be able to pay claims promptly, efficiently, and continue to write business over the long term. Our limited access to capital markets can preclude that very quickly.

I would also say small companies have the challenge, as well as large companies, of getting the right underwriting balance. Underwriting is an art, not a science, even though the actuaries try to dispute that with me periodically. We want to come up with a price that businesses or universities will pay but nevertheless covers the loss that we anticipate, and that's difficult with terrorist insurance and it's very difficult with NBCR. We have unfortunately a fair amount of experience in binge drinking claims, in harassment and discrimination for tenure, in date rape, in catastrophic athletic injuries. That's the world we live in, and we can underwrite to that.

We don't, fortunately or unfortunately – I would say fortunately – don't have the actuarial database to underwrite for terrorism insurance and don't have the underwriting base to do it for NBCR. So it's a true challenge for us to come up with a fair price, encourage all of our members of United Educators to buy this insurance at a fair price, and maintain the capital in order to recover. We need the federal and government involved. We need them involved in a level that makes us viable and solvent over the long term, not threatening our A rating, but more importantly, not threatening the solvency of the company over the long term.

Thank you.

MR. WELLER: Thank you very much. And finally, Michael Gray.

MR. MICHAEL GRAY: On the first panel one of the people started out, should government have a role in the private insurance markets. And I think that launches us into a philosophical question.

Now, I'm CEO of a privately-held insurance company and the first thing I want to talk about is philosophy. But you end up with an insurance market that may have around \$200 billion of equity to respond to a disaster, and you're not actually looking at the little silos that it's in and it may not all be available for the particular event you have in question. The federal government is the only one in the position to make the statements that need to be made of where we would like to as public policy to provide a relief mechanism to the general public or industry. You take that point of view and you say, can the federal government deliver that relief or that subsidy, or whatever term you use for it.

As part of my résumé, the home office of the Gray Insurance Company is in the greater New Orleans area. One-third of our employees lost their housing in Katrina. I am very, very colored by my experiences to believe that the federal, state and local government do not do as good a job as private industry at delivering relief to the end user that can put it in place and make it effective. Taking that position, we now have a situation where we're looking to try to offer a cover, in this case it's terrorism reinsurance, and if we accept the premise that private industry, which in the case of Katrina had paid between 90 and 98 percent of its claims in the first nine months after the disaster, and what we have from the federal and state level is less than 10 percent at 22 months post-disaster, if you accept the premise that private industry, as bad a name as we get sometimes, can do it better, then this whole discussion becomes maybe the proper position for the federal government as they decide these large questions of what will be covered by reinsurance. So the Terrorism Reinsurance Act becomes a very good model to go forward.

Now, you look and you say, we think there should be reinsurance. We think it should be public funding. There is no voice at the federal level. The Federal Deposit Insurance Company is somewhere in Treasury, and I'm sure there's a voice somewhere, and these statements get made like, we're going to include chemical, nuclear, biological,

radiological cover, but no one at the federal level is saying, you can include that cost but here is what the cost is in our estimation. You rely on industry groups and industry itself, and we're probably not the right messenger for this message.

Once you say, okay, we're going to deliver this, you need a federal voice somewhere to do it. You need to decide what you want to ask our industry to do. The federal government is very good at social engineering. We've proven that with something as simple as a tax deduction for your homeowners interest. We now have the most fabulous housing in the world. We are the envy of the rest of the world for housing. And in the last 20 years our footprint per person living in a house has increased by 250 percent. You can argue for or against that. But we have created a situation where we have wonderful housing. The federal government has to decide when it makes these statements like "We want to cover something," they have to decide how we as an industry are going to pay for it. If you decide that we are the delivery mechanism then the rest of it is reinsurance, and let's discuss what should be covered as reinsurance.

Now, from my perspective as a small insurer, I will tell you that I would like that reinsurance to be put in such a position that the small insurance industry actually can still exist. The way the first trigger was done before it was refined, it was the 'mega insurance company monopoly act.' I didn't like it. I'm not a mega insurance company. The final trigger was somewhat livable. We now have a situation where we have a somewhat livable, although not pleasant situation, and like the rest of the panel we don't want to keep coming up here. We need some sort of solution that has some sort of federal voice and can tell us with more than just us shouting back that this is what it costs when you all know from the first panel we have no reasonable data to make concrete statements. Thank you.

MR. WELLER: Thank you very much.

Let me take the opportunity now to ask a few questions of the panelists, following up a little bit on what they said. I want to probe a little bit deeper on the issue of businesses not buying insurance even when terrorism insurance is available. How serious should we take the argument that some businesses, or a large chunk actually, just simply rely on government bailouts? They just don't buy it knowing that the government will have absolutely no – that this becomes ultimately a too-big-to-fail problem, that the government will have to step in and do something if there's no insurance available in the case of a catastrophic loss?

MR. RODGERS: Yeah, the take-up rate for TRIA is interesting actually, if you compare it on a percentage basis with other programs, either state or federal. The take-up rates are pretty phenomenal. I think a lot of the need for terrorism risk coverage at least for now is driven by loan covenants and requirements by lenders or bond financing that would require all risk coverage, including terrorism coverage. So I think that's one sort of driver for that type of thing.

But I don't know how to respond to – because we just are not aware of businesses

that are choosing not to buy it. I think they put themselves, particularly if they're a public company, in a very serious situation in terms of having that exposure I think is somewhat questionable practice, if you know you can get the coverage and don't choose to purchase it because you may think you're not in a vulnerable area. The problem with terrorism is that it's a unique risk in the sense it's a man-made risk that is able to adapt and change unlike other risks, and so you don't really know. I talked a little bit about risk mitigation earlier. There's no equivalent of the air bag or sprinklers or whatever. In the World Trade Center, short of putting anti-aircraft guns on tops of office buildings, how do you protect against an incoming commercial jetliner? So I think it is an interesting dilemma. I think it would be an interesting study to look at businesses that chose not to buy it and see what their motivation is, but we're not aware of them at this point.

MR. WELLER: Let me ask a follow-up question to Janice. You said the capital market access – and this goes ultimately to the question of what's the long-term situation. But the question here is can we involve more of the private investors? In particular, right now we see money available for pretty much anything at this point. So when somebody says that there is lack of capital market access that kind of makes me perk up. Can we improve that? Can we build up a better financial basis for these type of insurance, especially smaller insurance companies?

MS. ABRAHAM: Oh, absolutely I think we can. In fact, I have advocated expanding the Liability Risk Retention Act, which is the federal legislation that allows us as a risk retention group to function, to have us do property – again, bring more capital to the market. So there's plenty of capital now available. After 9/11 there wasn't much capital. So I think that the goal is to have a steady stream of stable capital – a long-term solution. This two-year dance with TRIA is not something that allows universities to plan major research labs, major initiatives on campus, and I think there can be, knowing that there's a long-term federal reinsurance backstop, a long-term source of capital. The capital markets are extremely creative.

And we've talked about some of those – the experts did – in the first panel. But the more insurance companies that are involved, the more the backstop is known, is reasonable and open to a variety of different companies, small and large, the more we'll be able to ensure a long-term viable, steady stream stability. This is a generational issue for businesses. The insurance market, by any stretch of the imagination, is not a free market. I hate to dispute the faculty member from Wharton. It's not a free market. In fact, it's a regulated market, an extremely regulated market. And in order to have us respond in this long-term model, having the capital markets there to support us, we need a structure that's known, established and supports the free flow of capital within the regulated environment.

MR. GRAY: And you have to understand that the capital markets do not love the insurance industry. The reason they do not love the insurance industry is, for the last 20 years, we have underperformed the Dow. We're the only financial industry that has underperformed the Dow, to my knowledge. So if you can't make your numbers, why are they going to invest in you? Now, they have come up with capital structures to help

us when we need quick liquidity. They're called side-car investments and trust preferred obligations. But they're really kinds of things where insurance companies sort of mortgage their future to get involved with them. So it's nice to say that the capital markets would come to our rescue, but you're also posing that rescue after another major disaster after 20 years of underperformance. That's going to come at a very high cost.

MR. WELLER: Well, everybody now on the panel has mentioned that we need some sort of a long-term solution, something that's stable. And then let me turn this over to Brad. What do you think is the most promising approach, the most viable long-term option so you don't have to be in Washington, in Downtown D.C. every two years or more often to lobby for a particular –

MR. WOOD: I guess there's the political reality side of that and then there's also what could maybe be other enhancements that could be made that serve best. I guess one of the frustrations is we have now, what, five, six years, and we look back in that time period and we ask ourselves, has there been any funding or pooling built up during that time period? And the answer is no. We go into another long-term program for X amount of years. Will we find ourselves in the backside of that to where there is no build-up of reserves, whatever they may be? And is that good for the taxpayer? And then we're again here asking ourselves many years out, what did we just do for the last couple decades and not build up any reserving.

I think policyholders generally are willing to kick in monies to pay for government reinsurance. I think policyholders are willing to pay for reserving and pooling of funds out there so ultimately we can get ourselves in the position to be less reliant upon the insurance industry, to supplement the insurance industry and what's available out there. So I think we lose an opportunity if we don't consider that; yet, I'm not sure that's in line with some of the political realities that we face here today.

There are several other areas that are being considered out there, but I think that for me is one of the areas that is of concern.

MR. WELLER: Anybody else want to speak to long-term approaches?

MR. GRAY: I think that when you get to, as I call it, the social engineering point of view of the federal government that they want certain things done – I use “they.” “They” is really “we” – and we really make decisions because we're a big-hearted people and we want to do the right thing with our citizens. Sometimes we want to make promises that the entire equity of the insurance industry cannot deliver on. And when we as a people decide to make those choices, then when the insurance industry is a proper deliver mechanism, the federal government needs to have an arm and a say-so if they want to make those promises.

When they step back from wanting to make those promises, it can be a private industry response. When they start doing things like make available and forcing you to do things, they – the federal government is becoming a responsible party at that point.

And I personally think that the TRIA legislation is the proper vehicle to do it in and it needs a lot more permanency than exists, simply because you're asking us to undertake risk that we don't have enough equity to undertake on our own.

MR. RODGERS: I'll just talk about long-term options. The Real Estate Roundtable put out a proposal about a year ago intended to kind of jump-start the discussion on alternative ideas to TRIA. We called it Homeland Security Mutual. It was basically a pooling concept, mutual reinsurance company that would – it was modeled after Pool Re and a number of the other European programs as sort of a hybrid program. I guess we talked to a lot of policymakers and industry participants, floated that around. There were at the same time a group of investment bankers who came up with a similar pooling concept that was floated pretty broadly as well. We, I guess, pursued this option at some length, and found it got to somewhat of a dead end. And I suppose we're happy to resurrect it and take another look at it if appropriate, but it didn't seem to have any political traction out there in terms of the political reality. We also looked at trying to sort of deconstruct it and instead of having a mutual reinsurance vehicle, utilize some sort of a lockbox mechanism or basically a direct funding to the Treasury where a pool of money would accumulate over time and effectively be the – you know, would stand between the taxpayer and the federal government – I mean, the taxpayer and the insurers, so that this money was being drawn down by the federal government, that pool would draw down before any taxpayer-funded dollars would.

But again, these ideas have not really taken a hold in terms of the political debate, but just to show you that, I think, the depth and the breath of thinking an idea - sort of nurturing that we've trying to do over the last few years.

MR. GRAY: I think you need to look at the Pension Benefit Guaranty Corporation and you will see that for years, quote-unquote, "They were over-funded." And then some economic realities set in on how you should show your funding of your pension programs, and all of a sudden now, they're under-funded. I don't know how they derive their proper rate to fund it. I can guarantee you that a mutual, as you're describing, is either going to be over-funded or under-funded, depending on whether or not we have the event. And I don't know the underwriting criteria for basing the pricing. If you have a federal backstop – I'm not opposed to some sort of funding, but I know it won't be right at the end of the day.

MS. ABRAHAM: The reality is this is a long-term issue and needs a long-term solution. There's no – it is a war risk, and a war risk demands the federal government to play a significant role in it. We can do a lot in helping in risk management. We can help get people out of University of Michigan Stadium in a faster way. We can try to prevent people from breaking into our labs at MIT and taking really scary stuff and putting it in water supplies. We can do a lot of that, but we cannot prevent the plane from flying into the building and a lot of other risks.

So it is a risk that is out of the control of the businesses, of the universities of this country. And we need to recognize that and set up a three-part system: that businesses

that are buying the insurance, pricing it fairly; insurance companies that will be there with a lot of skin in the game; and then the federal government making sure that we can recover quickly and get the stock market back open, the shopping malls open and all of those things that make business click in this country.

So the idea that this is going to go away in two years or five years is naïve, I think, and something that we need to recognize: set up a long-term backstop and be prepared to fund it over the long term.

MR. WELLER: Well, let me ask one final question. This – like you’ve mentioned earlier, actuarial science or – I’m partial to that, since we economists like to see ourselves as scientists. But the problem is or the fortunate issue here is that we don’t have that much experience with terrorist acts, at least in the United States. And the question then is: Well, can we learn from the experience in other countries? Can we learn in particular to what are ways to mitigate the risk to the insurers and to the businesses – security standards implemented at various businesses? What is our like a kind of a best practices model? Is that something that for instance our federal government could start – like a clearinghouse for best practices?

MR. GRAY: I think they need some skin in the game. I’ve mentioned the Pension Benefit Guaranty Corporation. I’ve mentioned the Federal Deposit Insurance Corporation. In the Wharton presentation, they talked about Pool Re and England, and they talked about the German vehicle for handling this. And they said – Marsh McLennan and Aon were the people they had to go to in the United States. That’s the difference. There needs to be someone at the federal level that can be the go-to entity so that it is not the insurance industry telling you what your problems are.

It’s like asking bankers what they should be charged for the federal deposit insurance or pension fund managers what they should be charged by the pension benefit guaranty system. It’s very hard to ask your barber if you need a haircut. I mean, you get these answers you may not necessarily totally agree with. So, I guess, I’m arguing for some federal entity.

MR. WOOD: And security standard is an interesting issue and dilemma for private industry. I appreciate the comments that Frank provided today. I won’t leave anybody here thinking that there hasn’t been a lot of work in that regard. The ASIS had guidelines out there for quite a number of years. They’ve been accredited by ANSI. There is some discussion about them being standards. They’re getting into background screening, risk assessments, training, business continuity planning – I think in like areas like emergency response and physical security measures that are out there – there is a lot of work that’s being done.

There is a way to go yet out there for industry. And I think industry realizes that it needs to step forward and doesn’t want to have government regulation in there. I don’t think that’s the right spot to be. So there are a lot of leaders out there that are working with DHS and other organizations and trying to move it to that next step of standards.

And what we believe to – in having process business standards that are out there that are looking at the underlying process that cuts across all these industries. So you don't have a separate one for schools and a separate one for hotels and a separate standard out there for each of the different industries. And think more about the underlying processes around physical security measures that you take into a building. So we're a big proponent of moving forward and see a leadership position coming out from a number of groups into that area. And there is work yet to be done.

The other thought is from the insurer's standpoint, that relationship between insurers and policyholders from an underwriting standpoint. We're finding insurers are starting to become more and more astute into that area, asking the good questions, differentiating among their clients as to which ones are surfacing as having the best practices out there. We advocate that; we think that that's great. We think we've got some good stories to tell out there. And as such, I think a lot of policyholders that are struggling in this area will realize that insurers will do different price points, will have different deductibles as they become more astute and get closer to the underwriting side of it. So we see it all as a benefit.

MR. WELLER: It seems like that poses a particular challenge for you, Janice, on both sides as for your clients and your members.

MS. ABRAHAM: I think the reality is we can look to Bermuda to see how to keep roofs on buildings. We can look to Amsterdam to see how to keep levies in place. We can look to see how to evacuate hotels in an expeditious manner. But there are some things with terrorism that we simply don't know and maybe those – you in the room with top secret security clearances know more, can shed some information that can help us, but there's only so far in this area that we can go as businesses, as insurance companies that will prevent something from happening. The government may be able to do it. They have successfully for six years.

But I think the reality is there's only so far in this area that we can go as citizens, as business owners, and the government has to play a role in a way that is different than windstorm natural catastrophes, that allows us different kinds of science, and different kinds of best practices.

We can do something. We can do more. We're already doing a lot. But there is a limit at this point, given the national security issues, as to how far we can go. And I think we need to recognize that and develop a program that acknowledges those limitations.

(Crosstalk.)

MR. GRAY: Just remember that Janice and I are up here talking to you today because we represent needs not met by the insurance industry. We're called niche marketers. Whatever solution that is finally put in place has to allow the small companies

to continue to exist because you're going to find your best solutions at the smaller company levels, not the multinationals. And they will be the ones that have the laser-like focus on whatever solutions we do come up with.

MR. WELLER: Do you want to jump on? Well, with that, let me open it up to the floor, to the general audience. Please raise your hand and wait till the – do we have mikes?

Please state your name and the affiliation. And turn it on. (Laughter.) Are there any more instructions we need to give?

MS. ABRAHAM: The other turn on.

Q: Hi. Dean Pappas with Allstate. Good morning.

MR. WELLER: Good morning.

Q: The comments seem to be universal from you all that these are essentially war-like acts, which are uninsurable. You don't know how to price it. You don't know how to underwrite it. We agree with that, which goes to the whole concept of insurability.

We've realized that there are people selling these products out there, but does the whole set-up satisfy the criteria of insurability, the basic four tenants of insurability, and there's a big question on that. But within this whole concept of making sure that the economy thrives and survives in the wake of the terrorist act, particularly NBCR, there's very little, if any, discussion on the consumer infrastructure within a certain area. Would there be a community rebounding after an event? You know, people's homes and cars – are they insurable?

Many policies of homeowners insurance contain exclusions under NBCR, so while we talk about businesses rebounding with a national backstop, very little conversation takes place on a national backstop for the homeowner, for the people that will make the economy thrive in the aftermath of a nuclear disaster or another NBCR type of event. Any thoughts on that?

MS. ABRAHAM: Well, as a resident of Chevy Chase, I am very aware of the possibilities of a major attack in Washington, D.C., and when I checked my homeowners policy – unfortunately it's not with Allstate – but when I checked my policy there was no coverage at all on it.

So I think it is a very serious issue not addressed by TRIA at all – I would doubt that anybody in this room has this kind of coverage on their homeowners policy and so I would imagine for the public policymakers in Congress a very real concern.

MR. GRAY: That's why I started out with a philosophical discussion, because it's so large, the risks that we're being asked to entertain, that we cannot find a reasonable rate to charge. And our loss history doesn't allow any sort of - even a good guess at a reasonable rate to charge. And you're going down a road of what's good for the goose is good for the gander.

If commercial enterprises can benefit from TRIA, what about private home owners and stuff like that? These are questions that need to go up to the federal level, have a federal discussion. And if they so choose to make us provide the relief mechanism, then they have to be a party to all this.

MR. WELLER: One question over here first and then -

Q: I was just curious. A few years ago there was a pilot project discussed - I don't know how far it ever got at DARPA for a political risk futures market including potentially trading and the idea of predictions of terrorism.

Is that - that was obviously very controversial. It was shut down quickly or at least we think it was. Is this time to revisit that sort of thing and could that be used as an underwriting tool?

MR. GRAY: I think there is a moral issue with that. (Laughter.) How to hurt your enemy by having an attack on a certain time when they have the coverage and you don't - I mean, I just - even at first blush it's scary.

Q: Just one clarification first for Janice. I've misspoken. I never said it was a free market. There was a myth of free market. I know this market pretty well. I've been studying it for seven years in Europe and in the U.S. now, so no, there is no free market at all, especially not here.

We saw what - I saw proposed a few years in Tampa what would be the right price for terrorism insurance, and how the insurance regulator in this District of Columbia set down the price by one third of what ISO still came up with. So, no, I'm pretty aware of that.

MS. ABRAHAM: Good we agree.

Q: One question for you Janice, and we work with (unintelligible) -

MS. ABRAHAM: Right. They were a part of the original study, you're right.

Q: Do you think since - while Congress is now looking at the future of TRIA, that should be one or another, two different deductible in place depending on the size of the company?

It would make sense that for a big company, while the exposure over a surplus ratio of 10 percent, 20 percent – it can survive that. It's not quite clear that for a small company or risk retention group that even five or 10 percent exposure of a surplus ratio - a surplus or of any ratio will be something you can survive. So I was just wondering - I know, well, CBO is putting a report together just on these issues and whether they should talk about the different side of companies and have different deductible.

MS. ABRAHAM: I think that's a very viable solution, because I think the amount of capital that we have compared to others and the shock that it would take to ours and our ability to access the markets are significantly different.

Other big companies can go issue stock; they would be clamoring. I'd have to go back to our educational institutions and tell Villanova and Georgetown and a bunch of other educational institutions they need to pony up enough to replenish, which would be an extraordinary amount when they're already facing their deductibles and their rebuilding efforts.

So I think finding different levels of deductibles to participate in a federal program is an excellent idea and one that should be considered by the CBO as they analyze whether or not how to broaden the market to the ultimate level of having as many companies, small and midsize, as possible.

MR. GRAY: I would just point to the two largest workers comp mechanisms in the State of Louisiana. LWCC did not pay taxes on its surplus. And so when the loss comes in of 20 percent of surplus, they will lose the full 20 percent.

We're the second largest entity. We pay taxes. At least we can go back to Uncle Sam and get almost half of that back. So the effect on our financial state is substantially mitigated just by our structure. I mean, it is so unfair when you get into the granularity of things that some real thought process needs to go into how do you make the trigger fair and effective and it allows everybody to continue to play. And that needs a huge amount of work.

MR. WELLER: The mike goes to my colleague, P.J. Crowley.

MR. CROWLEY: Following up on a comment that everyone made in the first panel over mandatory coverage that exists in other countries, is that a viable mechanism in terms of being able to adequately spread risk out?

To some extent, there has been a perception that TRIA is aimed at businesses in New York, Washington and we do know from what Frank said in the first panel that there is an evolving threat that could very well at any point affect Middle America. But is there a role for having the government mandate that businesses have to have a minimal level of this coverage in much the same way that states mandate that if you have a car or lenders mandate if you have a house that you have to have minimal levels of coverage? Can that have a positive effect of the market?

MS. ABRAHAM: I think the difference is in mandating – I understand in the public-private partnership, the reason for mandating that coverage is to spread the risk. The difference is the magnitude of the losses and what is at stake by mandating that coverage.

To have mandated NBCR, CNBR coverage with deductibles that threaten the viability of a company doesn't help anyone. And so having the federal government mandating coverages to my mind speaks to having a much lower deductible, having a partnership that really speaks to a partnership rather than a mandate. Twenty percent of your surplus – 10 percent of your surplus – is at risk by offering this coverage. So the sacrificial lamb in this is the insurance company.

So the concept of requiring coverage, encouraging pick up rates is good. That's good public policy or can be. But lowering a deductible so that there's solvency, there's business continuity, and just insurance companies can continue to operate is the more viable way in my view to make sure the coverage is there, it's affordable. Because a lot of people are buying it and it's a good spread of risk. But you're not putting at risk companies – small, mid-sized companies – that won't be able to be there to provide the coverage for the next event or the next regular business occurrence that it happens.

(Crosstalk)

MR. CROWLEY: Right, that was more, but then there was a clarification I was going to make that it could well be that if you mandate coverage –

MS. ABRAHAM: Some may not buy it, because we price it in a different way.

MR. CROWLEY: Well, no, but if you mandate coverage from the standpoint that a business owner has to have it. But what I hear you saying, Janice, is that actually can also increase solvency issues even though it does spread out risk. You're accumulating more potential risk, which has its own implications.

MR. GRAY.: Again, I'm a fan of a federal solution, because you say, okay, mandated auto insurance. Well, post-Katrina, the mandated auto insurance ends up being liability insurance, and one of the large providers in the state happens to serve on the Guaranty Association with me. In post-Katrina, they walked in and were very proud of themselves not to have a loss.

So mandated coverage with no cover when it's needed, because it gets into a 50-state regulatory mechanism, is probably not where we want to go. And so let it be a national debate, a national focus, a national request for us to do our jobs and also a national voice at the federal level that says you can ask the insurance industry to do these things, but understand what it will cost us.

And just - I would be very hard pressed to put my money in the bank that the Federal Deposit Insurance Corporation found too shaky to insure. I think that it promotes itself to a federal solution of some sort.

MR. WOOD: P.J., the reason that I just ask that clarification is that from a policyholder perspective – there are mandates around. You can use workers compensation as an example at a state level right now. And there is a very good reason and purpose for why employers should maintain that.

You've got to think long term about the protection of those employees, and that they are going to be paid their claims over the course of many years. But I don't think that fits necessarily to all lines. When you think of the first priority, property insurance – that becomes more of an individualistic decision that's along the way, your wherewithal to sustain risk-aversion levels. There may be some lender criteria that, or mandates that come along that necessitate you purchase it, but I'm not sure that it fits to where mandating coverage of policyholders - that they must purchase it as a workable and appropriate decision approach.

MR. GRAY: You remember how workers comp got to be – have an inclusive coverage here. It's because it's a 50-state mandated cover and nobody thought to exclude it on the front-end.

The insurance industry gave up a lot of their defenses to create the Workers Compensation Act, because we truly did not want a system that kept employees from getting better, which would be not paying their medical and fighting them over it and all these other kinds of things. It's just indefensible, but that's the way the standard structure was when workers compensation was implemented.

So because it seems to be good policy now, it didn't mean we got there through a thoughtful process.

MR. WELLER: There are two questions over there.

Q: This might be a question for Brad. It's a question about business continuity and I certainly understand the importance of insurance moving forward after an event as far as enabling investment in a region so that you can get the loans, that kind of thing.

But the question is what role do the payouts on insurance policies play in business continuity and recovery. We've looked at this question a little bit and there's surprisingly little research. Any kind of empirical findings that having high insurance rates enables the recovery in the region and I think the argument is that, well, if you're a viable business with a bright future you can access the capital markets.

So it doesn't really matter if you get payments on insurance policies after a disaster. And I wondered if you had any thoughts on that and whether it's the payouts on

insurance policies that are important or it's just the availability moving forward of having insurance and it doesn't really matter if you ever got a payout?

MR. WOOD: Yes. I would say absolutely both scenarios. Unfortunately, we talked earlier how we had the World Trade Center/Marriott payouts were pretty important across the line.

We've had the experience of 14 Marriott hotels being impacted by Hurricane Katrina. I can tell you, two years out, where we're still working through those issues related to claims activity and the payouts there. It is a very important component part. Every transaction may be built upon in certain economics that are there. It sometimes is beyond just the breadth of just the overall organization. So we look at transactions individually, and we look at them collectively within the company that we have out there.

So I think their claims for payouts are a key component as it relates to all the other elements of business continuity planning. It's one ingredient that goes into emergency response, disaster recovery aspects, prices management planning, the business recovery process, and that's really where the whole claims piece is part of that last component part. Being the business recovery, how do you sustain yourself and get yourself out from where you were in the past - to get yourself back up and recovering to the same levels that you were before the incident and that's where the payouts I think come in.

MR. WELLER: Frank has a question.

MR. CILLUFFO: Thank you. A quick question also for Brad, primarily, and I think aimed at you, because I agree with you. There are a number of groups that had put out standards that are being driven, not necessarily accepted standards either economically or from a security standpoint.

But the question I have, and I think it stems from a bigger set of issues, we really haven't built the business case for homeland security at this point in time. And until we do that we're going to have very one-off similar discussions, and what I'd be curious about is Y2K planning - supply chain resiliency.

As a provider - I mean, not a provider but as a policyholder, are you asking the hard questions of the supply chain, because otherwise we're going to go sector by sector. And as we all know 9/11, Bank of New York was dependent upon a telecommunications provider, which debilitated a single point failure that we're very unfortunate that we had the New York Stock Exchange up and running as fast as we did.

But how do we get around the interdependency question, supply chain resiliency, and then what is it going to take? It's ultimately going to take Uncle Sam this is enough, isn't it?

MR. WOOD: All supply chain interdependencies are absolutely a critical issue that underlies every business. We all depend upon each other in one fashion or another. Getting to the point made earlier: what happened in New York City hit the housekeeper that was in Seattle. So the trail is there. We fully subscribe to it.

It is a tough issue. Our company is taking it on right now and trying to deal with that and asking each of the businesses to fully understand who those parties are, what their business continuity plans are and how do you test those at the end of the day. And that, I think, is an area that each business needs to ask all their partners that they're doing business with to ultimately get this going. So it becomes a major circle out there of questions that are going to be thrown out there.

So some are further along than others. We're right in that issue right now and asking those questions of our other suppliers, vendors that are out there across all different disciplines, whether they're human resource providers or financial markets or whatever it may be. You don't necessarily get the answers that you want and you may find out that many of your partners don't have business continuity plans out there, but what you're doing is, you're forcing good dialogue, you're forcing them to think about it, and hopefully to advance themselves. Or, ultimately, you'll change.

You want to move with a different partner that does have the plans out there. Those are the on-the-ground decisions that have to be made, have to be wrestled with and ultimately fought through.

MR. GRAY: Katrina was a dress rehearsal for what's going to happen and you had a city depopulated. It's interesting when you get into your disaster planning, and I think most businesses in New Orleans never planned to have the exchanges go underwater. And then FEMA decided to help us by coming to Baton Rouge and usurping the local telephone companies' authority to move T1 lines, because obviously they needed these kind of services more than any of the businesses locally might want to reconstitute themselves in any way after losing the exchanges.

And literally, in our case, we were given a form to get approval to override the lockout of moving T1s and one part of it was to get a federal employee to sign off that we were important enough. Well, we got our local state representative, which is kind of hard to argue – he's not a state employee - and, literally, their response was, well, we didn't think figure anybody would ever fill out the form properly. But the local cable companies did provide the solution after FEMA tried to forestall any intelligent response.

MR. WELLER: Well, we're coming to the end. I think Frank's last comment to make the business case for terrorism insurance I think remains a challenge from everything we've heard today.

And thank you all for coming. Let us join in thanking the panelists for coming here and doing this.

(Applause.)

(END)